



MINNESOTA HEALTH CARE QUALITY REPORT

2019 REPORT

RELEASED FEBRUARY 2020



2019 Minnesota Health Care Quality Report

WHO IS MN COMMUNITY MEASUREMENT?

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

PURPOSE OF THIS REPORT

This report provides a summary view of all measures collected and reported by MNCM as well as historical trend. Additional data is available on mnhealthscores.org and in the detailed tables included in the [Appendix](#) to this report.

KEY FINDINGS & NOTES

- Rates of depression follow-up care, improvement of symptoms, and remission measured at twelve months all increased significantly compared to last year's report. The statewide average for the depression follow up measure improved to nearly 30 percent, although four medical groups achieved rates above 50 percent for this measure.
- Avoiding antibiotic treatment in adults with acute bronchitis, which is a measure aimed at avoiding overuse of antibiotics, improved from 35.8 percent to 45.5 percent, with gains occurring broadly across many medical groups. Medical groups' performance on this measure ranged from 9.0 percent to 91.6 percent, indicating there is substantial room for improvement.
- New to this year's reporting by medical group is a measure of osteoporosis management in women who have had a fracture. MNCM added this measure in 2018 in response to evidence that Minnesota's performance on the measure was lagging the nation. The statewide average for this measure is 31.5 percent.

ACKNOWLEDGEMENTS

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

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

REPORT PREPARATION DIRECTION

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| QUALITY MEASURE | 2019 Statewide Average (2018 Dates of Service) | BENCHMARK OF CARE | | VARIATION | | | RANGE OF RESULTS BY MEDICAL GROUP | | |
|--------------------|---|-------------------|-------|------------------------|-----|------|-----------------------------------|---------|--------|
| | | Benchmark | Gap | Min/Mean/Benchmark/Max | | | Minimum | Maximum | |
| | | | | 0% | 50% | 100% | | | |
| PREVENTIVE HEALTH | Breast Cancer Screening | 76.5% | 85.9% | 30,380 | | | | 18.8% | 96.2% |
| | Cervical Cancer Screening | 71.3% | 83.1% | 53,063 | | | | 40.2% | 86.2% |
| | Colorectal Cancer Screening | 71.1% | 75.6% | 59,997 | | | | 0.0% | 82.0% |
| | Chlamydia Screening in Women | 51.9% | 64.5% | 13,842 | | | | 10.1% | 86.8% |
| | Childhood Immunization Status (Combo 10) | 56.2% | 67.6% | 5,382 | | | | 25.9% | 75.0% |
| | Immunizations for Adolescents (Combo 2) | 31.2% | 48.2% | 5,283 | | | | 14.6% | 65.7% |
| CHRONIC CONDITIONS | Optimal Diabetes Care | 44.9% | 50.5% | 18,320 | | | | 11.5% | 58.7% |
| | Diabetes Eye Exam | 64.4% | 68.9% | 8,270 | | | | 42.3% | 84.4% |
| | Optimal Vascular Care | 61.1% | 65.6% | 9,225 | | | | 16.1% | 75.7% |
| | Optimal Asthma Control - Adults | 53.3% | 69.0% | 22,398 | | | | 0.0% | 95.0% |
| | Optimal Asthma Control - Children | 59.9% | 72.4% | 9,460 | | | | 0.0% | 92.1% |
| | Use of Spirometry Testing in the Assessment and Diagnosis of COPD | 37.6% | 49.8% | 1,621 | | | | 19.6% | 66.0% |
| DEPRESSION | Adolescent Mental Health and/or Depression Screening | 86.1% | 99.3% | 20,285 | | | | 0.0% | 100.0% |
| | Adult PHQ-9 Utilization | 74.3% | 96.0% | 28,156 | | | | 0.0% | 100.0% |
| | Adult Depression: PHQ-9 Follow-Up at 6 Months | 34.2% | 42.4% | 12,816 | | | | 0.0% | 66.2% |
| | Adult Depression: 6 Month Response | 13.9% | 14.9% | 4,404 | | | | 0.0% | 32.3% |
| | Adult Depression: 6 Month Remission | 8.2% | 9.2% | 3,124 | | | | 0.0% | 21.3% |
| | Adult Depression: PHQ-9 Follow-Up at 12 Months | 29.8% | 33.3% | 8,994 | | | | 0.0% | 62.9% |
| | Adult Depression: 12 Month Response | 12.3% | 15.4% | 5,964 | | | | 0.0% | 32.0% |
| | Adult Depression: 12 Month Remission | 7.5% | 9.8% | 4,287 | | | | 0.0% | 20.0% |
| OTHER | Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis | 45.5% | 74.1% | 4,468 | | | | 9.0% | 91.6% |
| | Follow-Up Care for Children Prescribed ADHD Medication | 39.5% | 53.2% | 866 | | | | 23.6% | 70.2% |
| | Osteoporosis Management in Women Who Had a Fracture | 31.5% | 40.7% | 202 | | | | 22.6% | 46.2% |

STATEWIDE RESULTS FOR PRIMARY CARE MEASURES

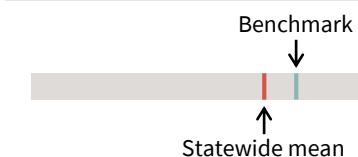
This table provides an overview of the statewide rates by measure for primary care and shows significant variation and/or room for improvement in all measures. Even for measures where the statewide average is high, wide variation exists in performance across medical groups.

Statewide mean (average): The average performance rate among medical groups for the 2019 report year.

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.

How to read variation chart



| QUALITY MEASURE | | Central Pediatrics | Entira Family Clinics | Essentia Health | HealthPartners Central Minnesota Clinics | HealthPartners Clinics | Mankato Clinic | Park Nicollet Health Services | South Lake Pediatrics | Wayzata Children's Clinic |
|-----------------------------------|---|--------------------|-----------------------|-----------------|--|------------------------|----------------|-------------------------------|-----------------------|---------------------------|
| PREVENTIVE HEALTH | Breast Cancer Screening | | ○ | ● | - | ● | ● | ● | < | |
| | Cervical Cancer Screening | | ○ | ○ | - | ● | ○ | ● | | |
| | Colorectal Cancer Screening | | ● | ● | ● | ● | ● | ● | | |
| | Chlamydia Screening | ● | ● | ○ | - | ● | ○ | ● | ○ | ○ |
| | Childhood Immunization Status (Combo 10) | ○ | ○ | ○ | - | ● | ○ | ○ | < | < |
| | Immunizations for Adolescents (Combo 2) | ○ | ○ | ○ | - | ○ | ○ | ○ | ● | ● |
| CHRONIC CONDITIONS | Optimal Diabetes Care | | ● | ● | ● | ● | ● | ● | | |
| | Diabetes Eye Exam | < | ○ | ● | - | ● | ○ | ● | < | |
| | Optimal Vascular Care | | ● | ● | ○ | ● | ○ | ● | | |
| | Optimal Asthma Control - Adults | ● | ● | ● | ● | ● | ● | ● | ● | ● |
| | Optimal Asthma Control - Children | ● | ○ | ● | ● | ● | ● | ● | ● | ● |
| | Use of Spirometry Testing in the Assessment and Diagnosis of COPD | | ○ | ○ | - | ○ | ○ | ● | | |
| DEPRESSION | Adolescent Mental Health and/or Depression Screening | ● | ○ | ● | ○ | ● | ● | ● | ● | ● |
| | Adult Depression: PHQ-9 Utilization | | ● | ○ | ● | ● | ● | ● | | |
| | Adult Depression: PHQ-9 Follow-up at 6 Months | | ● | ● | ● | ● | ● | ● | | |
| | Adult Depression: 6 Month Response | | ● | ● | ● | ● | ● | ● | | |
| | Adult Depression: 6 Month Remission | | ● | ● | ● | ● | ○ | ● | | |
| | Adult Depression: PHQ-9 Follow-up at 12 Months | | ● | ● | ● | ● | ● | ● | | |
| | Adult Depression: 12 Month Response | | ● | ● | ● | ● | ● | ● | | |
| | Adult Depression: 12 Month Remission | | ● | ● | ● | ● | ● | ● | | |
| | Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis | | ○ | ○ | - | ● | ○ | ● | < | |
| OTHER | Follow-up Care for Children Prescribed ADHD Medication | ○ | < | ○ | < | ○ | ○ | ○ | ● | ○ |
| | Osteoporosis Management in Women Who Had a Fracture | | ○ | ○ | - | ○ | < | ○ | | |
| | Total number of measures as high performers | 4 | 12 | 14 | 11 | 19 | 12 | 19 | 5 | 4 |
| Total number of eligible measures | 7 | 22 | 23 | 13 | 23 | 22 | 23 | 6 | 6 | |

HIGH PERFORMING MEDICAL GROUPS

Nine medical groups had rates significantly above the statewide average on at least 50 percent of the measures for which they were eligible*.

Detailed results by medical group and clinic are available in the online appendix to this report and at mnhealthscores.org.

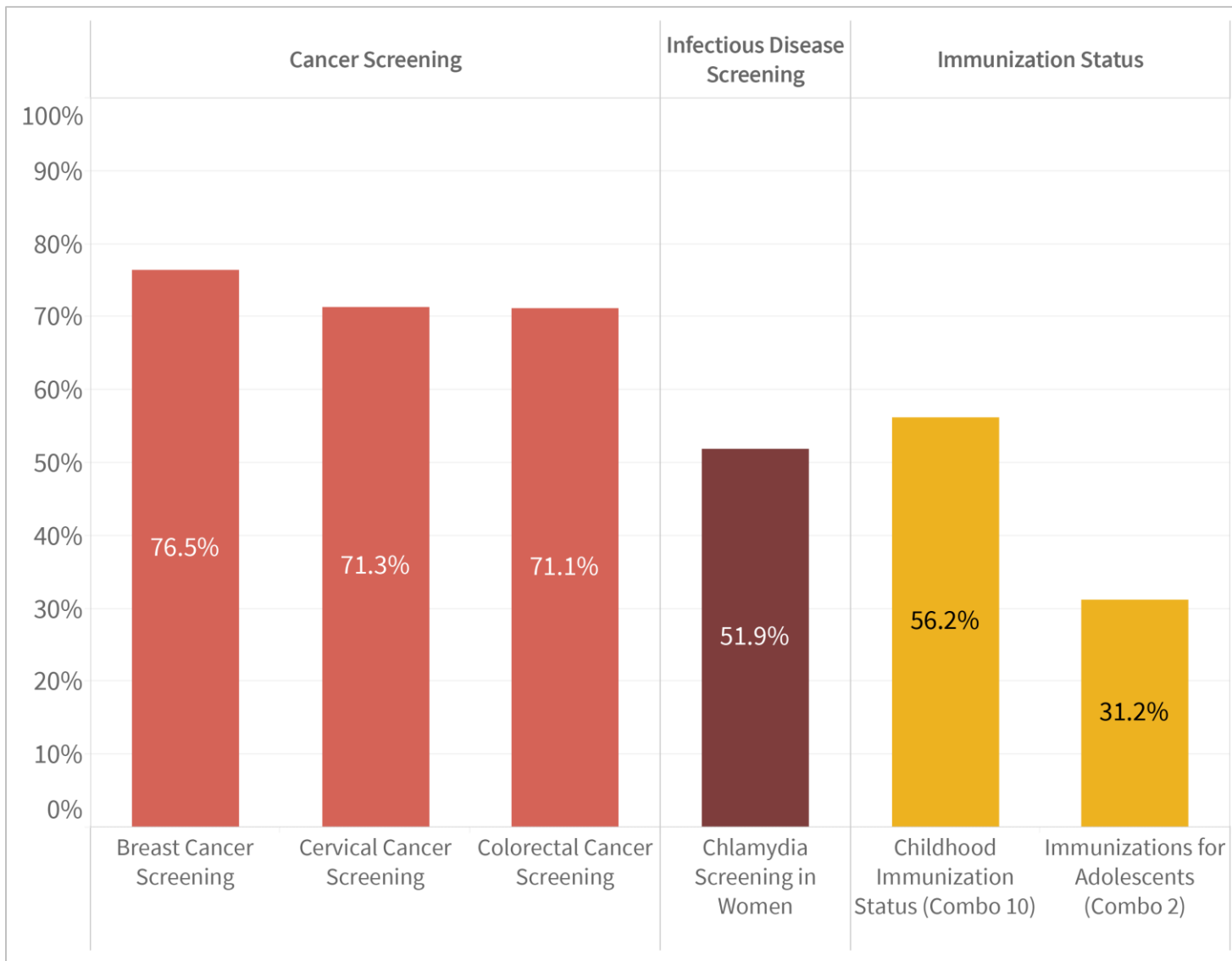
*Included if eligible for at least five measures.

