Leveraging Data to Understand and Address Disparities in Vascular and Diabetes Care

Preparedness and Treatment Equity Coalition (PTEC) Project Report

MN Community MEASUREMENT

DEPARTMENT OF HUMAN SERVICES

RELEASED MAY 2022

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REPORT AUTHORS

Jess Donovan, MPH, RN
Clinical Measurement Analyst

Julie Sonier, MPA
President & CEO

Trisha Brinkhaus
Health Data Analyst

Liz Cinqueonce, MBA
Chief Operating Officer

BACKGROUND

In November 2021, MN Community Measurement (MNCM) was awarded a grant from the Preparedness Treatment and Equity Coalition (PTEC) to leverage data to better understand and address disparities in vascular and diabetes care. This project, conducted in collaboration with the Minnesota Department of Human Services and with technical assistance from the University of Minnesota, leveraged MNCM's uniquely rich data set of quality outcome indicators for diabetes and vascular care in Minnesota, including patient-level detail on race, ethnicity, language, and country of origin (RELC). In addition to in-depth data analysis, the project scope also included convening a community advisory group to interpret the analytic results and prioritize intervention strategies to reduce health disparities.

Chronic conditions such as diabetes and vascular disease have disproportionate impacts on people who are Black, Hispanic/Latinx, Asian, and Native American. In part, this is due to higher prevalence of disease (Virani, S., et. al., 2021), but also due to lower likelihood that these conditions are managed optimally to result in better outcomes (Wang, 2021). Better understanding the reasons for these disparities in health outcomes is essential to developing health care delivery and payment strategies that will reduce these known disparities.

PROJECT GOALS

The main goals of this project included the following:

- Analyze and understand disparities in vascular care and diabetes care in Minnesota for Black, Hispanic/Latinx, Asian, and Native American communities, including detailed demographic and geographic analysis within each of these groups.
- Using the results of the data analysis, develop and prioritize action strategies that can be used by health care stakeholders to close gaps in care and reduce disparities.

MNCM's approach to health equity measurement has been nationally recognized for its "thoughtfully chosen group of measures, incorporation of multiple important social risk factors (i.e., RELC), ability to reliably distinguish performance among providers, clear focus on incentivizing achievement for at-risk beneficiaries, and choice to anchor disparities to the overall state average rather than the performance of a predetermined group" (RAND Health Care, 2021). This project represented an opportunity to do nation-leading work illustrating the power and importance of robust, granular clinical data to measure outcomes and health disparities.

It is well known that there are large existing racial and ethnic disparities in health and health care in Minnesota. For example, Black Minnesotans are 28 percent less likely than average to have optimal diabetes care (Donovan et. al., 2021) and 25 percent less likely to have optimal vascular care (Donovan, et. al., 2021). However, the knowledge that large disparities exist is not the same as the knowledge that is needed to drive action by health care providers, payers, and other stakeholders that will result in more equitable outcomes.

RELEVANCE BEYOND MINNESOTA

Nationally, federal agencies and other entities involved in quality measurement are emphasizing the need to shift toward health outcome measures, and away from measures of processes. Similarly, there is increasing recognition and urgency around the need for data-informed strategies to address health disparities. By illustrating the power of using granular data on clinical outcomes to better understand existing disparities and inform strategies to address them, this project highlights the national potential for how data on health outcomes can be combined with robust collection of data on factors such as race and ethnicity to drive improvements. Results from this project can be used to accelerate and reinforce national progress toward measuring outcomes of care in a way that highlights health disparities and motivates improvement.

QUALITY MEASURES

The source of the data for this project was existing data on health care provided in 2018, 2019, and 2020 that were collected and validated by MNCM from medical groups located throughout Minnesota on measures for optimal diabetes care (ODC) and optimal vascular care (OVC). The use of three years of data enabled MNCM to analyze stability of the estimates over a two-year period prior to the COVID-19 pandemic and also to understand how the pandemic affected the measures and the populations of interest for this analysis in 2020.

