2018 PREVENTIVE HEALTH MEASURES

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TABLE OF CONTENTS

- 2 Introduction
- 6 2018 Results for Preventive Health Measures
- **15** Definitions

ONLINE APPENDICES

- Methodology
- Detailed Medical Group and Clinic Level Tables

Who is MN Community Measurement?

MN Community Measurement (MNCM) is a non-profit organization that empowers the community with data and information to drive improvement in health care cost and quality. MNCM was formed as a community resource where all health care stakeholders – whether they buy, manage, provide, deliver, oversee, or consume health care – come together and mutually invest in improvement for a better tomorrow.

MNCM specializes in developing, collecting, analyzing, and publicly reporting information on health care quality, cost, and patient experience. Founded in 2005, our multi-stakeholder collaborative includes physicians, hospitals and health systems, health plans, employers, consumers, and state government.

MNCM strives to deliver data and information that is timely, actionable, and relevant for each stakeholder in the community to fulfill their role in advancing improvement and affordability.

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INTRODUCTION

MN Community Measurement (MNCM) has been empowering the community with data and information to drive improvement in health care quality and cost since 2005. This report presents data collected by MNCM in 2018 on quality measures for preventive health. It includes information on cancer screening, infectious disease screening, and vaccinations for children and adolescents. These measures were developed or selected to help prevent associated illnesses and diseases. Getting recommended preventive health services is important to good health and well-being, yet MNCM's data show a pattern of wide variation in health care quality overall and significantly different outcomes among some patient populations.

What is Preventive Care?

The goal of preventive care is to help people stay healthy, and to improve health. The goal of *primary prevention* is to avoid the onset of disease (e.g., childhood vaccines, smoking cessation counseling, good nutrition). The goal of *secondary prevention* is to prevent disease from developing beyond its early stages (e.g., screening mammograms to detect breast cancer early when treatment can be more effective). *Tertiary prevention* minimizes the progression and symptoms associated with established disease (e.g., controlling blood sugar levels in people with diabetes).¹ This report focuses on preventive health measures that address primary and secondary prevention.

Preventive care services prevent illnesses, diseases and other health problems or detect illnesses at an early stage when treatment is likely to work best.²

- » Some of the most common preventive health services recommended include cancer screenings and immunizations. Screening for sexually transmitted diseases like chlamydia are also important for young women.³
- » Although preventive care does not necessarily result in net cost savings, many preventive services offer good value for increasingly scarce health care dollars.¹

Preventive health services are an important focus for quality measurement to aid in preventing disease, helping people live healthier lives, and keeping health care costs down. Even though these services are covered by public and private insurance plans, millions of individuals do not get recommended preventive services.⁴ The good news is that a proactive approach and regular follow-up are associated with higher rates of completing recommended preventive health services. While there are many factors that can influence preventive health, medical groups with higher performance on these measures often find that system-based strategies including standing orders, decision supports, use of clinic non-physicians (e.g., nurses, care managers, patient navigators, ancillary providers), clinical tools such as patient registries, and partnerships with community-based organizations are effective. In fact, evidence shows that adopting multiple approaches simultaneously can effectively increase preventive care.⁵

NEW in 2018

Medical group results for the Immunizations for Adolescents (Combo 2) measure are being publicly reported for the first time. Completing the Human papillomavirus (HPV) vaccine series by age 13 is a new component.