- Above average
- Average or below average
- < Not reportable for this measure (too few patients in measure denominator)
- Not assigned to measure/no data
- HP Central reports under HealthPartners Clinics for HEDIS measures

PREVENTIVE HEALTH MEASURES

Statewide Results

2019 report year (2018 dates of service)



AT A GLANCE

Out of the six preventive health measures, Immunizations for Adolescents continues to have the most opportunity for improvement.

ELIGIBLE POPULATION

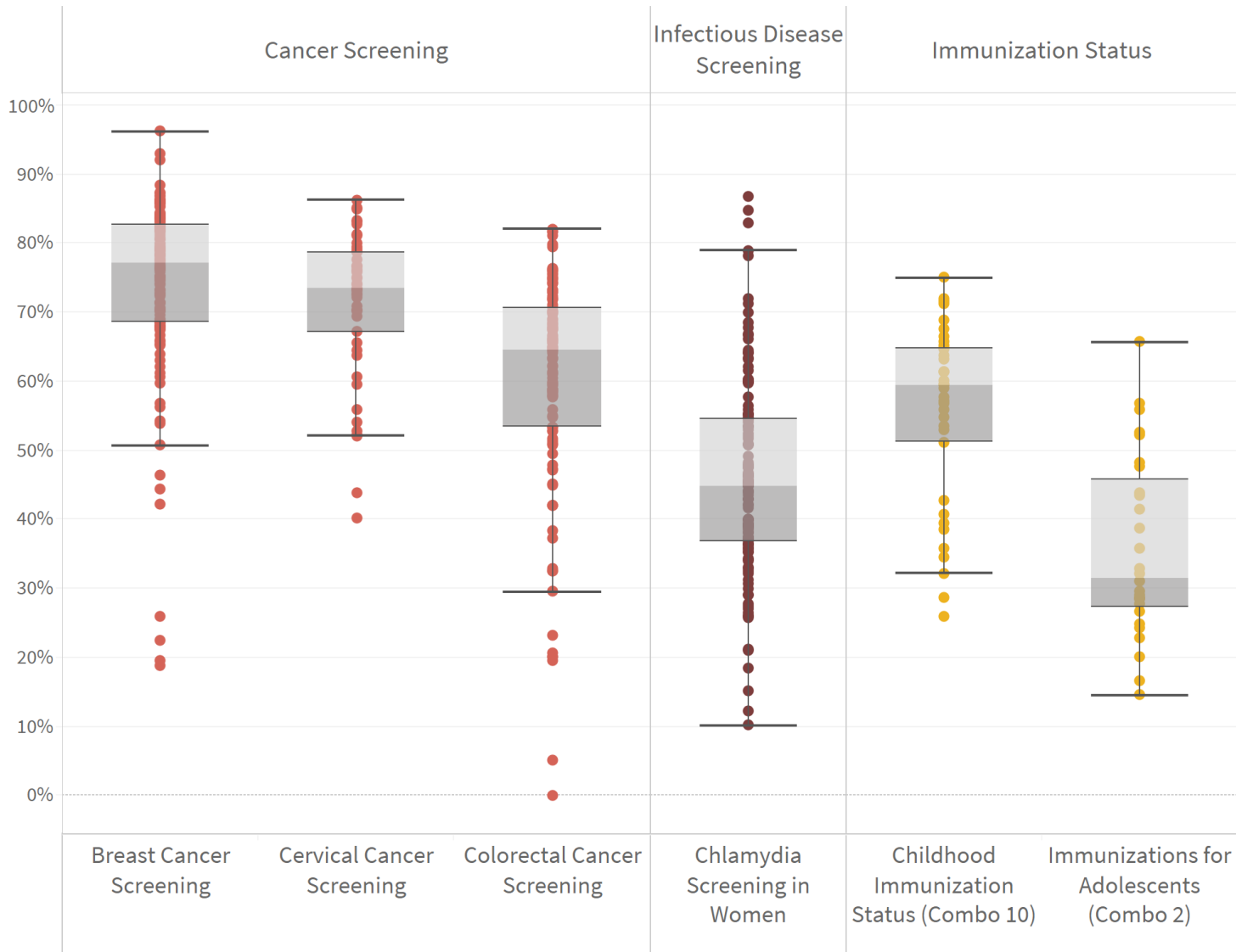
- **Breast Cancer Screening:**
Women ages 50-74
- **Cervical Cancer Screening:**
Women ages 21-64
- **Colorectal Cancer Screening:**
Adults ages 50-75
- **Chlamydia Screening:**
Women ages 16-24
- **Childhood Immunization Status:**
Children who are two years of age
- **Immunization for Adolescents:**
Adolescents who are 13 years of age

Measure descriptions available at end of report

PREVENTIVE HEALTH MEASURES

Rate Variation by Medical Group

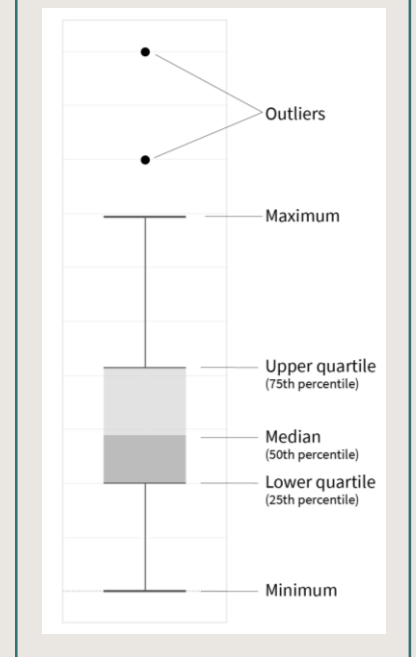
2019 report year (2018 dates of service)



AT A GLANCE

- There continues to be significant variation in medical group performance for all preventive health measures.
- In 2019, the widest range in performance was seen in the Chlamydia Screening in Women measure.
- Cervical Cancer Screening had the most consistent performance rates among medical groups.

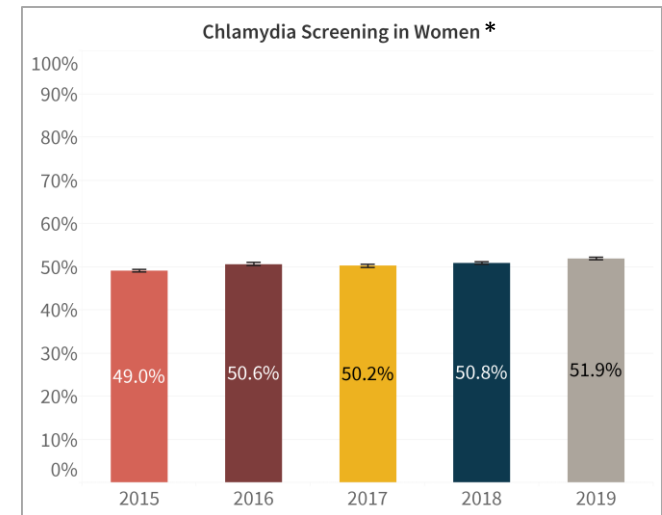
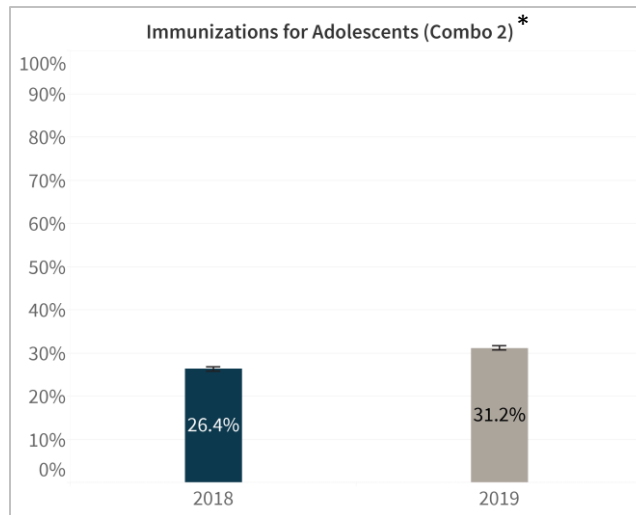
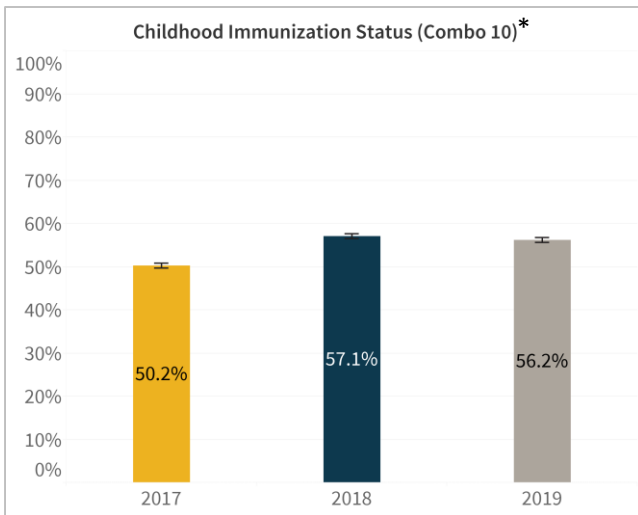
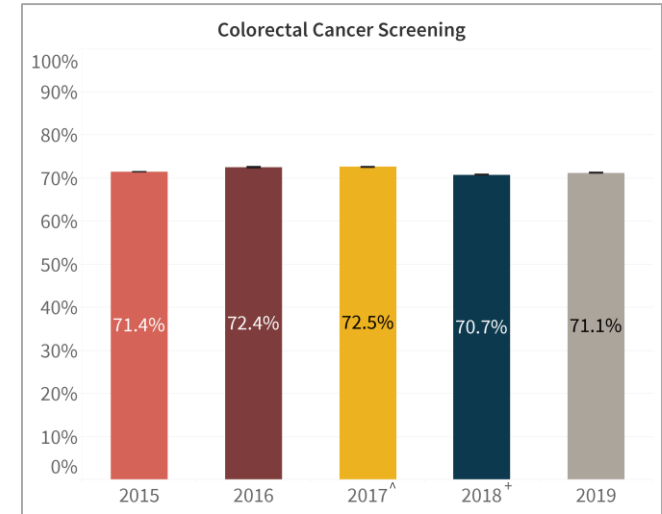
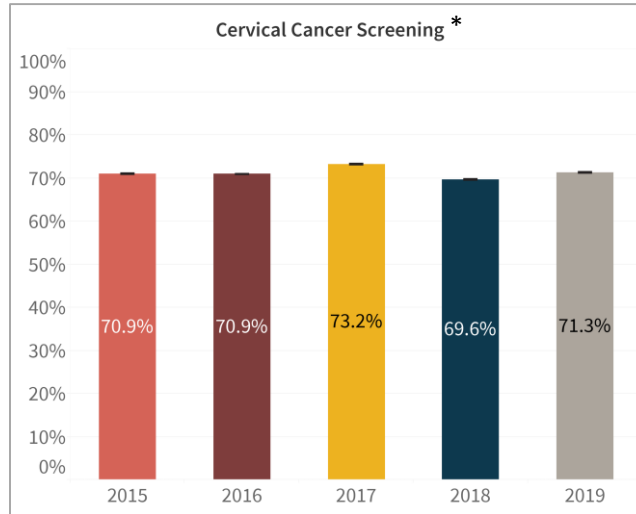
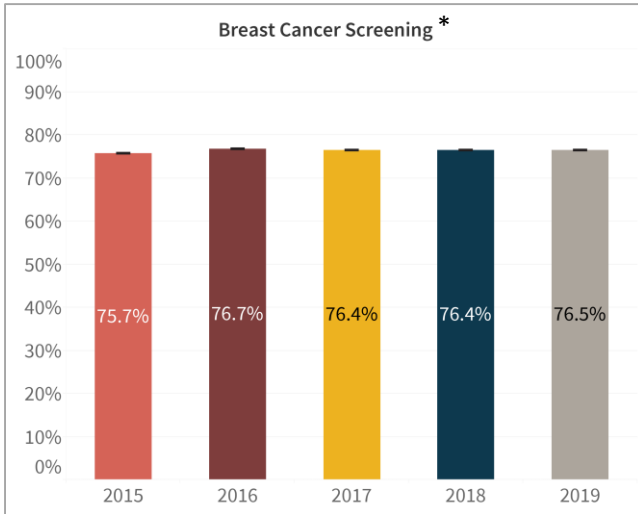
How to read a box plot