Both the OVC and ODC measures are endorsed by the National Quality Forum, which is considered the "gold standard" of health care quality measurement. Importantly, these measures indicate not just processes of care (such as whether certain tests were done) but outcomes of care (such as what the test results showed about how well the patient's condition is being managed). Measures of outcomes are more valuable as indicators of care quality, especially in examining health equity since "equity" in delivering specific services (like blood sugar tests) does not ensure equitable outcomes (optimal health).

For both the OVC and ODC measures, MNCM collects data for each measure component, meaning that for patients who do not meet the definition of "optimal care" there is an ability to analyze which components are not met and whether the component not met is due to missing care (e.g., no HbA1c test during the year, no blood pressure recorded) or whether the patient received care but did not meet the measure component.

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 < 8.0 mg/dL
- BP < 140/90
- Tobacco-free
- On statin medication (unless allowed contraindication)
- If ischemic vascular disease, on daily aspirin or antiplatelet (unless allowed contraindication)

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:

- BP < 140/90
- Tobacco-free
- On statin medication (unless allowed contraindication)
- On daily aspirin or antiplatelet (unless allowed contraindication)

DATA ANALYSIS APPROACH

The data set used for this project is uniquely comprehensive in both its scope (nearly all primary care medical groups in Minnesota and specialty groups providing care for diabetes and vascular disease) and its depth (clinical detail as well as richness of data on patient demographics). The clinical data set includes patient level detail on RELC collected using best practices that require the information be self-reported by patients, and that allow patients to place themselves in multiple race categories. MNCM data validation processes are designed to confirm adherence to best practices, in addition to validating quality and consistency of the data. For the OVC and ODC measures, 97 percent of Minnesota clinics submitted RELC data for 2020 using best practices, and the completeness of race data was about 96 percent. Appendix A to this report provides a summary of the data set for the two measures included in the research. For 2020, the data set includes nearly 156,000 patients with vascular disease and about 281,000 patients with diabetes who qualified to be included in the OVC and ODC measures, respectively.

The MNCM data set used for this project also includes data elements that can be used to examine other intersectional factors that influence health equity, including age, socioeconomic status, health insurance type, and zip code of patient residence. Zip-code level data from a Minnesota Department of Health analysis of CDC's Social Vulnerability Index (CDC, 2022) were merged with the MNCM data set to enable analysis by quartiles of social vulnerability.

The data analysis consisted of four major components: statewide analysis, analysis by race and ethnicity, analysis by insurance type, and analysis by geography. Each of these major components included deeper analysis by several intersectional factors, such as geography, race, ethnicity, language (English vs non-English), country of origin (US Born vs Non-US Born), age, type of health insurance, and social vulnerability:

- **Statewide Analysis** – This analysis forms a reference point for understanding how each of the other major analytic components is similar to or different from the state as a whole.
- **Analysis by Race and Ethnicity** – Understanding the intersection of race and ethnicity with other factors is important to designing strategies and interventions that consider important differences within each race and ethnicity category, rather than treating people within each race and ethnicity category as homogeneous.
- **Results by Insurance Type** – Because the analysis is intended to be useful and actionable to different payers, especially Medicaid which has historically had lower rates than other payers, it is important to include analysis where payer is the primary dimension of interest, and to examine the intersectional factors within payer type.
- **Results by Geography** – Finally, geography plays an important role in health equity – and the analysis included geography as a major dimension to understand how strategies and interventions may need to be localized to be most effective.

DATA ANALYSIS APPROACH (CONTINUED)

Even with the large and comprehensive MNCM data set, the numbers of people in a defined geographic region who are included in either the diabetes or vascular measure may be small (for example, there are fewer Black patients in rural than in urban ZIP codes). To address this problem and produce valuable information for stakeholders working to address disparities, MNCM used an approach to geographic analysis that defined regions of the state to enable as granular a regional-level analysis as possible while still defining regions that were large enough to produce statistically valid results. Using the actual distribution of patients in each race/ethnicity group, the geographic analysis defined up to 15 regions (contiguous groups of zip codes) with a minimum of 5 percent of patients in each region. As a result, the geographic regions used for the analysis are not the same for each race/ethnicity group – they are customized to the actual distribution of patients in each group. For example, there are distinct areas of the state with concentrations of people who are Black, Indigenous/Native, Asian or Hispanic/Latinx and the concentrations of each group occur in different places; the region definitions used for the analysis are customized to the actual geographic distribution of each group. Because the populations for the OVC and ODC measures are different, this approach also resulted in different regional maps for the OVC measure vs ODC; as explained in more detail below, the advisory group for this project felt this was the best approach.