The Importance of Preventive Health Services

Cancer screening tests help find cancer before symptoms appear. Getting screening tests regularly may find breast, cervical and colorectal cancers early, when treatment is likely to work best.⁶

- » Breast cancer in the United States is the most common cancer in women, regardless of race or ethnicity, and the most common cause of death from cancer among Hispanic women. It is the second most common cause of death from cancer among white, black, Asian, and American Indian/Alaska Native women.⁷ Mammograms are the best way to find breast cancer early.
- » Cervical cancer used to be the leading cause of cancer death for women in the United States. However, in the past 40 years, the number of cases of cervical cancer and the number of deaths due to cervical cancer have decreased substantially. This decline is the result of many women getting regular Papanicolaou (Pap) tests, which find cervical cancer early.⁸
- » Colorectal cancer is the third most common cancer diagnosed in both men and women in the United States. The death rate from colorectal cancer has been dropping for decades. One likely reason is that colorectal polyps are being found more often by screening and removed before they can develop into cancer; or that cancers are being found earlier when the disease is easier to treat. In addition, colorectal cancer treatment has improved over the last few decades.⁹

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: women age 21–64 who had a cervical cytology performed every three years or 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 51–75 who are up-to-date with the appropriate screening for colorectal cancer. Appropriate screenings include one of the following:

- » Colonoscopy during the measurement year 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.

Chlamydia is one of the most prevalent sexually transmittable diseases in the United States, mostly among young women.¹⁰

- » Untreated chlamydia infections can result in pelvic inflammatory disease which is a major cause of infertility, ectopic pregnancy, and chronic pelvic pain; however, screening programs can help reduce the incidence of pelvic inflammatory disease.
- » The United States Preventive Services Task Force (USPSTF) recommends screening for chlamydia infection for all sexually active non-pregnant young women ages 24 and younger.11
- » Chlamydia infections are increasing nationally and in the Midwest. In 2017, the number of chlamydia cases in Minnesota was highest in suburban and Greater Minnesota areas, and Whites had the highest number of chlamydia cases compared to other race categories.¹²

Vaccination is one of the best ways to protect children and teens from potentially harmful diseases that may require hospitalization and can even be deadly.¹³

- » Diseases that used to be common, including polio, measles, diphtheria, pertussis, rubella, mumps, tetanus, rotavirus, chickenpox, influenza and human papillomavirus can now be prevented by vaccination.¹⁴
- » While patient compliance with some of the recommended vaccines for children two years and younger is high and stable, children are less likely to be up-to-date on Hepatitis A, the combined seven-vaccine series* and rotavirus. In addition, immunization rates are much lower for uninsured children and those insured by Medicaid.¹⁵
- » Adolescent vaccination coverage continues to improve, but opportunity remains to increase HPV-associated cancer prevention. Protection against vaccine-preventable diseases will be increased if clinicians consistently recommend and administer recommended vaccines for adolescents.¹⁶

The number of people represented in each measure varies by data source, measure type, age, and gender, as shown in Table 1. For more information, see *Methodology appendix*.

Infectious Disease Measure

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 (Combo 10): The percentage of two-year old children who received all of the following vaccines by their second birthday:

- » Four diphtheria, tetanus and acellular pertussis (DTaP)
- » Three inactivated polio (IPV)
- » One measles, mumps and rubella (MMR)
- » Three H influenza type B
- » Three hepatitis B
- » One chicken pox (VZV)
- » Four pneumococcal conjugate
- » One hepatitis A
- » Two or three rotavirus
- » Two influenza

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 and
- » completed the human papillomavirus (HPV) vaccine series by their 13th birthday.

*DTaP, poliovirus vaccine, MMR, H influenzae type b conjugate vaccine, HepB vaccine, varicella vaccine, and pneumococcal conjugate vaccine.

TABLE 1: Number of Patients Represented in Preventive Health Measures

MEASURE	Age Range	*Number of Patients Eligible for Measure	Number of Patients in Measure Denominator (Total population or sample of eligible patients)	
Breast Cancer Screening	50-74	319,185	319,185	
Cervical Cancer Screening	21–64	463,570	11,775	
Colorectal Cancer Screening	51-75	1,207,960	1,207,960	
Chlamydia Screening	16-24	81,167	81,167	
Childhood Immunization Status (Combo 10)	Age 2 and under	26,359	5,479	
Immunizations for Adolescents (Combo 2)	13	29,577	5,038	

*Includes patients who meet measure denominator criteria, continuous enrollment criteria (applies to all measures except Colorectal Cancer Screening) and are attributed to a medical group.

