



Hennepin Health
300 South Sixth Street, MC 604
Minneapolis, Minnesota 55487-0604

Description

According to the Centers for Disease Control and Prevention (CDC), colon and rectal cancers are the fifth most diagnosed cancer and have the fourth highest death rate of all cancers in Minnesota¹. The U.S. Preventive Services Task Force (USPSTF) recommends that adults aged 45 to 75 be screened for colorectal cancer.² Screening rates for colorectal cancer leave room for improvement across all populations, even more so in the last two years. The Colorectal Cancer Screening Alliance states that since the start of the COVID-19 pandemic, colorectal cancer screenings dropped by roughly 90% and colon cancer diagnoses fell by 32%.³ For these reasons, Hennepin Health seeks to understand the rates and demographics of colorectal cancer screenings among our member populations and use this information to develop current interventions to raise screening rates.

Focus study questions

1. How do the colorectal cancer screening rates among Hennepin Health members compare to the commercially insured population in Minnesota?
2. Among Hennepin Health members, what are the screening rates for colorectal cancer?
3. Are there disparities in the colorectal cancer screen rates by ethnic group?
4. What interventions to address colorectal cancer screening rates are showing promise or effectiveness?

Process and documentation

Sample size and study methodology

This study is based on Hennepin Health colorectal cancer screening claims data with dates of service in 2020 and 2021 received by February 15, 2022. The claims of all eligible members were examined for 2020 and 2021, so there was no sampling, and therefore no sampling methodology. The DHS Risk Corridor Technical Specifications for colorectal cancer screening was used for the 2020 and 2021 data collection. The population age for inclusion in this study is 50-75 years old⁴.

1 <https://gis.cdc.gov/Cancer/USCS/#!/AtAGlance/>

2 <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/colorectal-cancer-screening>

3 <https://www.ccalliance.org/news/press-releases/colorectal-cancer-alliance-launches-comprehensive-campaign-increase-screening-rates-during-covid-19-beyond>

4 In May of 2021, the USPSTF changed the recommended screening age range from 50-75 to 45-75 years of age. Data in future years will reflect this change, however the data in this study is from the 50-75-year age range to align with the recommendations at the time of data collection.

The 2019 colorectal cancer screening risk corridor rate, race and ethnicity data created by DHS is used as the baseline.

For the purposes of this study, appropriate colorectal cancer screening includes:

- 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

The key metrics for the study are defined below.

- Colorectal cancer screenings: Claim codes – HCPCS G0104, G0105, G0106, G0107, G0120, G0121, G0327, G0328, G0464; CPT 82270
- Race and ethnicity: DHS enrollment data files were used to identify race and ethnicity (Hispanic vs. non-Hispanic) for each member in the HEDIS® data when available.

Analysis

Data limitations

The Hennepin Health 2021 claims data is incomplete due to claims lag and claims filing requirements. Hennepin Health has access to the member's claims data for any colorectal screening test performed during the member's enrollment with Hennepin Health; therefore, claims data for any colorectal screening test performed prior to the member's enrollment would not be available.

Hennepin Health could not recreate the 2019 colorectal cancer screening data received from DHS. Therefore, Hennepin Health could not validate the data.