RESULTS OF DATA ANALYSIS

The detailed data analysis results are included as Appendix B to this report. Tables 1 and 2 summarize the statewide results for 2018-2020 by race/ethnicity for the ODC and OVC measures.

TABLE 1: SUMMARY OF OPTIMAL DIABETES CARE BY RACE/ETHNICITY

RACE/ETHNICITY	NUMBER OF PATIENTS			COMPOSITE RATE		
	2018	2019	2020	2018	2019	2020
Asian	11,638	12,560	13,010	47.6%	48.6%	42.4%
Black	21,970	23,162	24,294	33.7%	35.0%	29.6%
Indigenous/ Native	3,783	3,846	4,087	25.0%	26.7%	23.3%
Hispanic/Latinx	11,692	12,067	12,944	36.5%	37.7%	33.2%
White	214,629	215,888	220,688	46.6%	47.0%	42.3%
STATEWIDE	**271,491**	**278,033**	**280,915**	**44.9%**	**45.4%**	**40.5%**

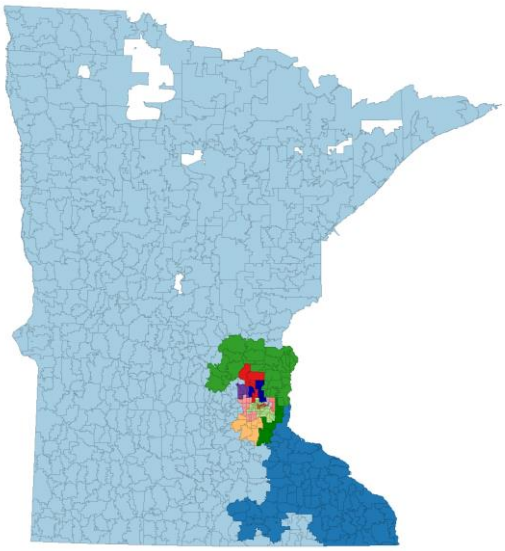
TABLE 2: SUMMARY OF OPTIMAL VASCULAR CARE BY RACE/ETHNICITY

RACE/ETHNICITY	NUMBER OF PATIENTS			COMPOSITE RATE		
	2018	2019	2020	2018	2019	2020
Asian	3,183	3,450	3,390	67.3%	66.2%	60.3%
Black	5,725	6,066	6,195	47.2%	46.5%	40.7%
Indigenous/ Native	1,632	1,658	1,700	46.4%	44.8%	44.2%
Hispanic/Latinx	1,860	2,002	2,254	57.4%	59.7%	54.2%
White	139,444	140,116	138,318	61.9%	61.0%	54.4%
STATEWIDE	**156,360**	**159,428**	**155,550**	**61.1%**	**60.2%**	**53.7%**

GEOGRAPHIC ANALYSIS
ASIAN PATIENTS

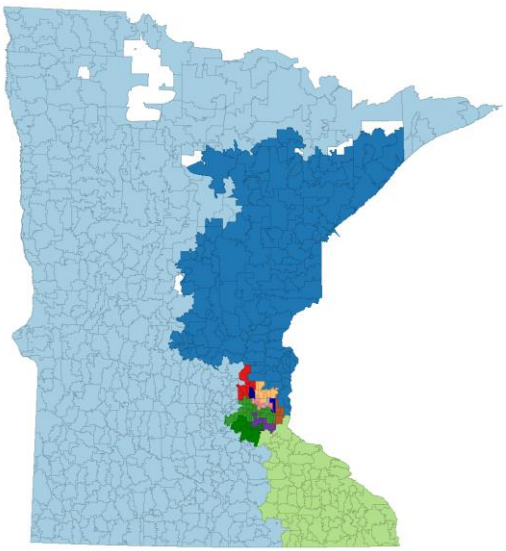
The following maps show the distribution of Asian patients in the denominator for each measure. A minimum of five percent of the patients lives in each of the regions shown below. A complete list of the ZIP codes found in each region can be found in Appendix C.