Key findings include:

- » The immunization measures are improving and show statistically significant increases in statewide rates compared to 2017.
- » Statewide results for the other preventive health measures have been relatively stable over the last three years but show continued room for improvement.
- » There is significant variation in medical group performance for all preventive health measures, but several medical groups and clinics are achieving noteworthy results for many of these measures.
- » There is also significant variation by demographic characteristics:**
 - » Colorectal cancer screening rates are significantly higher for patients who live in metro areas, are age 60 and older, or female.
 - » Results also vary by race and Hispanic ethnicity.** Notably, colorectal cancer screening rates for all populations of color were significantly below the statewide average.
 - » Rates also vary by preferred language and country of origin. Patients born in Ireland, the United States or Vietnam have the highest rates of colorectal cancer screening. Patients born in Somalia have the lowest rates.

**Because of differences in how data are collected, only the Colorectal Cancer Screening measure can be reported by demographic characteristics.

5 · PREVENTIVE HEALTH SCREENING IN MINNESOTA

2018 RESULTS FOR PREVENTIVE HEALTH MEASURES

MNCM reports on six preventive health measures. The figures below display results at a statewide level, over time, and illustrate variation across medical groups. For the Colorectal Cancer Screening measure, results are further segmented by geography, age, gender, race, Hispanic ethnicity, preferred language and country of origin. Detailed results by medical group and clinic are available in the online appendix to this report, and at *mnhealthscores.org*.

Data Source Enables Reporting Capability

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, Healthcare Effectiveness Data and Information Set (HEDIS) measures use data from health plans. This data enables reporting of results by medical group only. In this report, clinic level results and results by demographic characteristics are only reported for the DDS measure (i.e., Colorectal Cancer Screening).



FIGURE 1: Statewide Results

(2018 report year)

Rates for all preventive health measures indicate room for improvement. In Minnesota, over 70 percent of patients are receiving pertinent cancer screenings; however, only 26 percent of adolescents are receiving recommended immunizations.

FIGURE 2: Statewide Trend Over 3 Years

(2016, 2017, 2018 report years)



The immunization measures are improving and show statistically significant increases in statewide rates compared to 2017. Results for the other preventive health measures have remained relatively stable over the last three years. The rate decrease for colorectal cancer screening is likely due to changes in the measure denominator. *Changes to the measure denominator definition resulted in a significant drop in the population for this measure. This change likely contributed to the decreased rate in 2018.

FIGURE 3: Variation by Medical Group

(2018 report year)



There is significant variation in medical group performance for all preventive health measures, but the range of variation is widest for the Colorectal Cancer Screening measure. Rates for individual medical groups and clinics are included in the online appendix to this report.

FIGURE 4: Colorectal Cancer Screening by Geography, **Age and Gender**

(2018 report year)



95 percent confidence intervals.



patients = 1,176,265

Total number of patients = 1,207,960



patients = 1,207,952

Patients living in metropolitan areas, age 60 and older, or female have higher colorectal cancer screening rates.

FIGURE 5: Colorectal Cancer Screening by Race and Hispanic Ethnicity

(2018 report year)



95 percent confidence intervals.





Total number of patients = 1,052,817

Ethnicity



Total number of patients = 1,078,335 For the Colorectal Cancer Screening measure, rates vary by race and Hispanic ethnicity. Notably, the screening rates for all populations of color are significantly below the statewide average.

FIGURE 6: Colorectal Cancer Screening by Language

(2018 report year)



95 percent confidence intervals.

Preferred Language



Total number of patients = 1,154,266

For the Colorectal Cancer Screening measure, results vary by language. Patients who speak Cantonese, English, or Vietnamese have rates that are significantly above the statewide average. Patients who speak Somali have the lowest rates.

