



Hennepin Health

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Focus Study: Understanding the Primary Deterrents to and Barriers Impacting Cervical Cancer Screening - Phase II

May 1, 2026



Focus Study: Cervical Cancer Screening (CCS) - Understanding the Primary Deterrents to and Barriers Impacting CCS - Phase II

Description

Cervical cancer remains a significant public health issue, with substantial disparities in incidence and mortality rates across different racial and ethnic groups in the United States (U.S.). The National Cancer Institute (NCI) reports that almost all cancer cases are caused by the human papillomavirus (HPV), the most prevalent sexually transmitted infection globally.¹ Despite advancements in screening and prevention, cervical cancer continues to be a leading cause of cancer deaths among women worldwide.

The World Health Organization (WHO) recommends at least two screenings for every woman, one at age 35 and another at age 45. The target for WHO is to reduce cervical cancer cases to four per 100,000 women.² The current cervical cancer rate among women in the U.S. is 7.6 per 100,000 which is higher than the global target. The current death rate among women in the U.S. stands at 2.2 per 100,000 women per year. In 2021, an estimated 295,748 women were living with cervical cancer in the U.S. An estimate of 13,360 new cases is projected in 2025, with 4,320 projected deaths.³

Significant racial and ethnic disparities exist in cervical cancer screening (CCS) and outcomes. For instance, Black/ African American women over the age of 65 have a much higher incident rate (18.9 per 100,000) compared to the national average.⁴ Generally, U.S. statistics show racial and ethnic minorities have higher chances of being diagnosed with advanced states of cervical cancer when compared to people who identify as Non-Hispanic White Women.⁵

In Minnesota, studies from 2015 to 2019 indicate 50% of cervical cancers were diagnosed among females under age 50. During the same period, 813 women were diagnosed with cervical cancer, in addition to a reported 203 deaths.⁶ American Indians and Asian populations in Minnesota show higher incidence and mortality rates compared to the general female population in the state.⁷ According to MDH, 93% of Minnesotan women who received early diagnosis of cervical cancer have a survival chance of at least five years after diagnosis, compared to 52% for those diagnosed with the disease at a later stage.⁸

Given these disparities, it is crucial to investigate the barriers impacting cervical cancer screening among minority groups. Understanding these barriers can inform targeted interventions to improve screening rates and reduce cervical cancer incidence and mortality among these populations. This study aims to explore the factors contributing to

¹ National Cancer Institute. *Cervical Cancer Causes, Risk Factors, and Prevention*. Updated: August 2024

² WHO. *Global strategy to accelerate the elimination of cervical cancer as a public health problem, 2020*

³ [Cervical Cancer — Cancer Stat Facts](#)

⁴ Howlader et al., 2019

⁵ Nghiem et al., 2016

⁶ [Cervical Cancer in Minnesota \(state.mn.us\)](#)

⁷ [Cervical Cancer in Minnesota \(state.mn.us\)](#)

⁸ [Cervical Cancer in Minnesota](#)

low screening rates and develop strategies to enhance cervical cancer prevention efforts, particularly in underserved communities.

The study was completed in two phases. The initial phase entailed a fact-finding mission focusing on a comprehensive review of existing cervical cancer studies and direct consultations with Hennepin Healthcare System (HHS) and NorthPoint Health and Wellness (NorthPoint) staff and providers whose work center around CCS. Both institutions are part of Hennepin Health's Accountable Health Mode (AHM) partners and serve as State Grantees for the Cervical Cancer Quality Improvement (CSQI) program. These sources offered a substantial foundation for understanding the observed barriers and helped highlight potential interventions to address these gaps. The second phase of the study commenced in 2025 with plans to utilize insights from the first phase to guide a focus group conversation and/or survey with members through NorthPoint's existing Listening Sessions or organized groups. Additionally, during the second phase, an attempt was made to assess the Social Determinants of Health (SDoH) wheel on Epic® to identify the key areas that may impact care for our members. Plans were to explore implementation of small test of change for key strategies identified during the first phase of the study. The interim report for 2024 was completed by March 31, 2025, and presented to CQOC. The second phase report is scheduled to be completed by March 31, 2026, and will be presented to CQOC in the second quarter.

The study will provide valuable insights into barriers to cervical cancer screening from the perspective of researchers, healthcare providers, and the community. Strategies will be developed to address the main challenges and enhance screening rates. Using the Plan-Do-Study-Act (PDSA) methodology, a small test of change will be implemented and assessed through continuous monitoring of HEDIS® CCS rates.