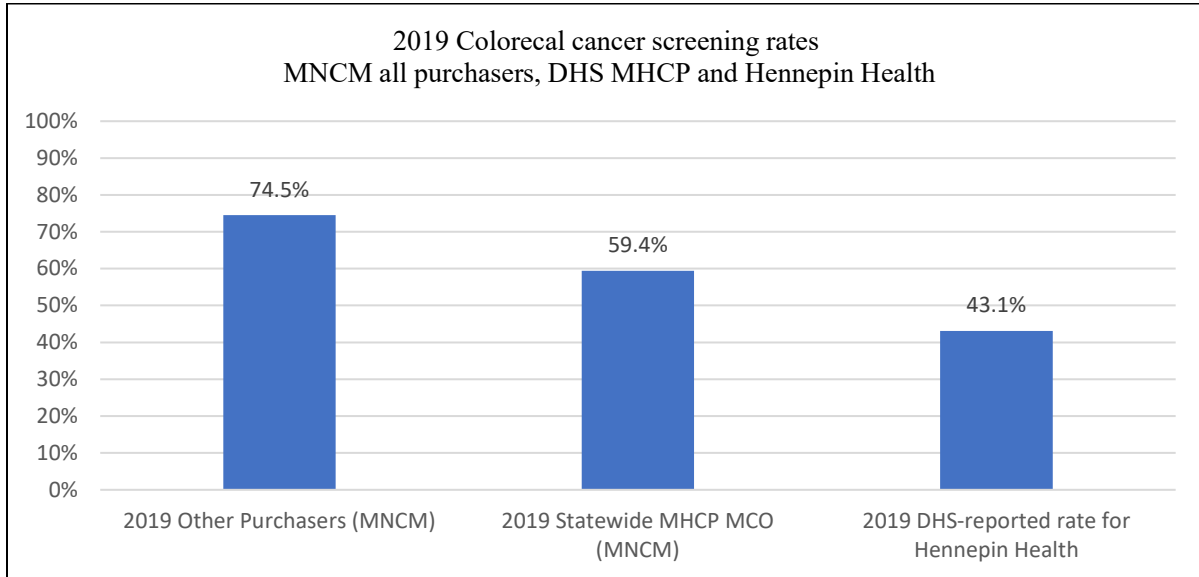
Results

According to the Minnesota Community Measurement (MNCM) 2019 Minnesota Health Care Disparities by Insurance Type report, the colorectal cancer screening rate for Minnesota Health Care Programs (MHCP) managed care patients is significantly lower than the rate for all other Minnesota health care purchasers⁵. In 2019, the Statewide MHCP managed care organizations (MCO) colorectal cancer screening rate was 59.4% compared to 74.5% for all other Minnesota health care purchasers as displayed in Figure 1. In addition to the lower colorectal cancer screening for MHCP members, racial and ethnic disparities are also existed for Blacks, Native Hawaiian/Pacific Islander, and American Indian members compared to White members⁵.

⁵(n.d.). Minnesota Community Measurement.

The 2019 colorectal cancer screening rate for Hennepin Health as reported by DHS was 43.1% (Figure 1).

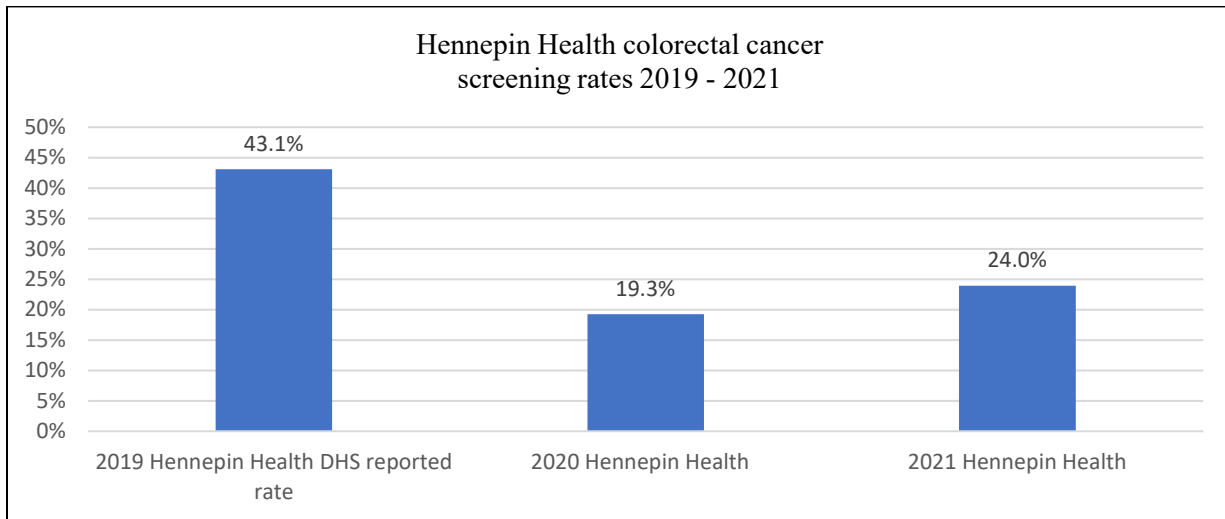
Figure 1. Colorectal cancer screening rates -MNCM statewide all purchasers, DHS MHCP and Hennepin Health 2019



Data source: MNCM, DHS

The Hennepin Health colorectal cancer screening rate for all populations decreased significantly from the 2019 DHS reported rate of 43.1% to 19.3% in 2020. This decrease can be attributed to the start of the COVID-10 pandemic in March 2020, at which time, health care clinics were seeing patients in-person to provide “essential” care. When the health care clinics did reopen a few months later, preventive screenings were not provided unless they were “essential” until 4th quarter 2020. In addition, colorectal cancer screening claims data was not available if the screening test was performed before a member was enrolled with Hennepin Health. The Hennepin Health’s colorectal cancer screening rates increased slightly since the COVID-19 pandemic began. Hennepin Health’s internal HEDIS® data reflects an increase in screening to 24.0% of the eligible population in 2021, up from 19.3% in 2020 (Figure 2).