FIGURE 7: Colorectal Cancer Screening by Country of Origin

(2018 report year)



95 percent confidence intervals.

Highest Performers for Preventive Health Measures – Medical Group Level Results

There are 8 primary care or multi-specialty medical groups with rates significantly above the statewide average on at least 50 percent of the preventive health screening measures for which they were eligible. They are listed below in alphabetical order.

	CANCER SCREENING			INFECTIOUS DISEASE SCREENING	IMMUNIZATIONS	
MEDICAL GROUP	Breast Cancer Screening	Cervical Cancer Screening	Colorectal Cancer Screening	Chlamydia Screening	Childhood Immunization (Combo 10)	Immunizations for Adolescents (Combo 2)
Allina Health	•	٠	•	•	•	
CentraCare Health	•	٠	•	•		
Fairview Health Services	•	٠	•	•		
HealthPartners Clinics	•	٠	•	•		
Hennepin County Medical Center (HCMC) Clinics			•	•	•	
Mankato Clinic, Ltd.	•		•		•	
Mayo Clinic	•		•			
Park Nicollet Health Services	•	٠	•	•	•	

Performance ratings for all clinics and medical groups can be found on *mnhealthscores.org*.

Highest Performers for Colorectal Cancer Screening – Clinic Level Results

One of the preventive health measures is able to be reported at the clinic level – Colorectal Cancer Screening. There are 17 primary care clinics that received a "Top" rating on this measure. These are the clinics with the highest actual to expected rates after adjusting for differences in patient risk factors. The adjustment accounts for differences in health insurance product type, patient age, and ZIP code level indicator of socioeconomic status.* The clinics are listed below in order of risk adjusted performance.

Clinic Name

Stevens Community Medical Center - Starbuck Clinic

HealthPartners - Center for International Health

Associates in Women's Health - Minneapolis

CentraCare Health Plaza - Internal Medicine

Park Nicollet Clinic - Compass

Sacred Heart Mercy Health Care Center

Obstetrics, Gynecology and Infertility - Edina

CentraCare River Campus - Internal Medicine

Obstetrics, Gynecology and Infertility - Maple Grove

CentraCare Health Plaza - Obstetrics and Women's Clinic

Sanford Sioux Falls Women's Internal Medicine

Fairview Prior Lake Clinic

Hennepin County Medical Center (HCMC) Clinics - Golden Valley Clinic

Clinic Sofia Ob/Gyn

HealthPartners - Health Center for Women

Associates in Women's Health - Edina

Essentia Health East Duluth Clinic 1st St

*More information on risk adjustment is available in the Methodology Appendix.

14 · PREVENTIVE HEALTH SCREENING IN MINNESOTA

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DEFINITIONS

Health Care Effectiveness Data and Information Set (HEDIS) measures: A national set of performance measures used in the managed care industry and developed and maintain by the National Committee for Quality Assurance (NCQA). Clinical HEDIS measures use data from the administrative or hybrid data collection methodology.

- » 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. The HEDIS measures in this report that use the administrative method include:
 - » Breast Cancer Screening
 - » Chlamydia Screening
- » Hybrid Method: These HEDIS measures use health plan claims data to identify the patients who are eligible for the measure. 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). The HEDIS measures in this report that use the hybrid method include:
 - » Cervical Cancer Screening
 - » Childhood Immunization Status (Combo 10)
 - » Immunizations for Adolescents (Combo 2)

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 ensures 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.

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

- » Childhood Immunization Status (Combo 10)
- » Immunizations for Adolescents (Combo 2)

Process measures: A measure that shows whether steps proven to benefit patients are followed correctly. They measure whether an action was completed (e.g., having a medical exam or test, writing a prescription, or administering a drug). The process measures in this report include:

- » Breast Cancer Screening
- » Cervical Cancer Screening
- » Colorectal Cancer Screening
- » Chlamydia Screening

Online Appendices

- Methodology
- Detailed Medical Group and Clinic Level Tables

Endnotes

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