OPTIMAL DIABETES CARE



Region	Rate for Asian Patients	Region	Rate for Asian Patients
1	45.0%	8	46.0%
2	46.9%	9	43.8%
3	42.1%	10	45.2%
4	45.0%	11	34.6%
5	46.7%	12	39.1%
6	39.0%	13	35.2%
7	47.3%	14	37.4%

OPTIMAL VASCULAR CARE

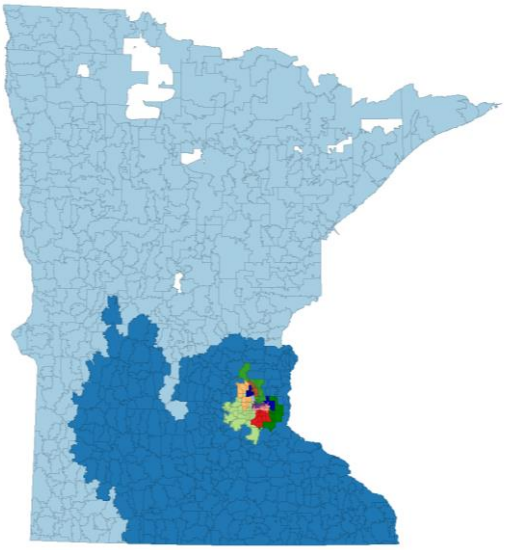


Region	Rate for Asian Patients	Region	Rate for Asian Patients
1	53.6%	8	65.9%
2	64.4%	9	62.2%
3	55.5%	10	65.7%
4	56.7%	11	63.3%
5	54.0%	12	58.8%
6	65.0%	13	59.2%
7	61.7%	14	58.4%

GEOGRAPHIC ANALYSIS
BLACK PATIENTS

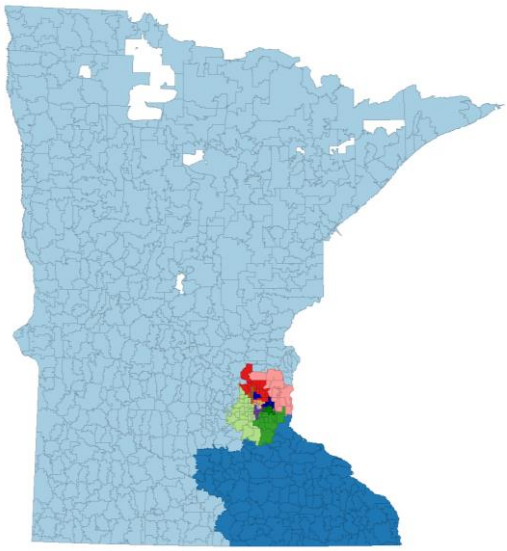
The following maps show the distribution of Black patients in the denominator for each measure. A minimum of five percent of the patients lives in each of the regions shown below. A complete list of the ZIP codes found in each region can be found in Appendix C.

OPTIMAL DIABETES CARE



Region	Rate for Black Patients	Region	Rate for Black Patients
1	27.9%	8	32.8%
2	32.0%	9	28.2%
3	30.9%	10	31.8%
4	29.2%	11	30.0%
5	27.8%	12	25.2%
6	34.1%	13	21.9%
7	32.8%		