Focus Study Questions

- What barriers hinder CCS completion?
 - To what extent do social drivers of health influence individuals' screening behaviors?
 - To what extent do cultural beliefs and practices influence an individual's screening behaviors?
 - To what extent do knowledge and awareness influence individuals' screening behaviors?
- What tested strategies worked and what did not work in address CCS?
- What key strategies can we adopt to address these barriers?
- What are the trends in CCS screening among Hennepin Health members?

Process and Documentation

For this study, CCS includes:

- Primary HPV test every 5 years for women, ages 30-64.
- HPV test with a Pap test (co-test) every 5 years for women, ages 30-64.
- Pap test every 3 years for women, ages 21-29.

Anything that poses as hinderance to getting the above screenings done is considered a barrier.

Sample Size and Sampling Methodology

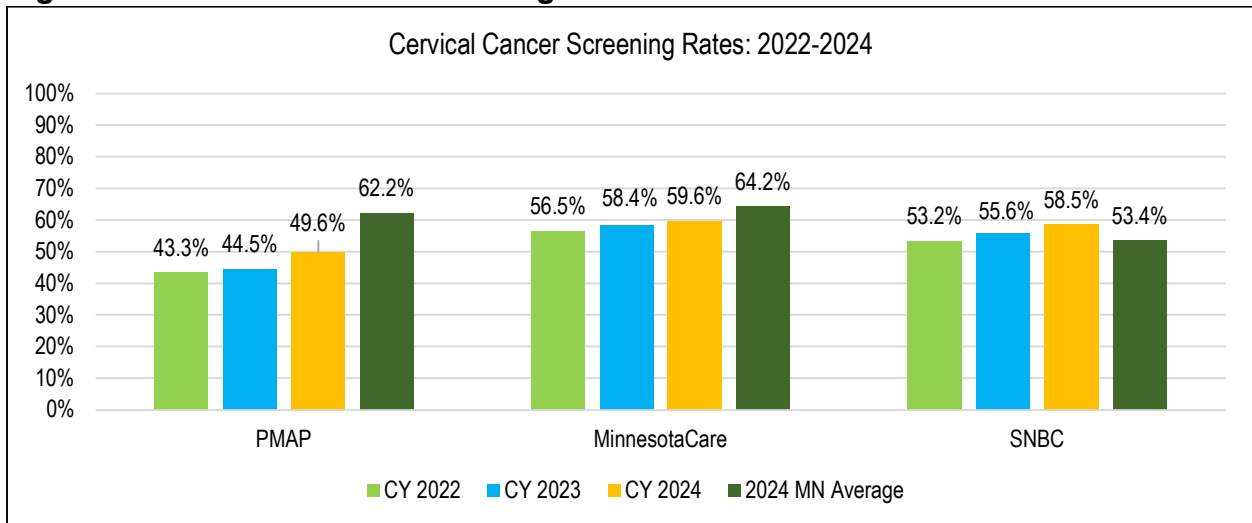
The first phase of the study sample included staff of HHS and NorthPoint who work on the CCS interventions for these institutions. The sample size for the second phase included 10% of the total Hennepin Health eligible member population who are attributed to HHS and NorthPoint. The members in the sample must be between the ages of 21 to 65 as at the time of the survey. This age bracket determination is based off the recommendation of the U.S. Preventive Services Taskforce.⁹ The HEDIS® calendar year (CY) 2023 data was used as baseline and HEDIS® data continued to be used for phases of the study.

Analysis

According to the Minnesota Community Measurement (MNCM) report, the Statewide CCS average for 2023 was 68%, which was below the statewide benchmark of 82.10%.¹⁰ Based on HEDIS® CY2023 data, an analysis was done on status of CCS for eligible Hennepin Health members.

Figure 1 below shows CCS rates from 2022 to 2024 and compares these rates with the 2024 Minnesota state average rate. While all Hennepin Health product lines demonstrated consistent improvement from 2022 to 2024, the Minnesota state average remained higher for both PMAP and MinnesotaCare populations. For the SNBC population, however, Hennepin Health outperformed the Minnesota average, with screening rates slightly exceeding 50% of the eligible population.