Figure 2. Hennepin Health colorectal cancer screening rates – all populations 2019 - 2021



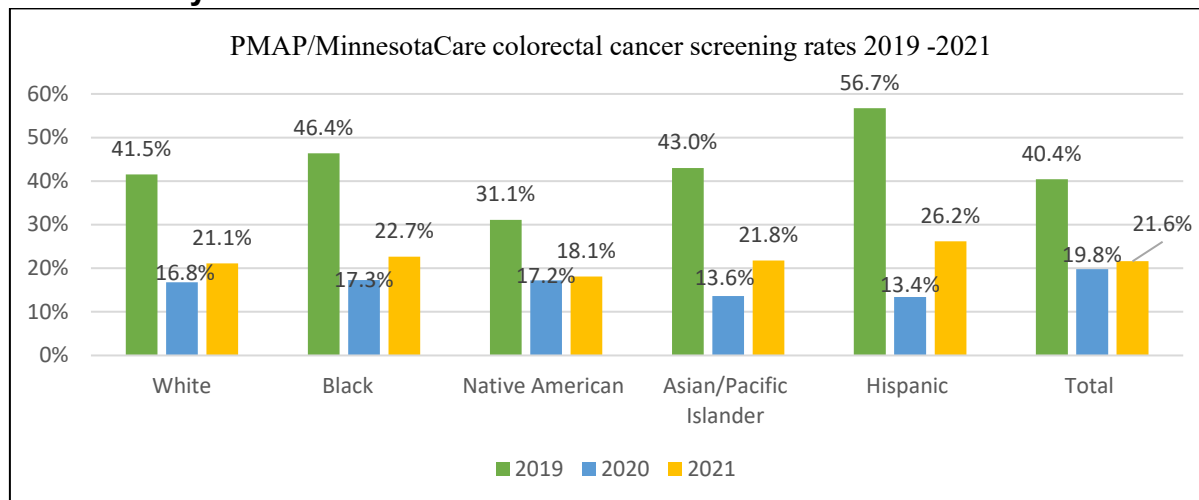
Data source: DHS (2019), Hennepin Health data warehouse

In both PMAP/MinnesotaCare and the SNBC membership, the denominator (number of eligible members) was under 100 members within the Native American, Asian/Pacific Islander, and Hispanic populations in 2020 and 2021. Small numbers raise statistical issues concerning accuracy, and thus usefulness, of the data. Rates based on small numbers may fluctuate dramatically from year to year.

For our PMAP/MNCare members, the overall screening rate was 19.8% and 21.6% in 2020 and 2021, respectively (see Figure 3). Screening rates in all race and ethnic groups increased from 2020 to 2021 with the largest increase seen in the Asian/Pacific Islander group. In 2021, when presented by race/ethnic group, the highest screening rate is the Hispanic members at 26.2%. Next is the rate for the Black population at 22.7% and Asian/Pacific Islander members at 21.8%. The screening rate for the White population follows closely behind the others at 21.1% with the lowest screening rate noted for the Native American members at 18.1%.

In 2020, racial disparities are noted in the Asian/Pacific Islander (13.6%) and Hispanic (13.4%) populations when compared to the White population (16.8%). Racial disparities are noted between the Native American population (18.1%) and the White population (21.2%) in 2021.

Figure 3. 2021 PMAP/MinnesotaCare colorectal cancer screening rates by race/ethnicity 2019 - 2021