PREVENTIVE HEALTH MEASURES

Statewide Trend Over Time

2019 report year (2018 dates of service)



While the percentage of adolescents who received recommended immunizations remains low, the 2019 statewide rate saw statistically significant improvement compared to the 2018 statewide rate. Statewide rates for Chlamydia Screening and Cervical Cancer Screening also had statistically significant increases in the 2019 report year when compared to the 2018 report year. While the rate of childhood immunizations has decreased slightly from 2018, the change is not statistically significant.

*2015 – 2018 results were adjusted to match 2019 patient population

[^] The criteria for including patients in the measure denominator changed in 2017. This change may have contributed to a change in statewide rates for this measure.

⁺ Changes to the measure denominator definition resulted in a significant drop in population for this measure and likely contributed to slight decrease in rate.

PREVENTIVE HEALTH MEASURES

Highest Performers for Preventive Health Measures – Medical Group Level Results

| MEDICAL GROUP | Total number of measures as high performers | Total number of eligible measures | CANCER SCREENING | | | INFECTIOUS DISEASE SCREENING | IMMUNIZATIONS | |
|------------------------------------|---|-----------------------------------|-------------------------|---------------------------|-----------------------------|------------------------------|--|---|
| | | | Breast Cancer Screening | Cervical Cancer Screening | Colorectal Cancer Screening | Chlamydia Screening | Childhood Immunization Status (Combo 10) | Immunizations for Adolescents (Combo 2) |
| Affiliated Community Medical | 3 | 6 | ● | ○ | ● | ○ | ● | ○ |
| Alomere Health | 3 | 6 | ● | ○ | ● | ● | ○ | ○ |
| CentraCare Health | 3 | 6 | ● | ○ | ● | ● | ○ | ○ |
| Fairview Health Services | 4 | 6 | ● | ● | ● | ● | ○ | ○ |
| HealthPartners Clinics | 5 | 6 | ● | ● | ● | ● | ● | ○ |
| Mayo Clinic | 3 | 6 | ● | ○ | ● | ○ | ○ | ● |
| Mayo Clinic Health System | 3 | 6 | ● | ● | ○ | ○ | ● | ○ |
| Obstetrics & Gynecology Associates | 2 | 3 | ● | < | ● | ○ | | |
| Park Nicollet Health Services | 4 | 6 | ● | ● | ● | ● | ○ | ○ |

● Above average ○ Average or below average < Not reportable for this measure (too few patients in measure denominator) ■ Not assigned to measure/no data

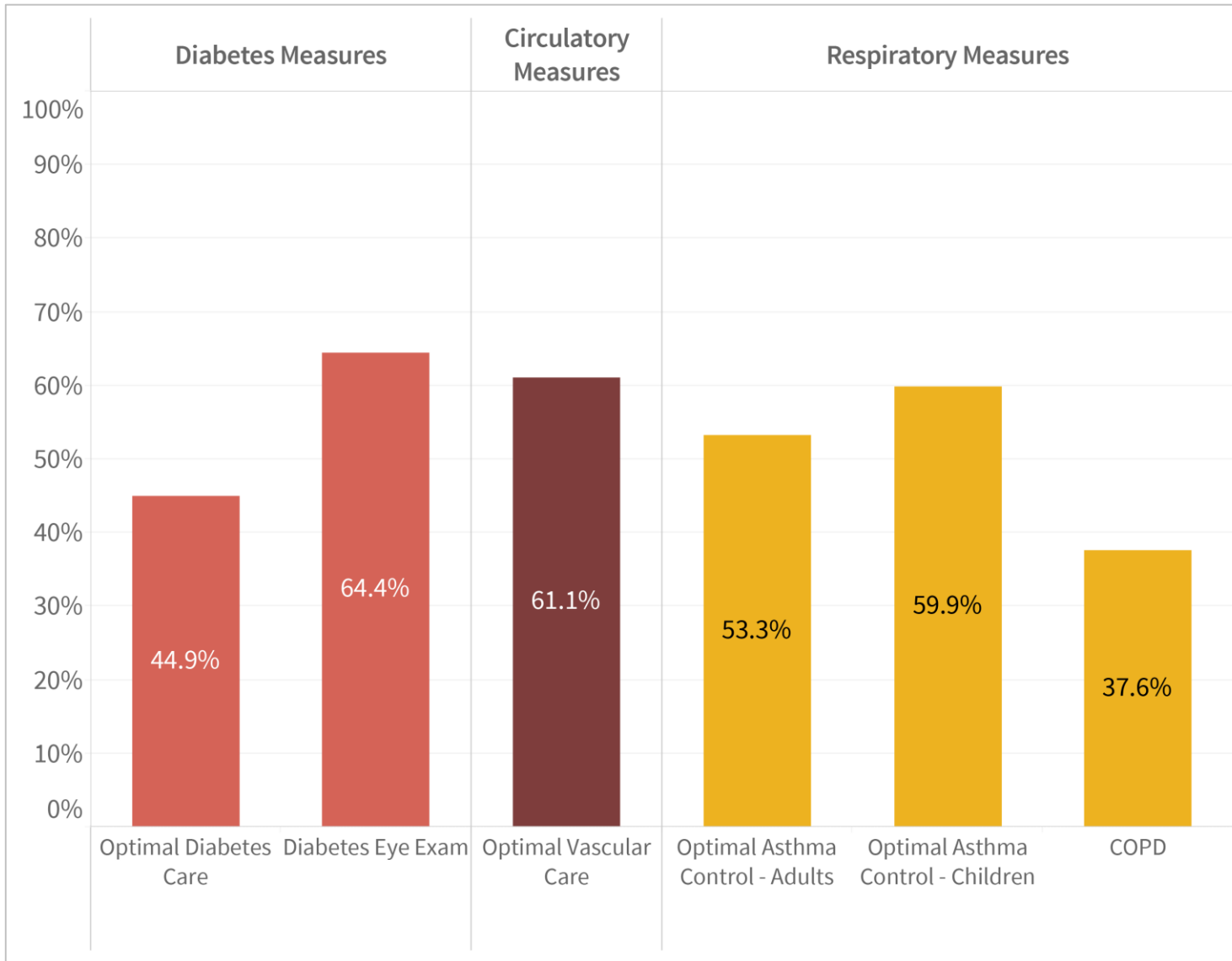
There were nine medical groups that had rates significantly above the statewide average on at least 50 percent of the preventive health measures for which they were eligible. Detailed results by medical group and clinic are available in the online appendix to this report and at mnhealthscores.org.

*Included if eligible for at least three measures.

CHRONIC CONDITIONS MEASURES

Statewide Results

2019 report year (2018 dates of service)



AT A GLANCE

DIABETES MEASURES

On average, out of every 100 adults with diabetes:

- 64 patients receive an eye exam
- 45 patients meet all five criteria to be in control

ASTHMA MEASURES

On average, for patients with asthma:

- 53 out of every 100 adults meet all criteria to be in control
- 60 out of every 100 children meet all criteria to be in control

Measure descriptions available at end of report

CHRONIC CONDITIONS MEASURES

Variation by Medical Group

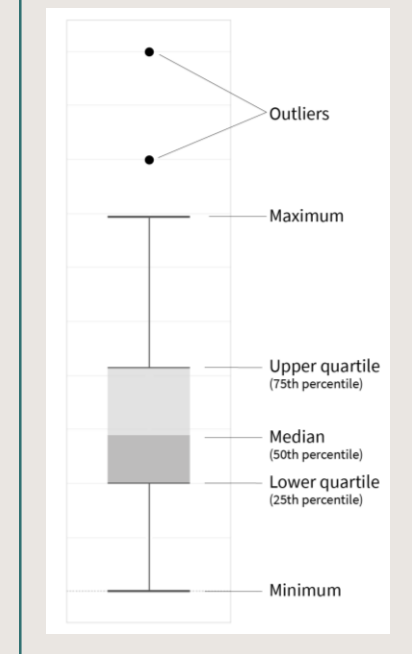
2019 report year (2018 dates of service)



AT A GLANCE

- There continues to be significant variation in medical group performance for all measures of chronic conditions.
- In 2019, the widest range in performance was seen in the Optimal Asthma Control – Adult measure.
- The Diabetes Eye Exam saw the most consistent performance among medical groups.