Figure 1: Cervical Cancer Screening Status - CY2024



Data Source: Hennepin Health Data Warehouse, Hennepin Health HEDIS® CY2022-CY2024

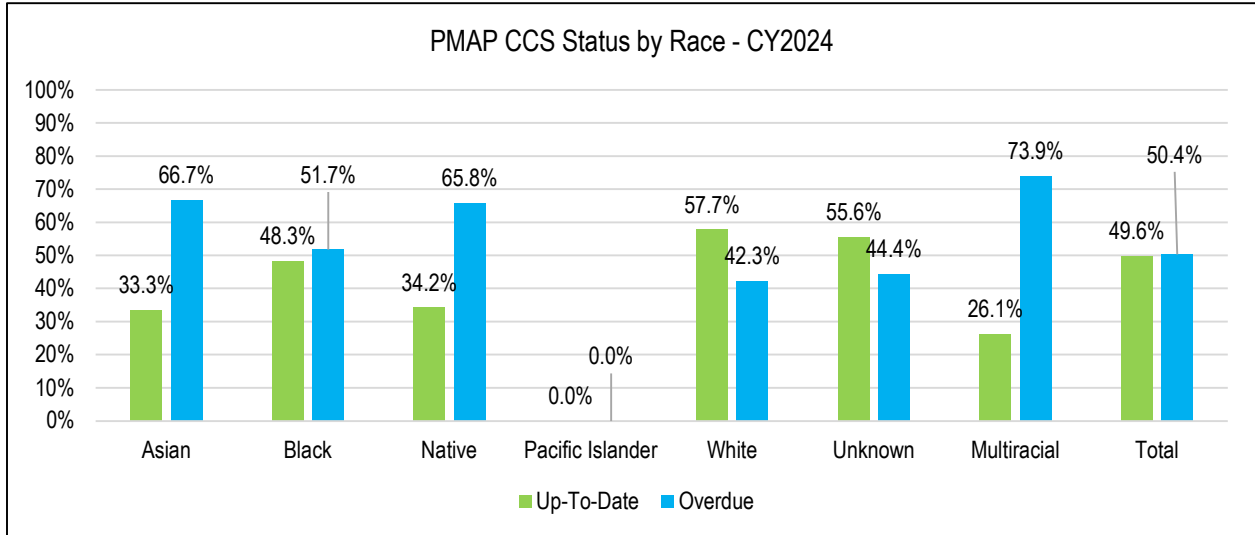
Out of a sample size of 411 members in the PMAP population, 204 (49.64%) were compliant with the screening requirements. Figure 2 below shows the racial distribution of members who up to date or overdue for CCS. The populations with the highest screening rates were White (57.7%), Unknown (55.6%), and Black/African American (48.2%). The Asian, Native American and Multiracial populations were overdue at higher rates, with screening completion ratios of 33.3%, 34.2% and 26.1% respectively.

⁹ US Preventive Services Task Force, *Screening for Cervical Cancer, US Preventive Services Task Force Recommendation Statement*. JAMA August 21, 2018. Volume 320 Number. [cervical-cancer-final-rec-statement.pdf](#)

¹⁰ [Health Care in Minnesota: Summary Report](#)

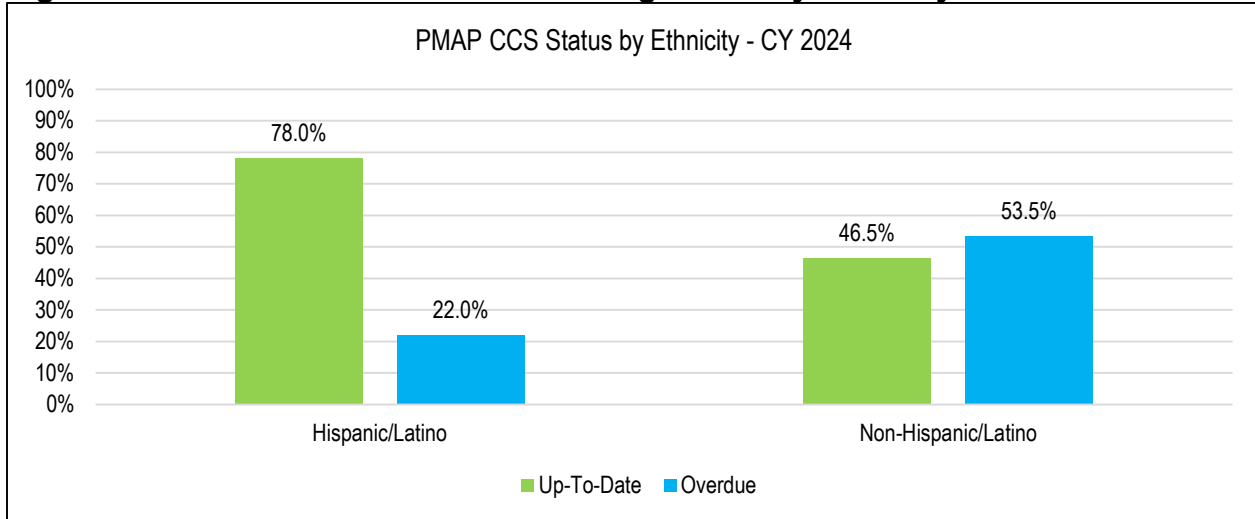
There were no Pacific Islanders in the sample. The sample comprised of 370 non-Hispanic members, 172 of whom were up to date with screening, and 41 Hispanic/Latino members, 32 of whom were up to date. Figure 3 shows the PMAP CCS status by ethnicity.