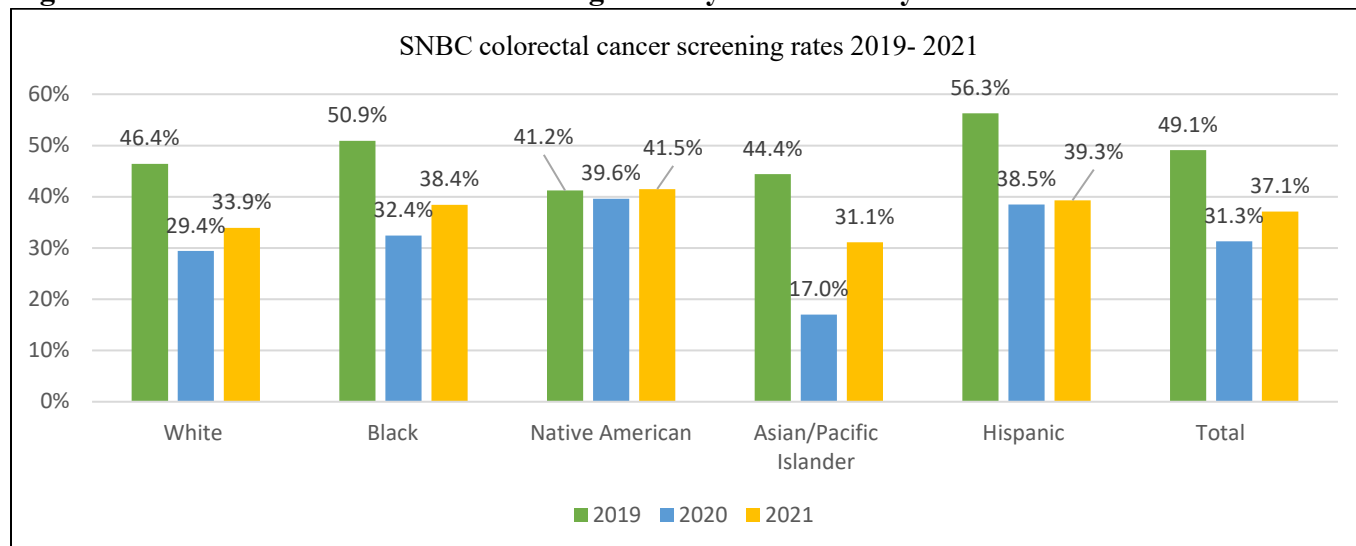


Data source: DHS (2019), Hennepin Health data warehouse

Colorectal cancer screening rates for the SNBC population are considerably higher than those for the PMAP/MinnesotaCare group with the overall rate being 31.3% in 2020 and 37.1% in 2021 (see Figure 4). Due to small denominators for the Native American, Asian/Pacific Islander and Hispanic population, rates should be interpreted cautiously. As seen in the PMAP/MinnesotaCare population, screening rates in all race and ethnic groups increased from 2020 to 2021 with the largest increase seen in the Asian/Pacific Islander group. Among the SNBC membership, the highest colorectal cancer screening rate is the Native American population at 41.5%, followed closely by the Hispanic and Black members at 39.3% and 38.4%, respectively. Next is the rate for White members at 33.9%, and the Asian/Pacific Islander group again has the lowest screening rate at 31.1%.

In 2020, racial disparities are noted in the Asian/Pacific Islander (17.0%) population when compared to the White population (29.4%). Racial disparities are noted between the Asian/Pacific Islander population (31.1%) and the White population (33.9%) in 2021, although the disparity between the two populations significantly decreased when compared to 2020. In 2020, there was a 12.4% rate difference, whereas in 2021 the rate difference was 2.8%.

Figure 4. SNBC colorectal cancer screening rates by race/ethnicity 2019 -2021



Data source: DHS (2019), Hennepin Health data warehouse

Hennepin Health also examined the colorectal cancer screening rates for members who were identified as homeless or recently homeless. Hennepin Health has access to this information for members who have been screened for social determinants of health at a Hennepin Healthcare clinic, so the data is limited to members receiving care and Hennepin Healthcare. It is unknown which members responded that they were securely housed vs. not having been asked the question at all. There is no designation in the data between not asked and a response that they are securely housed. We do believe this exercise is useful despite its limitations as we increase our understanding about colorectal cancer screening for our membership.

In 2021, data identified 528 members who were homeless or recently homeless and eligible for colorectal cancer screening. Of those members, 87 members had been screened. Therefore, 16.5% of the population that has been identified as experiencing homelessness is current in their colorectal cancer screening. Hennepin Health was not able to discern whether these members were enrolled with PMAP/MinnesotaCare or SNBC program. Given the data limitations for this metric, no conclusions about the impact of being homeless has on the overall colorectal cancer screenings rates.

While colorectal cancer screening rates are not completely equitable across groups, it is difficult to draw any conclusions due to the small sample size. It is clear, however, that Hennepin Health member screening rates lag those of commercially insured people and the statewide MHCP rate. Many people find the screening tests for colorectal cancer screening to be unpleasant, and therefore, were likely further disincentivized to undergo the procedures during the COVID-19 pandemic. Additionally, the more invasive tests (colonoscopies and sigmoidoscopies) were not available during the most intense periods of the pandemic.

Recommendations and next steps

Hennepin Health will bring these findings to the Enrollee Advisory Council for member insights into what may be contributing to the low colorectal cancer screening rates and explore potential strategies to increase screening. Hennepin Health will also consider conducting a colorectal cancer screening campaign directed at both members and providers. Hennepin Health, Hennepin Healthcare and NorthPoint are currently collaborating on outreach activities to increase these rates.



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