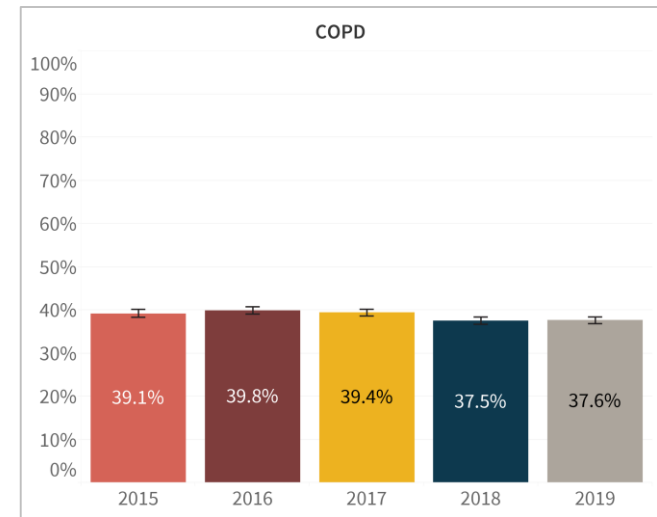
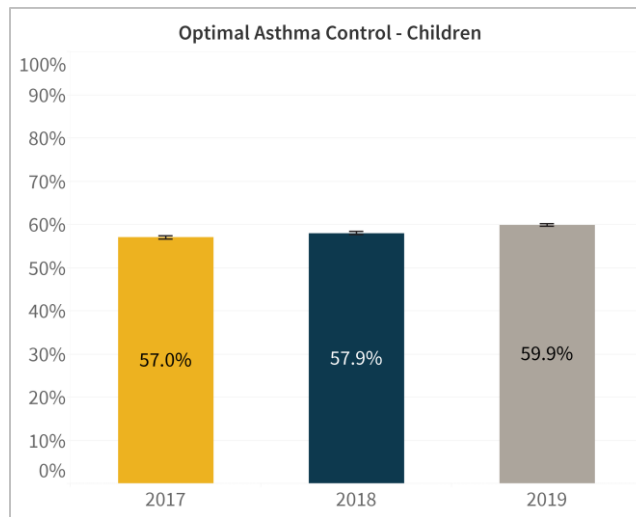
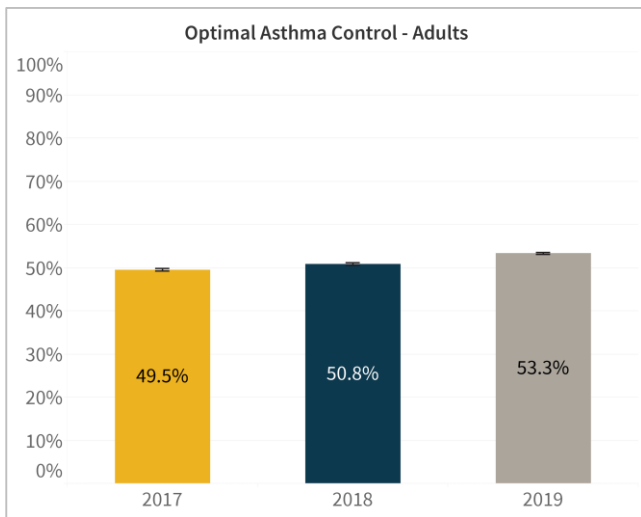
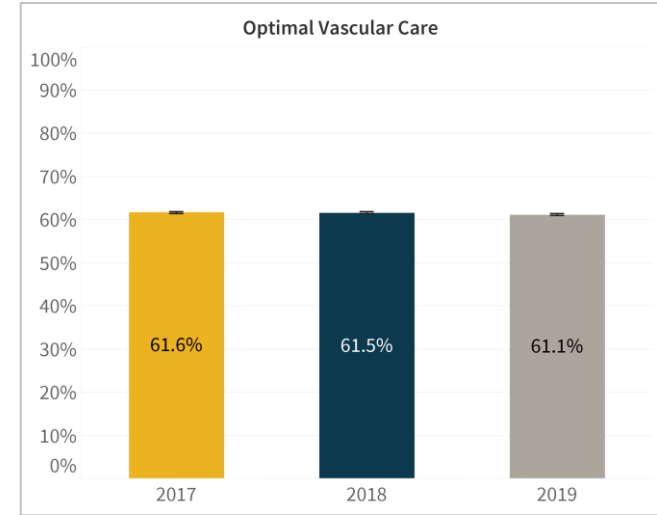
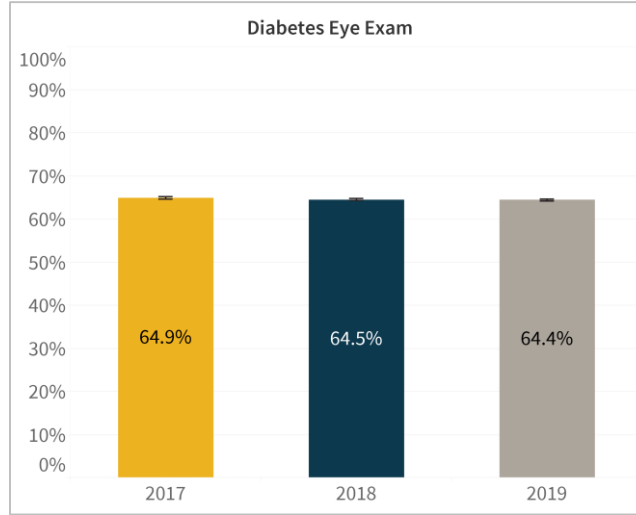
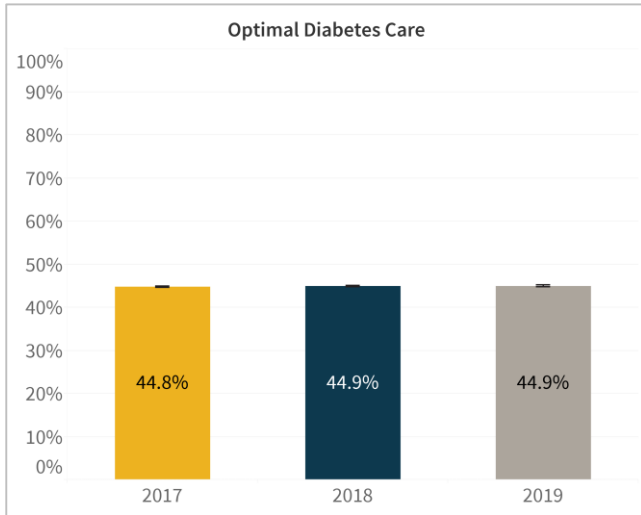
How to read a box plot



CHRONIC CONDITIONS MEASURES

Statewide Trend Over Time

2019 report year (2018 dates of service)



2015 – 2018 results were adjusted to match 2019 patient population

Out of the six measures of chronic conditions, the Optimal Asthma Control measures for both the adult and child populations experienced statistically significant increases in 2018. Performance rates for the other measures of chronic conditions remained stable.

CHRONIC CONDITIONS MEASURES

Highest Performers for Chronic Conditions Measures – Medical Group Level Results

| MEDICAL GROUP | Total number of measures as high performers | Total number of eligible measures | DIABETES | | CIRCULATORY | RESPIRATORY | | |
|--|---|-----------------------------------|-----------------------|-------------------|-----------------------|---------------------------------|--------------------------------|------|
| | | | Optimal Diabetes Care | Diabetes Eye Exam | Optimal Vascular Care | Optimal Asthma Control - Adults | Optimal Asthma Control - Child | COPD |
| Affiliated Community Medical | 3 | 6 | ○ | ● | ○ | ● | ● | ○ |
| Allina Health | 3 | 6 | ○ | ● | ○ | ● | ● | ○ |
| CentraCare Health | 4 | 6 | ● | ● | ○ | ● | ● | ○ |
| Entira Family Clinics | 3 | 6 | ● | ○ | ● | ● | ○ | ○ |
| Essentia Health | 5 | 6 | ● | ● | ● | ● | ● | ○ |
| Fairview Health Services | 5 | 6 | ● | ○ | ● | ● | ● | ● |
| HealthEast Clinics | 3 | 6 | ○ | ○ | ● | ● | ● | ○ |
| HealthPartners Central Minnesota Clinics | 3 | 4 | ● | - | ○ | ● | ● | - |
| HealthPartners Clinics | 5 | 6 | ● | ● | ● | ● | ● | ○ |
| Mankato Clinic | 3 | 6 | ● | ○ | ○ | ● | ● | ○ |
| Park Nicollet Health Services | 6 | 6 | ● | ● | ● | ● | ● | ● |
| Ridgeview Clinics | 4 | 6 | ● | ○ | ● | ● | ● | ○ |

● Above average

○ Average or below average



Not assigned to measure/no data



HP Central reports under HealthPartners Clinics for HEDIS measures

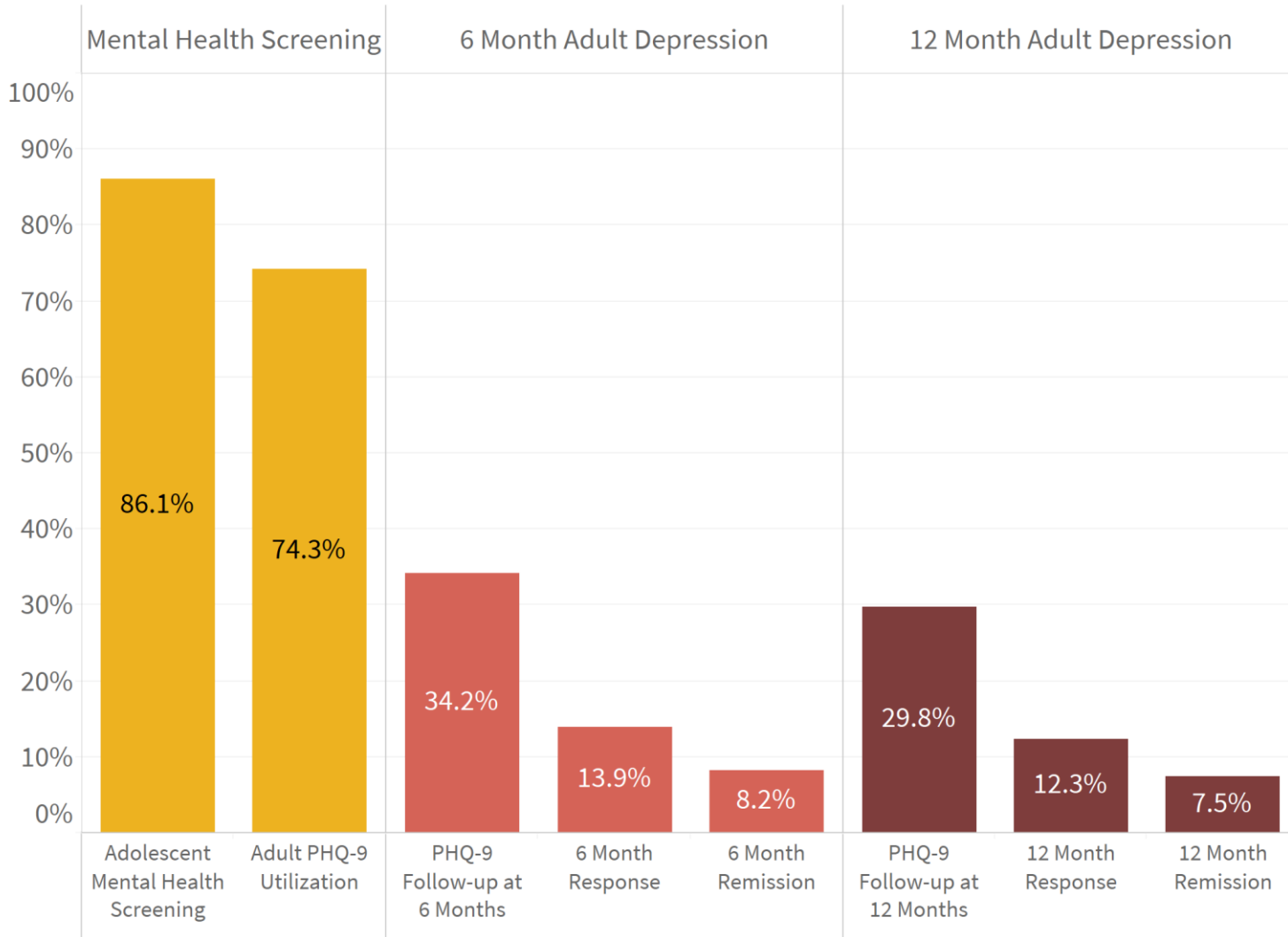
There were 12 medical groups with rates significantly above the statewide average on at least 50 percent of the chronic conditions measures for which they were eligible. Detailed results by medical group and clinic are available in the online appendix to this report and at mnhealthscores.org.