Figure 2: PMAP Cervical Cancer Screening Status by Race - CY2024



Data Source: Hennepin Health Data Warehouse, Hennepin Health HEDIS® CY 2024

Figure 3: PMAP Cervical Cancer Screening Status by Ethnicity - CY2024

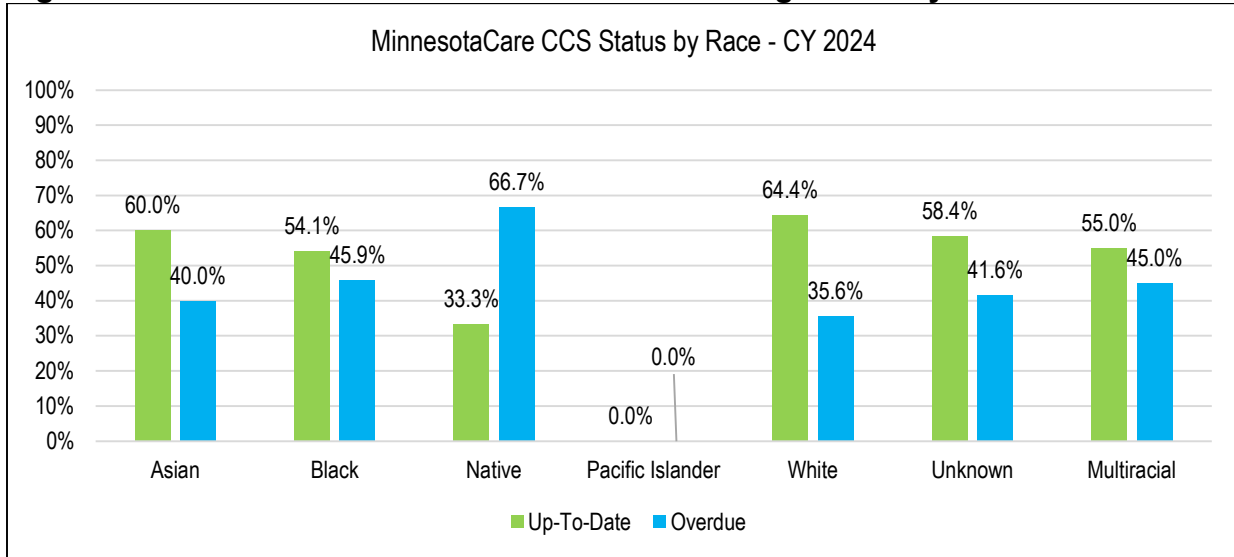


Data Source: Hennepin Health Data Warehouse, Hennepin Health HEDIS® CY 2024

HEDIS® CY2024 data indicates that out of a sample size of 411 in the MinnesotaCare population, 245 (59.61%) were compliant with their CCS screening requirements. Figure 4 below shows the racial distribution of members who were up to date or overdue for CCS. The populations with the highest screening rates were White (64.4%), Asian (60%), unknown (58.4%), Multiracial (55.0%), and Black/African American (54.1%). The Native American population had lower screening rates with 33.3% up to date. There were no Pacific Islanders in the sample.

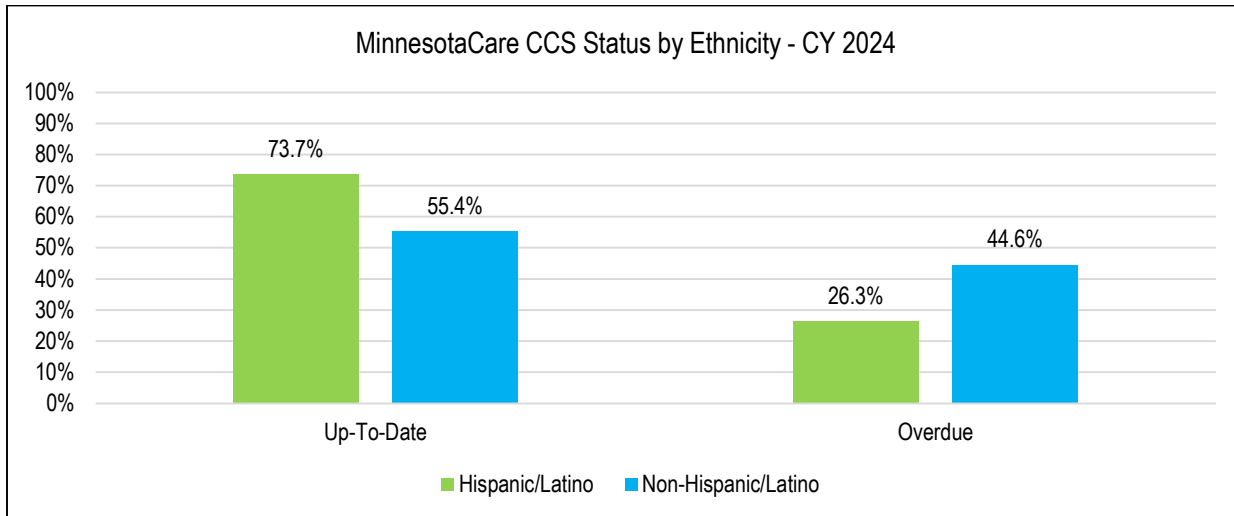
The sample comprised of 316 non-Hispanic members, 175 of whom were up to date with screening and 95 Hispanic/Latino members, of whom 95 were reported as up to date. Figure 5 displays the MinnesotaCare CCS status by ethnicity.

Figure 4: MinnesotaCare Cervical Cancer Screening Status by Race - CY2024



Data Source: Hennepin Health Data Warehouse, Hennepin Health HEDIS® CY 2024

Figure 5: MinnesotaCare Cervical Cancer Screening Status by Ethnicity – CY2024

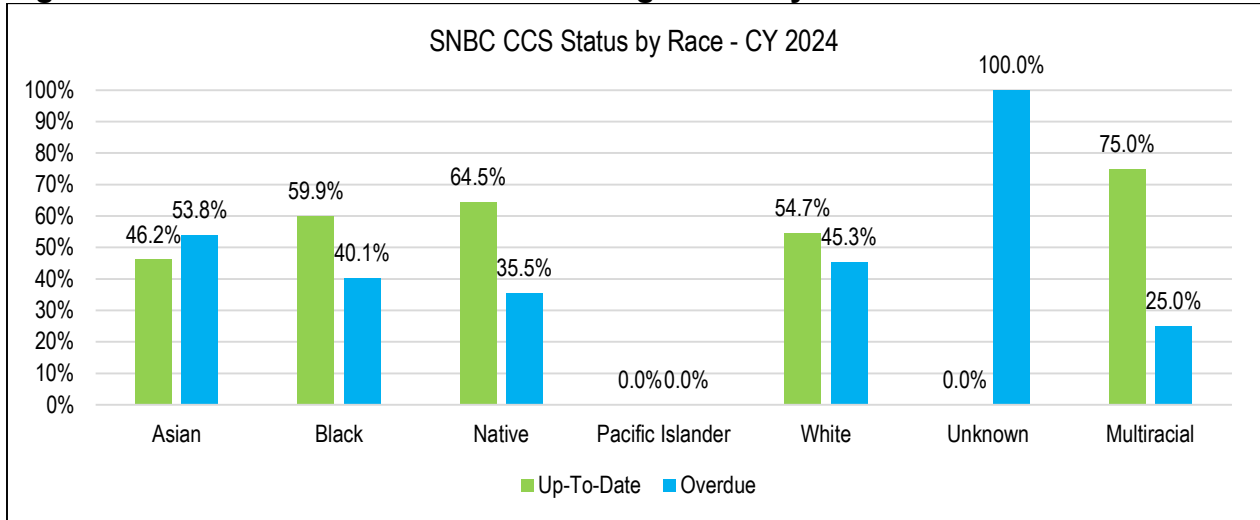


Data Source: Hennepin Health Data Warehouse, Hennepin Health HEDIS® CY 2024

The HEDIS® CY2024 data indicate that out of a sample size of 342 SNBC population, 200 (58.5%) were compliant with the CCS requirements. Figure 6 below shows the racial distribution of members who were up to date or over for CCS. The populations with the highest screening rates were the Multiracial (75%), Native American (64.5%), Black/African American (59%), White (54%). The Asian population had lower screening rates, with 46.2% up to date. There were no Pacific Islanders or people with unidentifiable race groups in the sample.