*Included if eligible for at least three measures.

MENTAL HEALTH SCREENING & DEPRESSION OUTCOME MEASURES

Statewide Results

2019 report year



AT A GLANCE

MENTAL HEALTH SCREENINGS

- The Adolescent Mental Health Screening measure captures adolescents without a diagnosis of depression who were screened for mental health and/or depression.
- In contrast, the Adult PHQ-9 Utilization measure only includes adults diagnosed with depression who were assessed for depression.

ADULT DEPRESSION OUTCOMES

On average, out of every 100 adults with depression:

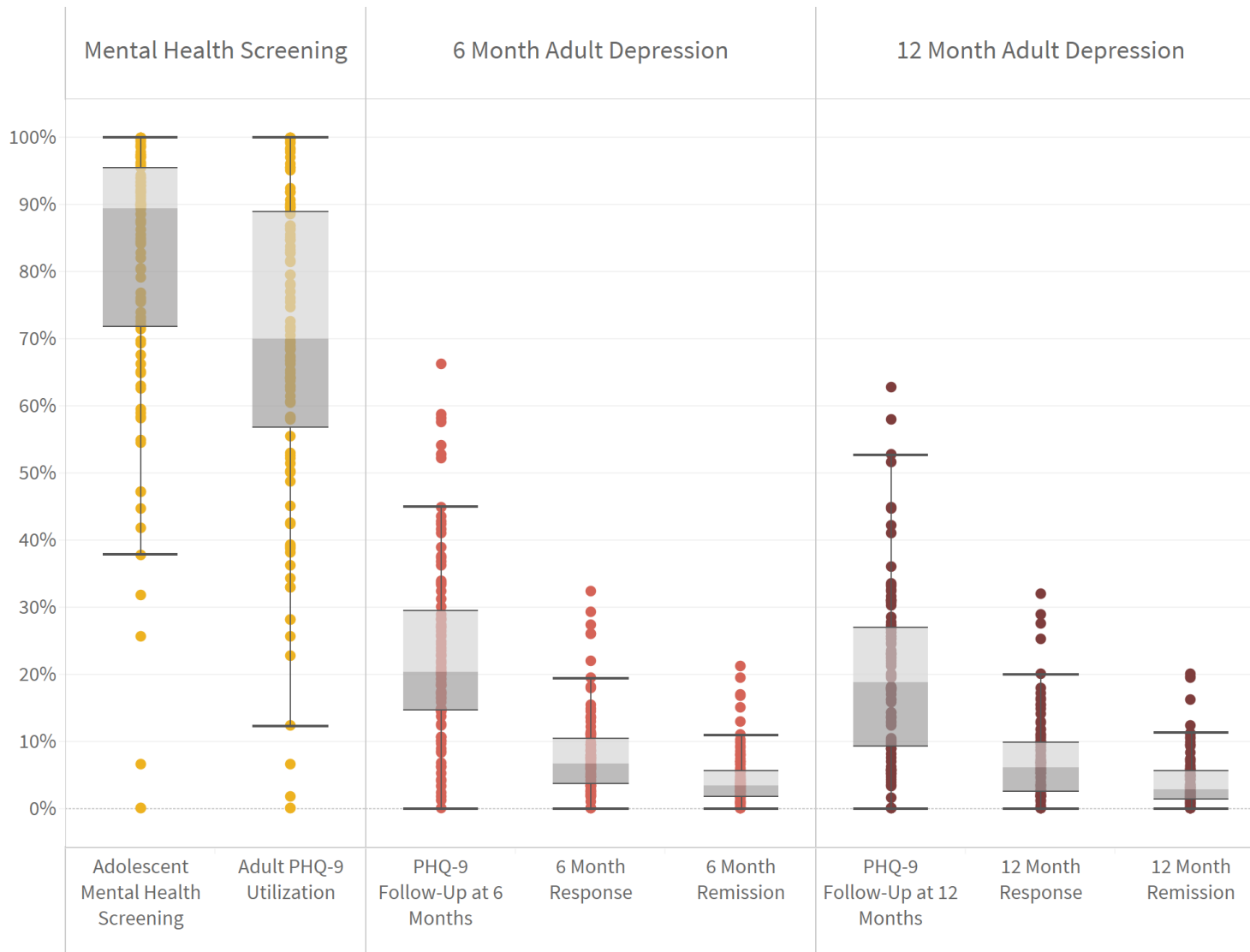
- 34 patients are re-assessed with a PHQ-9 tool after six months
- On average, out of every 34 patients who are re-assessed after six months of treatment:
 - Approximately 14 have a response to treatment
 - Approximately 8 are considered in remission

Measure descriptions available at end of report

DEPRESSION OUTCOME & SCREENING MEASURES

Variation by Medical Group

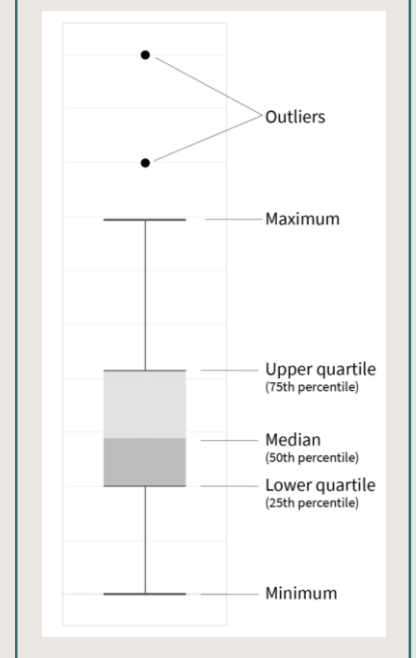
2019 report year



AT A GLANCE

- There continues to be significant variation in medical group performance for all mental health/depression measures.
- In 2019, the widest range in performance was seen in the Adult PHQ-9 Utilization measure.
- Both the 6-month and the 12-month remission measures saw the most consistent performance among medical groups.

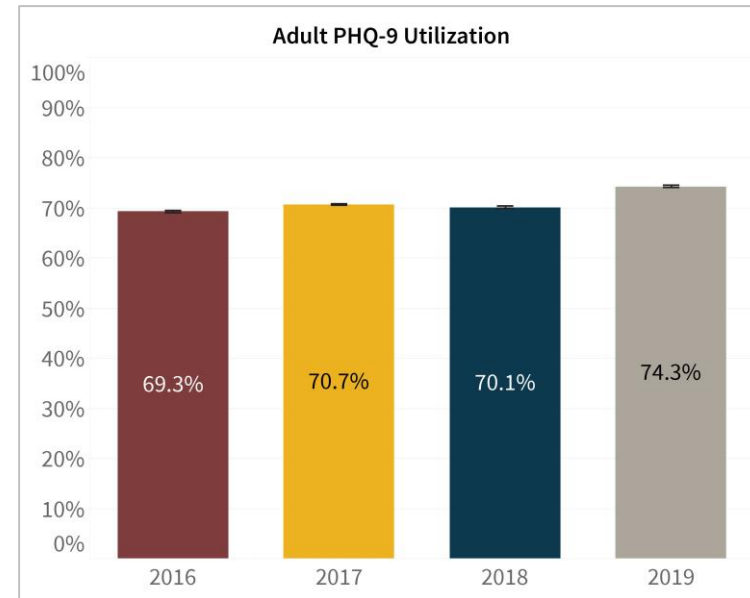
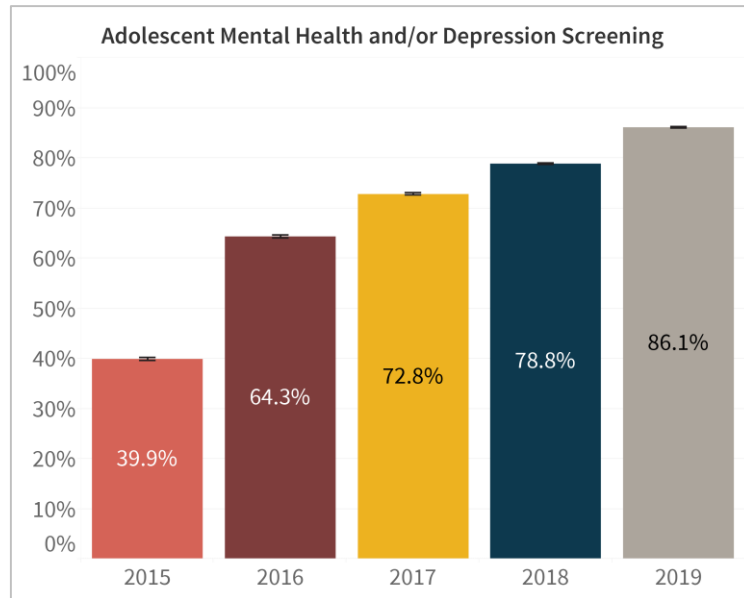
How to read a box plot



MENTAL HEALTH/DEPRESSION SCREENING MEASURES

Statewide Trend Over Time

2019 report year

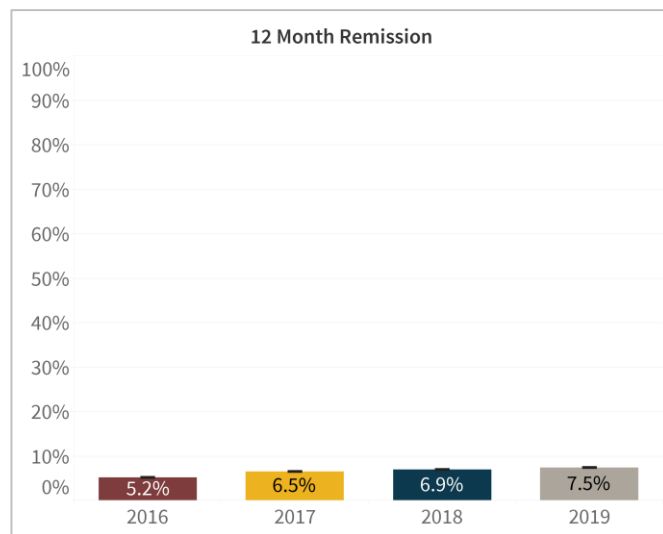
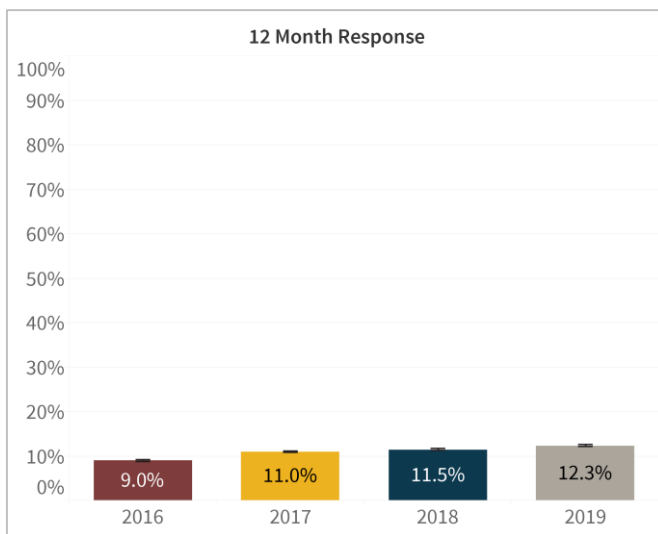
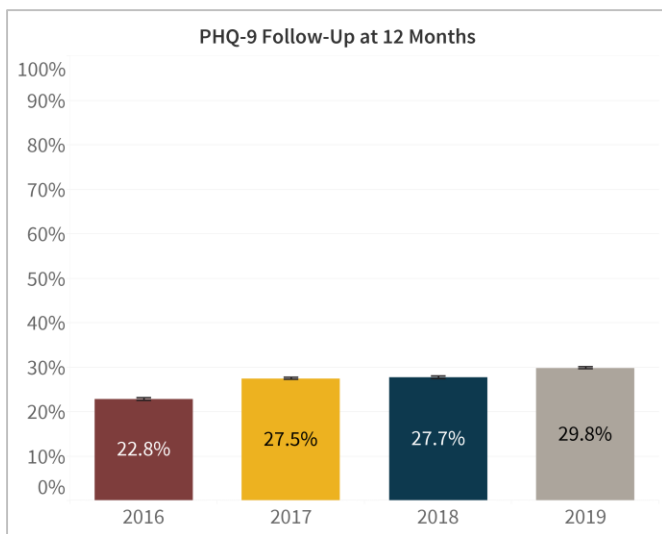
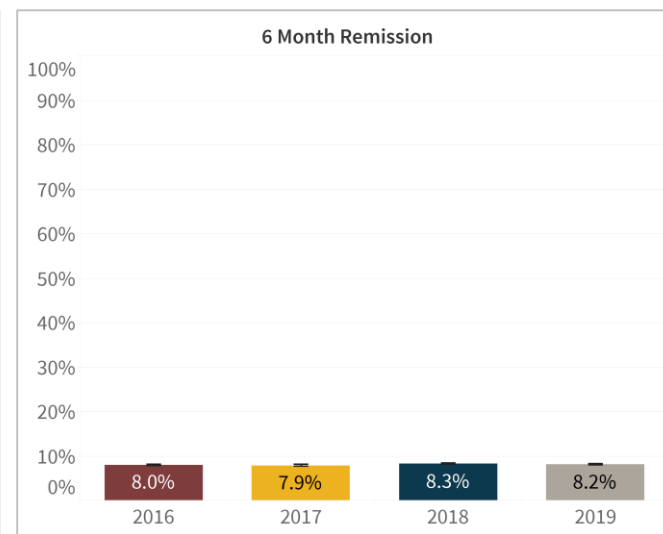
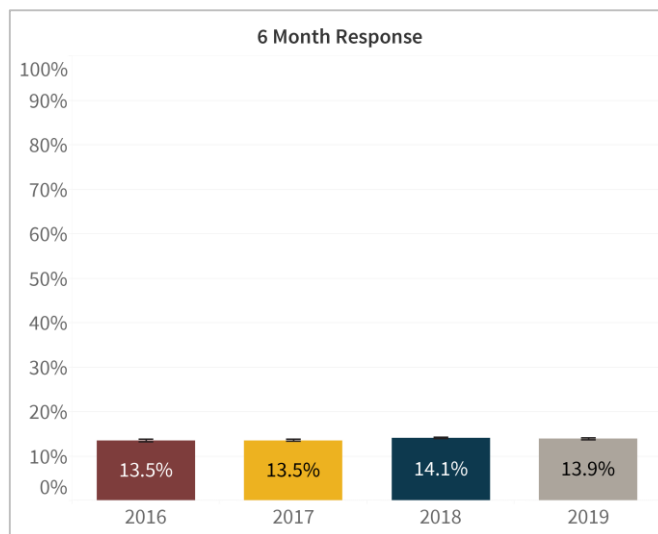
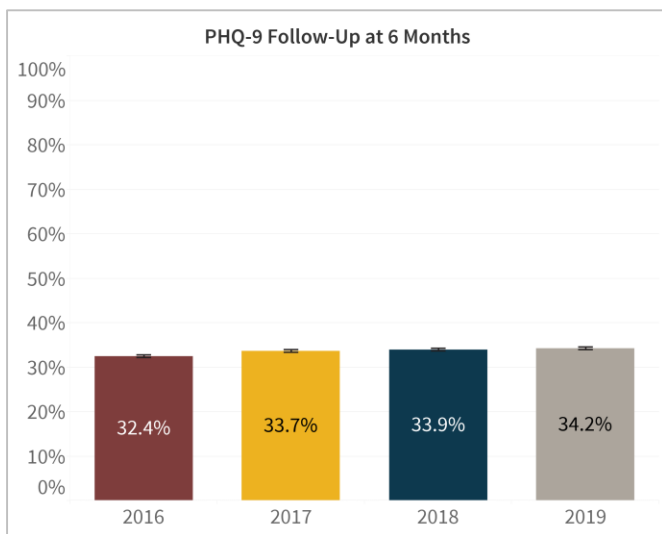


The mental health screening measures had statistically significant increases in performance rates during the 2018 calendar year. The Adolescent Mental Health screening measure increased just over seven percentage points, while the Adult PHQ-9 Utilization measure increased just over four percentage points from the previous year.

6- AND 12-MONTH ADULT DEPRESSION MEASURES

Statewide Trend Over Time

2019 report year



While there continues to be a large opportunity for improvement in the 6- and 12-month adult depression measures, each of the 12-month measures experienced statistically significant rate increases in the 2019 report year. The 6-month measures remained stable and did not have any statistically significant changes from the 2018 report year.

MENTAL HEALTH SCREENING & ADULT DEPRESSION MEASURES

Highest Performers for Depression/Mental Health Measures – Medical Group Level Results

| MEDICAL GROUP | Total number of measures as high performers | Total number of eligible measures | Mental Health Screening | | 6 Month Adult Depression | | | 12 Month Adult Depression | | |
|--|---|-----------------------------------|------------------------------------|-------------------------|-----------------------------|------------------|-------------------|------------------------------|-------------------|--------------------|
| | | | Adolescent Mental Health Screening | Adult PHQ-9 Utilization | PHQ-9 Follow-up at 6 Months | 6 Month Response | 6 Month Remission | PHQ-9 Follow-up at 12 Months | 12 Month Response | 12 Month Remission |
| Advanced Medical Clinic | 1 | 2 | ○ | ● | < | < | < | < | < | < |
| Amery Hospital and Clinic | 1 | 2 | ○ | ● | < | < | < | < | < | < |
| Boynton Health Service | 4 | 8 | ○ | ● | ● | ● | ○ | ● | ○ | ○ |
| Entira Family Clinics | 7 | 8 | ○ | ● | ● | ● | ● | ● | ● | ● |
| Essentia Health | 7 | 8 | ● | ○ | ● | ● | ● | ● | ● | ● |
| Fairview Mesaba Clinics | 6 | 8 | ○ | ● | ● | ● | ● | ● | ● | ○ |
| HealthPartners Central Minnesota Clinics | 7 | 8 | ○ | ● | ● | ● | ● | ● | ● | ● |
| HealthPartners Clinics | 8 | 8 | ● | ● | ● | ● | ● | ● | ● | ● |
| Lakewood Health System | 4 | 8 | ● | ● | ○ | ○ | ○ | ○ | ● | ● |
| Mankato Clinic | 7 | 8 | ● | ● | ● | ● | ○ | ● | ● | ● |
| Park Nicollet Health Services | 8 | 8 | ● | ● | ● | ● | ● | ● | ● | ● |
| Perham Health | 5 | 8 | ○ | ● | ● | ● | ● | ○ | ● | ○ |
| Sanford Health | 6 | 8 | ○ | ○ | ● | ● | ● | ● | ● | ● |
| Swift County Benson Health | 1 | 2 | ● | ○ | < | < | < | < | < | < |
| Westfields Hospital and Clinic | 2 | 2 | ● | ● | < | < | < | < | < | < |

● Above average ○ Average or below average < Not reportable for this measure (too few patients in measure denominator)

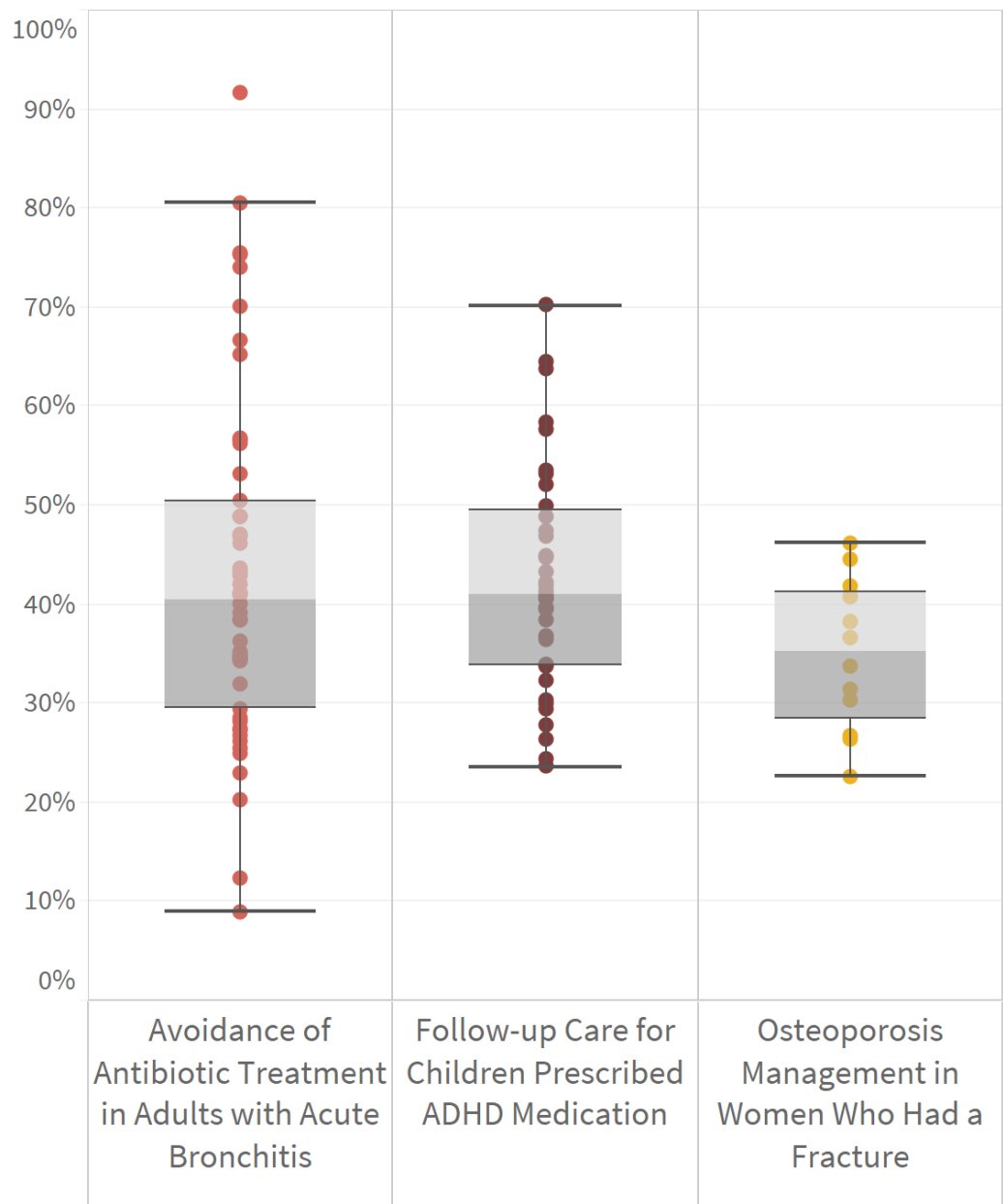
There were 15 medical groups with rates significantly above the statewide average on at least 50 percent of the Depression measures for which they were eligible. Detailed results by medical group and clinic are available in the online appendix to this report and at mnhealthscores.org.