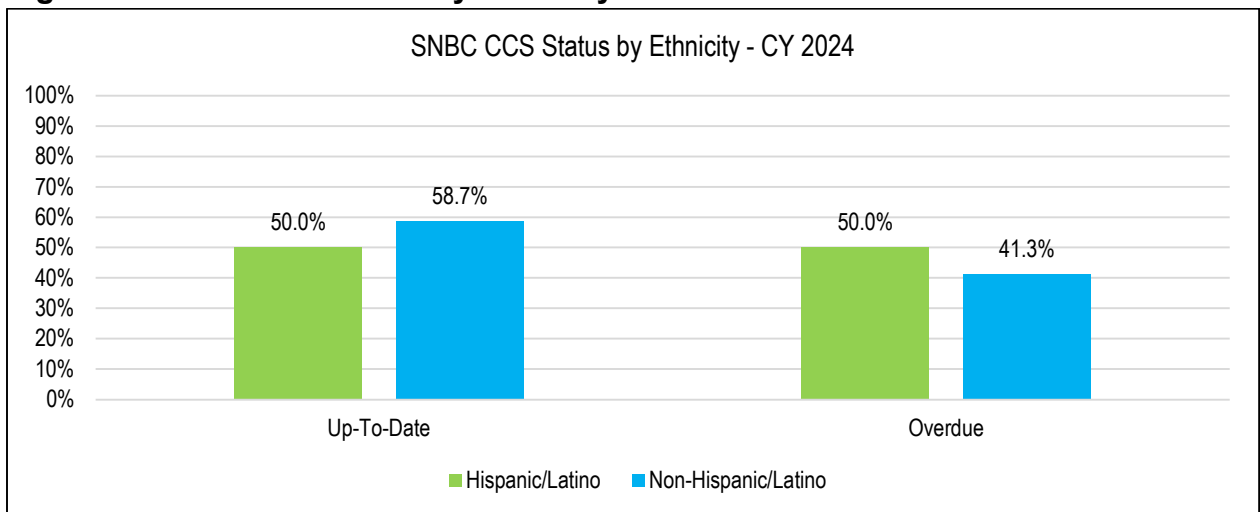
The sample comprised of 334 non-Hispanic members, 196 of whom were up to date with screening, and 8 Hispanic/Latino members, 4 of whom were up to date with the CCS requirements. Figure 7 shows the SNBC CCS status by ethnicity.

Figure 6: SNBC Cervical Cancer Screening Status by Race - CY2024



Data Source: Hennepin Health Data Warehouse, Hennepin Health HEDIS® CY 2024

Figure 7: SNBC CCS Status by Ethnicity - CY2024



Data Source: Hennepin Health Data Warehouse, Hennepin Health HEDIS® CY 2024

Results

Phase II: Findings

The second phase was intended to include a focus group discussion and/or survey with Medicaid members through NorthPoint’s existing Listening Sessions or organized groups. Due to limited staffing capacity at NorthPoint, the implementation of the survey was delayed. If staffing issues are resolved before the study concludes, the survey will still be carried out.

In the interim, a brief two-question multiple-choice survey was developed to gather barriers directly from members who are behind with their cervical cancer screening. The survey was distributed via email and text message to 68 member emails and 92-

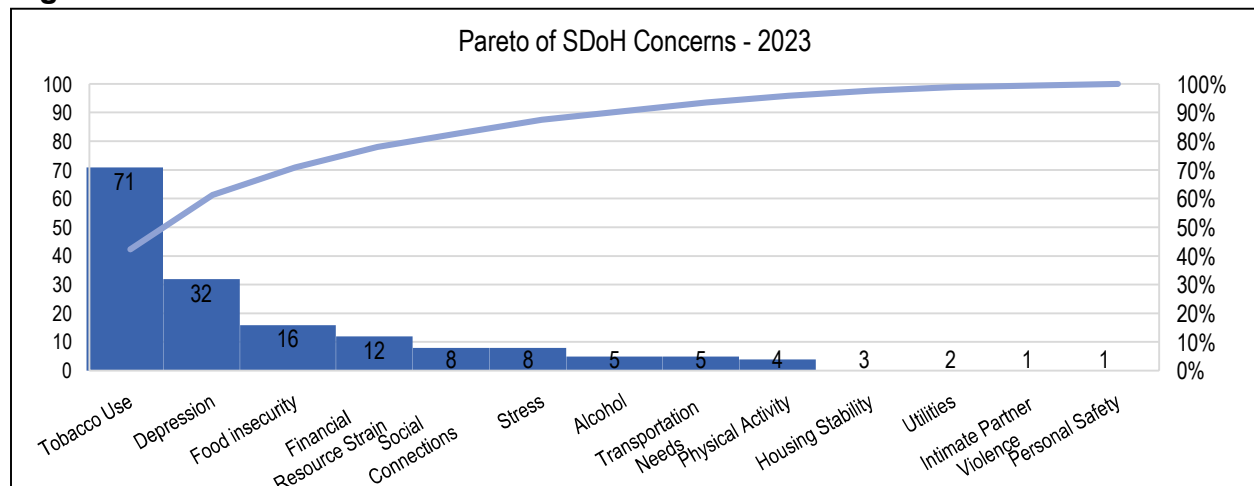
member cellphone numbers between November 10 to November 25, 2025. No responses were received.