*Included if eligible for at least three measures.

OTHER MEASURES

Variation by Medical Group

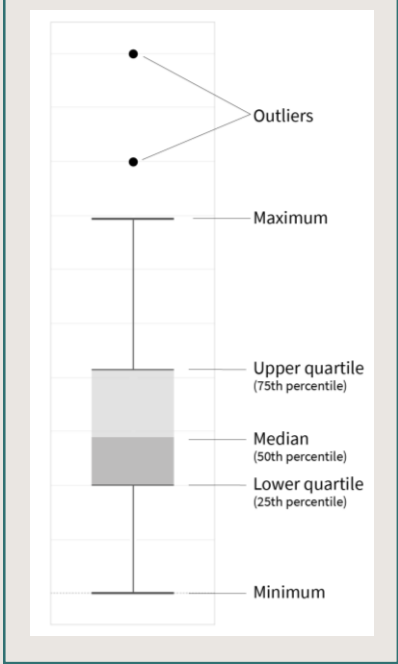
2019 report year (2018 dates of service)



MEASURE OVERVIEW

- Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis:**
 Percentage of adults with a diagnosis of acute bronchitis NOT dispensed an antibiotic prescription
- Follow-up Care for Children Prescribed ADHD Medication:**
 Percentage of children prescribed a new ADHD medication who at least one follow-up visit within 30 days
- Osteoporosis Management in Women Who Had a Fracture:**
 Percentage of women who suffered a fracture and who either had a bone mineral density test or prescription to treat osteoporosis in the six months after fracture

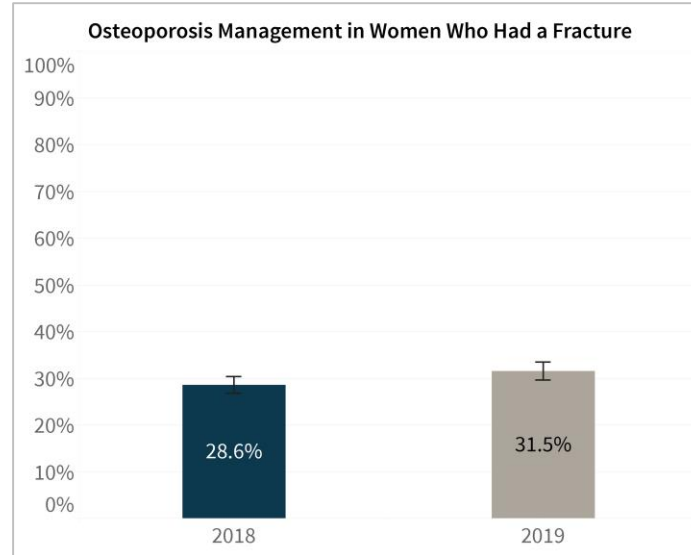
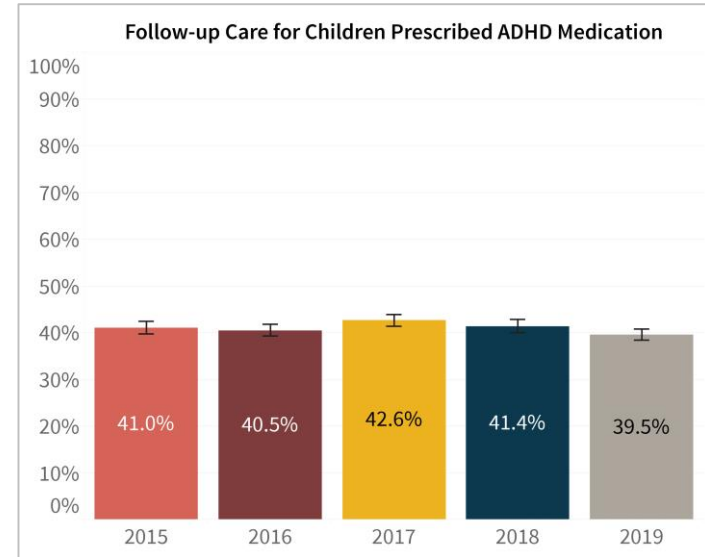
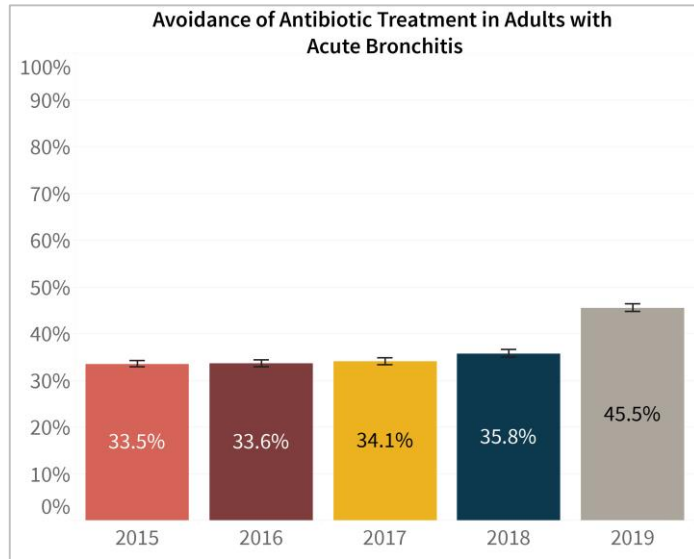
How to read a box plot



OTHER MEASURES

Statewide Trend Over Time

2019 report year (2018 dates of service)



The Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis measure experienced the largest, statistically significant increase in performance rate compared to all other clinical quality measures in this report. This is the first year that the Osteoporosis Management in Women Who Had a Fracture measure has been publicly reported by MNMCM. The rate has remained statistically stable since the 2018 report year.

DEFINITIONS & METHODOLOGY

PREVENTIVE HEALTH MEASURES

Measure Definitions

CANCER SCREENING MEASURES

- **Breast Cancer Screening:** The percentage of women ages 50-74 who received a mammogram during the prior two years (the measurement year or prior year)
- **Cervical Cancer Screening:** The percentage of women ages 21-64 who were screened for cervical cancer during the measurement year using either of two criteria:
 1. Women age 21-64 who had a cervical cytology performed every three years; **OR**
 2. Women age 30-64 who had cervical cytology/human papillomavirus (HPV) co-testing performed every five years
- **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

INFECTIOUS DISEASE SCREENING MEASURES

- **Chlamydia Screening:** The percentage of sexually active women ages 16-24 who had at least one test for chlamydia during the measurement year.

IMMUNIZATIONS

- **Childhood Immunization Status (Combo 10):** The percentage of children two years of age had all of the following vaccines by their second birthday:
 - Four diphtheria, tetanus and acellular pertussis (DTaP)
 - Three polio (IPV)
 - One measles, mumps and rubella (MMR)
 - Three haemophilus influenza type B (HiB)
 - Three hepatitis B (HepB)
 - One chicken pox (VZV)
 - Four pneumococcal conjugate (PCV)
 - One hepatitis A (HepA)
 - Two or three rotavirus (RV)
 - Two influenza (flu)
- **Immunizations for Adolescents (Combo 2):** The percentage of adolescents 13 years of age who had:
 - One dose of meningococcal conjugate vaccine
 - One tetanus, diphtheria toxoids and acellular pertussis (Tdap) vaccine
 - Completed the human papillomavirus (HPV) vaccine by their 13th birthday

CHRONIC DISEASE MEASURES

Measure Definitions

DIABETES MEASURES

- **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
- **Diabetes Eye Exams:** The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) who had a retinal eye exam.

CIRCULATORY MEASURE

- **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

RESPIRATORY MEASURES

- **Optimal Asthma Care – Adults:** The percentage of adults 18-50 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 Asthma Care – Children:** The percentage of 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
- **Use of Spirometry Testing in the Assessment and Diagnosis of COPD:** The percentage of adults 40 years of age and older with a new diagnosis of COPD or newly active COPD, who received appropriate spirometry testing to confirm diagnosis

DEPRESSION MEASURES

Measure Definitions

MENTAL HEALTH SCREENING

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

6 MONTH MEASURES

- **PHQ-9 Follow-up at 6 Months:** The percentage of patients with depression who have a completed PHQ-9 tool within six months after the index event (+/- 30 days)
- **6 Month Response:** The percentage of patients with depression who demonstrated a response to treatment (at least 50 percent improvement) six months after the index event (+/- 30 days)
- **6 Month Remission:** The percentage of patients with depression who reached remission (PHQ-9 score less than five) six months after the index event (+/- 30 days)

12 MONTH MEASURES

- **PHQ-9 Follow-up at 12 Months:** The percentage of patients with depression who have a completed PHQ-9 tool within 12 months after the index event (+/- 30 days)
- **12 Month Response:** The percentage of patients with depression who demonstrated a response to treatment (at least 50 percent improvement) 12 months after the index event (+/- 30 days)
- **12 Month Remission:** The percentage of patients with depression who reached remission (PHQ-9 score less than five) 12 months after the index event (+/- 30 days)

OTHER MEASURES

Measure Definitions

- **Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis:** The percentage of adults 18-64 years of age with a diagnosis of acute bronchitis who were not dispensed an antibiotic prescription
- **Follow-up Care for Children Prescribed ADHD Medication:** The percentage of children ages 6-12 prescribed a new attention-deficit/hyperactivity disorder (ADHD) medication who had a least one follow-up visit within 30 days of when the ADHD medication was dispensed.
- **Osteoporosis Management in Women Who Had a Fracture:** The percentage of women 67-85 years of age who suffered a fracture and who had either a bone mineral density (BMD) test or prescription for a drug to treat osteoporosis in the six months after the fracture.

DEFINITIONS

- **Composite Measures:** A measure of two or more component measures, each of which individual 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 Measure (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).

QUALITY MEASURES BY MEASURE TYPE

| QUALITY MEASURE | Process | Outcome | PRO-PM | HEDIS | HEDIS Hybrid |
|---|-----------|----------|----------|----------|--------------|
| Adolescent Mental Health and/or Depression Screening | ✓ | | | | |
| Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis | ✓ | | | ✓ | |
| Breast Cancer Screening | ✓ | | | ✓ | |
| Cervical Cancer Screening | ✓ | | | ✓ | ✓ |
| Childhood Immunization Status (Combo 10) | ✓ | | | ✓ | ✓ |
| Chlamydia Screening in Women | ✓ | | | ✓ | |
| Colorectal Cancer Screening | ✓ | | | | |
| Depression Remission at 12 Months | | ✓ | ✓ | | |
| Depression Remission at 6 Months | | ✓ | ✓ | | |
| Depression Response at 12 Months | | ✓ | ✓ | | |
| Depression Response at 6 Months | | ✓ | ✓ | | |
| Depression: Adult PHQ-9 Utilization | ✓ | | | | |
| Depression: PHQ-9 Follow-Up at 12 Months | ✓ | | | | |
| Depression:PHQ-9 Follow-Up at 6 Months | ✓ | | | | |
| Diabetes Eye Exam | ✓ | | | | |
| Follow-Up Care for Children Prescribed ADHD Medication | ✓ | | | | |
| Immunizations for Adolescents (Combo 2) | ✓ | | | | ✓ |
| Optimal Asthma Control - Adults | | ✓ | ✓ | | |
| Optimal Asthma Control - Children | | ✓ | ✓ | | |
| Optimal Diabetes Care | | ✓ | | | |
| Optimal Vascular Care | | ✓ | | | |
| Osteoporosis Management in Women Who Had a Fracture | ✓ | | | ✓ | |
| Use of Spirometry Testing in the Assessment and Diagnosis of COPD | ✓ | | | ✓ | |
| TOTALS | 15 | 8 | 6 | 7 | 3 |

PATIENT-REPORTED OUTCOME (PRO) TOOLS USED

OPTIMAL ASTHMA CONTROL

- Asthma Control Test (ACT)
- Childhood Asthma Control Test (C-ACT)
- Asthma Control Questionnaire (ACQ)
- Asthma Therapy Assessment Questionnaire

ADULT DEPRESSION

- Patient Health Questionnaire (PHQ-9)

PRO-PM: Patient-reported Outcome Performance Measure

METHODS

The measures in this report are collected from two separate data sources: clinics and health plans. Direct Data Submission (DDS) measures use data from clinics. This data enables reporting of results by clinic location as well as by medical group. In contrast, the Healthcare Effectiveness Data and Information Set (HEDIS) measures use data from health plans. This data enables reporting of results by medical group only.

The table on the next slide shows the number of patients included in each measure and the data source. HEDIS measures include patients enrolled in commercial health insurance products, Medicare managed care or Medicaid managed care programs. Patients who are uninsured, or those served by a Medicaid/Medicare fee-for-service program are not included. The number of patients eligible for these measures is further narrowed by criteria specifying a minimum amount of time a member/patient must be continuously enrolled in a health plan to be eligible for the measure.

In contrast, DDS measures rely on data from clinics across Minnesota to identify the number of patients eligible for the measure. All eligible clinic patients are reflected regardless of insurance coverage type and duration. As a result, DDS measures have a larger number of eligible patients for the measures.

NUMBER OF PATIENTS INCLUDED IN QUALITY MEASURES

| | QUALITY MEASURE | Data Source | Age Range | Number of Patients Eligible for Measure* | Number of Patients in Measure Denominator |
|--------------------|---|-------------|-----------------|--|---|
| PREVENTIVE HEALTH | Breast Cancer Screening | Health Plan | 50-74 | 339,249 | 339,249 |
| | Cervical Cancer Screening** | Health Plan | 21-64 | 519,769 | 12,050 |
| | Colorectal Cancer Screening | DDS | 50-75 | 1,241,678 | 1,236,138 |
| | Chlamydia Screening in Women | Health Plan | 16-24 | 102,462 | 102,462 |
| | Childhood Immunization Status (Combo 10)** | Health Plan | Age 2 and under | 31,668 | 5,364 |
| | Immunizations for Adolescents (Combo 2)** | Health Plan | By age 13 | 34,187 | 5,071 |
| CHRONIC CONDITIONS | Optimal Diabetes Care | DDS | 18-75 | 313,857 | 313,454 |
| | Diabetes Eye Exam | Health Plan | 18-75 | 165,842 | 165,842 |
| | Optimal Vascular Care | DDS | 18-75 | 185,840 | 185,840 |
| | Optimal Asthma Control - Adults | DDS | 18-50 | 139,039 | 138,621 |
| | Optimal Asthma Control - Children | DDS | 5-17 | 72,763 | 72,365 |
| | Use of Spirometry Testing in the Assessment and Diagnosis of COPD | Health Plan | 40+ | 13,114 | 13,114 |
| DEPRESSION | Adolescent Mental Health and/or Depression Screening | DDS | 12-17 | 154,205 | 154,034 |
| | Adult PHQ-9 Utilization | DDS | 18+ | 219,645 | 219,645 |
| | Adult Depression: PHQ-9 Follow-Up at 6 Months | DDS | 18+ | 111,585 | 111,585 |
| | Adult Depression: 6 Month Response | DDS | 18+ | 111,585 | 111,585 |
| | Adult Depression: 6 Month Remission | DDS | 18+ | 111,585 | 111,585 |
| | Adult Depression: PHQ-9 Follow-Up at 12 Months | DDS | 18+ | 111,585 | 111,585 |
| | Adult Depression: 12 Month Response | DDS | 18+ | 111,585 | 111,585 |
| | Adult Depression: 12 Month Remission | DDS | 18+ | 111,585 | 111,585 |
| OTHER | Avoidance of Antibiotic Treatment in Adults with Acute Bronchitis | Health Plan | 18-64 | 15,333 | 15,333 |
| | Follow-Up Care for Children Prescribed ADHD Medication | Health Plan | 6-12 | 6,054 | 6,054 |
| | Osteoporosis Management in Women Who Had a Fracture | Health Plan | 67-85 | 2,153 | 2,153 |
| | | | | | |

DATA SOURCES

The measures in this report are collected from two separate data sources: clinics and health plans.

- **Direct Data Submission (DDS)** measures use data from clinics, which enables reporting by clinic location and medical group.
- **HEDIS** measures use data from health plans, which enables reporting of results by medical group only.

TABLE OVERVIEW

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

HEDIS MEASURES

- Includes patients enrolled in commercial health insurance products, Medicare managed care or Medicaid managed care programs.
- Does NOT include patients who are uninsured or those served by a Medicaid/Medicare fee-for-service program, patients who do not meet continuous enrollment criteria for measure

DDS MEASURES

- Rely on data from clinics across Minnesota to identify eligible patients
- All eligible clinic patients are reflected, regardless of insurance coverage type and duration

DIRECT DATA SUBMISSION (DDS)

DDS measures use data submitted directly to MNMCM by medical groups and clinics.

Data Collection

Data are reported at two levels: by clinic site and medical group.

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

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

Eligible Population Specifications

The eligible population for each measure is identified by a medical group on behalf of their individual clinics. MNMCM's 2019 DDS Data Collection Guides provide technical specifications for the standard definitions of the eligible population, including elements such as age.

Numerator Specifications

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

Calculating Rates

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

DIRECT DATA SUBMISSION (DDS) CON'T

Risk Adjustment

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

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

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

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

- Medical group/clinic name
- Performance
 - “Above Average” = Clinic or medical group’s actual rate is significantly above its expected rate
 - “Expected” = Clinic or medical group’s actual rate is equivalent to its expected rate
 - “Below Average” = Clinic or medical group’s actual rate is significantly below its expected rate
- Patients = Number of patients at a medical group/clinic site that meet the denominator criteria for the measure.
- Actual Rate = Actual percentage of patients meeting criteria (unadjusted rate).
- Expected Rate = Expected percentage of patients meeting criteria based on the clinic’s/medical group’s mix of patient risk (adjusted rate).
- Actual to Expected Ratio = Actual percentage of patients meeting criteria divided by the expected percentage of patients meeting criteria for the clinic’s/medical group’s mix of patient risk.

Thresholds for Public Reporting

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

HEALTH CARE EFFECTIVENESS AND INFORMATION SET (HEDIS)

HEDIS is a national set of performance measures used in the managed care industry that were developed and maintained by the National Committee for Quality Assurance (NCQA). Clinic HEDIS measures use data from the administrative or hybrid data collection methodology.

Data Collection

- Administrative Method: These HEDIS measures use health plan claims data to identify the patients who are eligible for the measure (denominator) and for the numerator.
- Hybrid Method: These HEDIS measures use health plan claims data to identify the patients who are eligible for the measures. Numerator information comes from health plan claims and medical record review data. Because medical record review data is costly and time-consuming to collect, health plans select a random sample from the eligible patients to identify the measure denominator. For the immunization measures, health plans also use data from the Minnesota Immunization Information Connection (MIIC).
- Continuous enrollment criteria: The minimum amount of time for a member/patient to be enrolled in a health plan to be eligible for a HEDIS measure. It ensure the health plan has enough time to render services. If a member/patient does not meet minimum continuous enrollment criteria, they are not eligible to be included in the measure denominator.

Eligible Population Specifications

The eligible populations for the administrative and hybrid measures are identified by each participating health plan using its respective administrative claims database. Health plans assign patients to a medical group using a standard medical group definition based on a tax identification number (TIN). Administrative billing codes determine the frequency of a patient's visit to a medical group. For most measures, patients are assigned to the medical group they visited most frequently during the measurement period. Patients who visited two or more medical groups with the same frequency are attributed to the medical group visited most recently in the measurement period. The TIN is used as the common identifier for aggregating data across health plans.

HEALTH CARE EFFECTIVENESS AND INFORMATION SET (HEDIS)

Numerator Specifications

For HEDIS administrative measures, the numerator is the number of patients from the eligible population who met the numerator criteria. For HEDIS hybrid measures, the numerator is the number of patients from the sample who met numerator criteria.

Calculating Rates

HEDIS administrative and hybrid measures are reported at a medical group level and are expressed as percentages. Rates calculated for hybrid measures require weighting because of the sampling procedures applied. Rates and 95-percent asymmetrical confidence intervals are calculated for each measure for each medical group. (Asymmetrical confidence intervals are used to avoid confidence interval lower bound values less than zero and upper bound values greater than one hundred.). The medical group overall average is used to compare to the individual medical group's rate for the performance ratings. The statewide average includes attributed and unattributed patients.

HEDIS measures are not risk adjusted, therefore do not have Actual to Expected Ratios. Columns for Lower and Upper 95% Confidence Intervals are included. HEDIS measures are rated on the following scale:

- Above = Clinic or medical group's actual rate is significantly above the medical group average
- Average = Clinic or medical group's actual rate is equivalent to the medical group average
- Below = Clinic or medical group's actual rate is significantly below the medical group average

Thresholds for Public Reporting

MNCM has established minimum thresholds for HEDIS public reporting to ensure statistically reliable rates. Only medical groups that meet the thresholds of 30 patients in the denominator of HEDIS administrative measures and 60 patients in the denominator of HEDIS hybrid measures are publicly reported.

Limitations

Data used to calculate rates for the HEDIS measures reflect patients insured through 10 health plans doing business in Minnesota. Patients who are uninsured, self-pay, or who are served by Medicaid/Medicare fee-for-service are not reflected in the HEDIS results.

APPENDIX

Online Appendix Tables

- 2** Preventive Health Measures by Medical Group
- 20** Chronic Conditions Measures by Medical Group
- 40** Mental Health Screening & Depression Outcome Measures by Medical Group
- 72** Other Measures by Medical Group
- 77** Preventive Health Measures by Clinic
- 97** Chronic Conditions Measures by Clinic
- 160** Mental Health Screening & Depression Outcome Measures by Clinic