This phase also included collaboration with NorthPoint to pull Social Determinants of Health (SDoH) data from Epic® for Hennepin Health members who are overdue with their CCS. The 2023 baseline sample included 152 Hennepin Health members who receive care at NorthPoint and Hennepin Healthcare. The goal was to identify common SDoH factors within this group and determine potential strategies to address these gaps and improve CCS rates.

The 2023 data pull returned 1,914 SDoH records, of which 168 showed active SDoH concerns. Figure 8 below is a pareto chart of the identified concerns on the SDoH wheel collected from Epic®. The most common issues identified were *depression, financial resource strain, food insecurity, and tobacco use*. Research has shown strong associations between these social and behavioral factors and lower engagement in preventive care. For example, study published by International Scholarly Research Network (ISRN) Obstetrics and Gynecology stated ‘Smokers seem to have lower compliance for cervical cancer screening, the most powerful weapon against cervical cancer mortality. Smokers held fewer positive attitudes towards cervical screening than did nonsmokers’ (Fonseca-Moutinho, 2011)¹¹. Ludman et al (2010) found that depression and obesity are linked to ‘lower rates of cervical and breast cancer screening.’¹² Food insecurity and financial strains also contribute to reduced preventive care use as immediate survival needs are prioritized, often leading to higher long-term health care costs.¹³

The same data was pulled again for 2024, and the same core factors (*depression, financial resource strain, food insecurity and tobacco use*) remained most prevalent. *Stress and social connections* issues also emerged as top contributors in 2024. Figure 9 below displays the key social drivers of health for this population in 2024.

Figure 8: Social Determinants of Health Concerns – CY2023



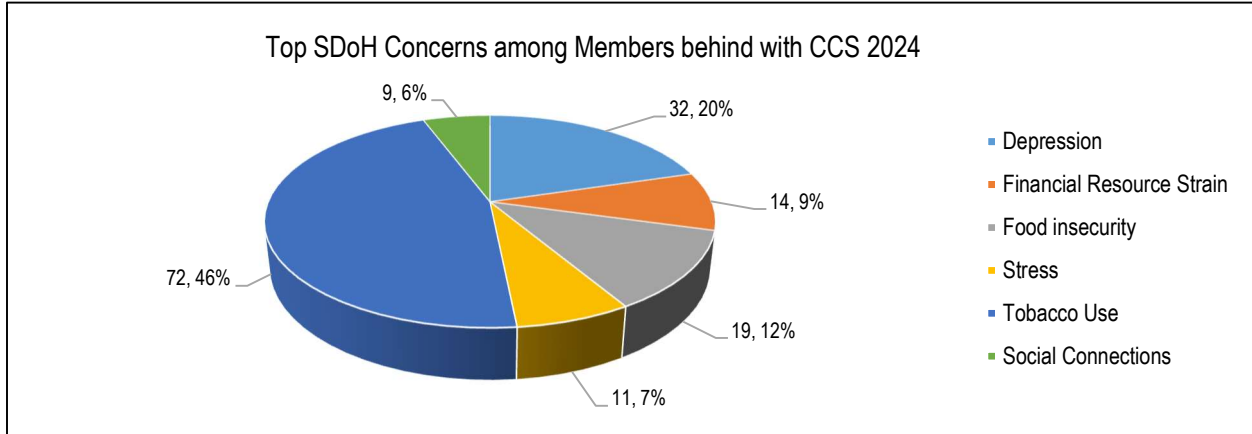
Data Source: NorthPoint Health and Wellness Epic® SDoH Wheel, CY 2023

¹¹ ISRN Obstet Gynecol. 2011 Jul 14;2011:847684. doi: [10.5402/2011/847684](https://doi.org/10.5402/2011/847684)

¹² Breast and Cervical Cancer Screening. Ludman, Evette J. et al. American Journal of Preventive Medicine, Volume 38, Issue 3, 303 - 310

¹³ Berkowitz SA, Basu S, Gundersen C, Seligman HK. State-Level and County-Level Estimates of Health Care Costs Associated with Food Insecurity. Prev Chronic Dis 2019;16:180549. DOI: <http://dx.doi.org/10.5888/pcd16.180549>

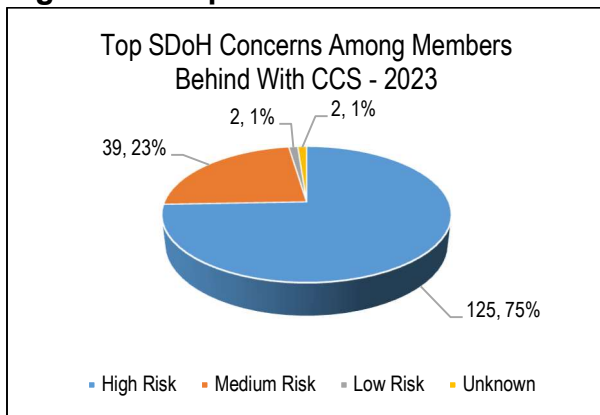
Figure 9: Top SDoH Concerns among Members who were behind with CCS - CY2024



Data Source: NorthPoint Health and Wellness Epic® SDoH Wheel, CY 2024

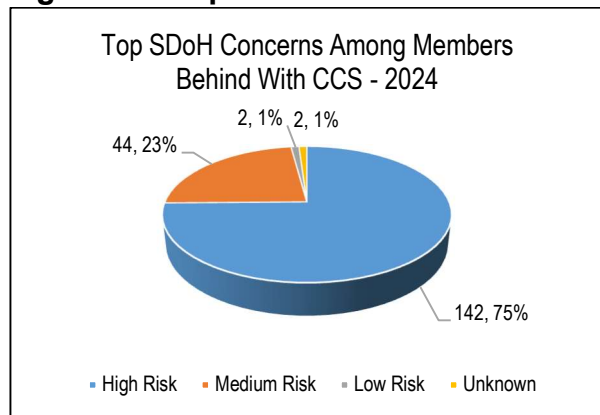
The SDoH wheel categorizes risk severity into three levels: low, medium and high. Unknown status is assigned to those that were not identified. As represented in Figures 10 and 11, the degree of reported concerns varied in terms of risk severity and 75% of the identified social concerns were of high risk across both review years, 2023 and 2024.

Figure 10: Top SDoH Concerns-CY2023



Data Source: NorthPoint Health and Wellness Epic® SDoH Wheel, CY 2023

Figure 11: Top SDoH Concerns-CY2024



Data Source: NorthPoint Health and Wellness Epic® SDoH Wheel, CY 2024

Recommendations

Based on the findings from the SDoH wheel, it is evident that patients become less engaged in preventive care when they are experiencing pressing social needs such as *depression, financial resource strain, food insecurity and tobacco use*. To increase preventive care rates, it is essential to identify and address these social needs and connect patients to appropriate resources in a timely manner. The following strategies can be explored.

- Integrate depression screening into primary care visits and ensure timely follow-up for patients with high-risk results. Connecting these patients to behavioral health specialists and supportive programs can help improve management of their condition.

- Screen patients for financial resource strain during primary care visits and refer those at high risk to social workers and/or navigators who can help them access available financial supports. Offering incentives for preventive care needs may also be further improve engagement.
- Include routine screening for food security and link patients in need with social workers or navigators who can assist with accessing food resources and related programs.
- Provide tobacco-use education during preventive care visits to raise awareness about the health risks of tobacco use and its impact on preventive care adherence. Offer educational materials and resources for continued learning and support.
- In alignment with recent developments, the AHM partner providers can explore implementing the HPV self-collection option which may increase screening rates among individuals who are uncomfortable with traditional provider-collected Pap test.

Next Steps

The plan to conduct a focus group discussion through NorthPoint’s existing parenting groups did not materialize and there were no responses to the survey created as an alternative option to gather member feedback. Hennepin Health will continue to engage NorthPoint to find opportunities for a discussion or survey with existing groups that have the target population relevant to this survey.

Hennepin Health’s Social Services Navigation (SSN) team has made significant progress in securing housing and connecting PMAP/MinnesotaCare members to resources that help address financial strain, mental health issues such as depression, and other social needs. The SSN team will continue to support members in navigating social determinants of health. The SNBC Care Coordination team provides similar support and resources to the SNBC member population and will continue to do so.

Hennepin Health will also explore opportunities to incorporate tobacco education into the Population Health department’s preventive care campaign. Depending on resource availability, the team may consider launching a targeted tobacco education initiative for members who are behind with their cervical cancer screening.

This report will be presented to the Clinical Quality Outcomes Committee (CQOC) by March 31, 2026. The presentation will offer a forum to review study outcomes and identify potential areas for AHM partner intervention to improve screening rates. In addition, there is an opportunity to share the findings with the newly established Primary Care/Well Child Visits Outcomes Workgroup to assess what is feasible at the AHM partner organizations.

References & Acknowledgements

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