OPTIMAL VASCULAR CARE

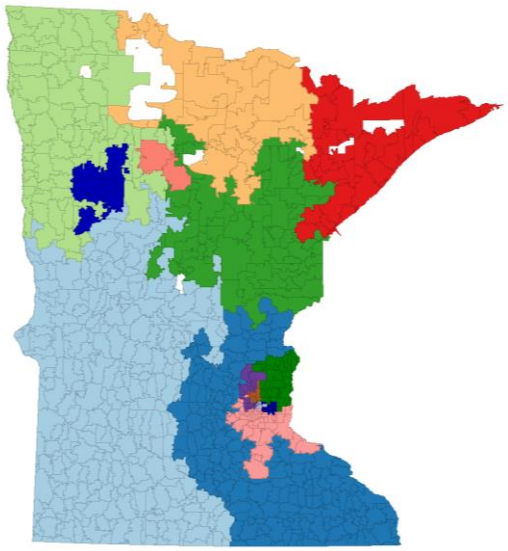


Region	Rate for Black Patients	Region	Rate for Black Patients
1	36.8%	8	38.1%
2	42.0%	9	41.5%
3	48.3%	10	36.0%
4	47.2%	11	42.2%
5	45.7%	12	35.4%
6	45.6%	13	34.1%
7	32.5%	14	38.5%

GEOGRAPHIC ANALYSIS
INDIGENOUS/NATIVE PATIENTS

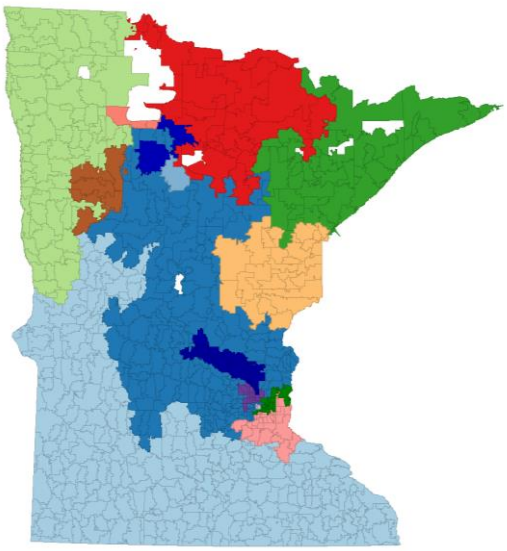
The following maps show the distribution of Indigenous/Native patients in the denominator for each measure. A minimum of five percent of the patients lives in each of the regions shown below. A complete list of the ZIP codes found in each region can be found in Appendix C.

OPTIMAL DIABETES CARE



Region	Rate for Indigenous Patients	Region	Rate for Indigenous Patients
1	25.4%	9	23.4%
2	25.7%	10	24.4%
3	29.2%	11	23.5%
4	23.6%	12	20.0%
5	25.2%	13	21.0%
6	23.0%	14	19.9%
7	16.7%	15	12.4%
8	28.3%		

OPTIMAL VASCULAR CARE

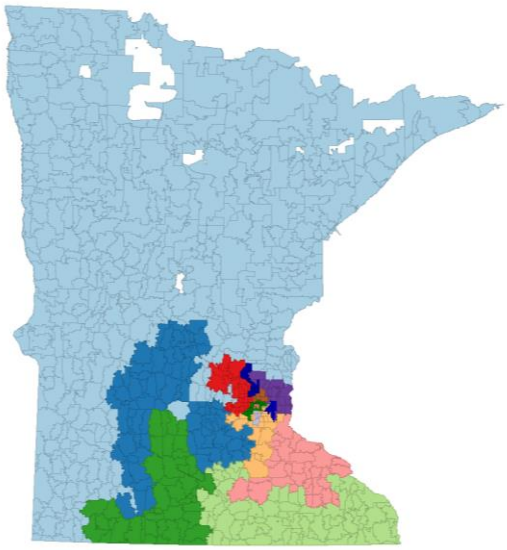


Region	Rate for Indigenous Patients	Region	Rate for Indigenous Patients
1	37.5%	9	39.8%
2	43.2%	10	49.4%
3	46.8%	11	44.3%
4	40.2%	12	49.4%
5	51.2%	13	40.5%
6	45.7%	14	36.3%
7	48.7%	15	41.3%
8	48.5%		

GEOGRAPHIC ANALYSIS
HISPANIC/LATINX PATIENTS

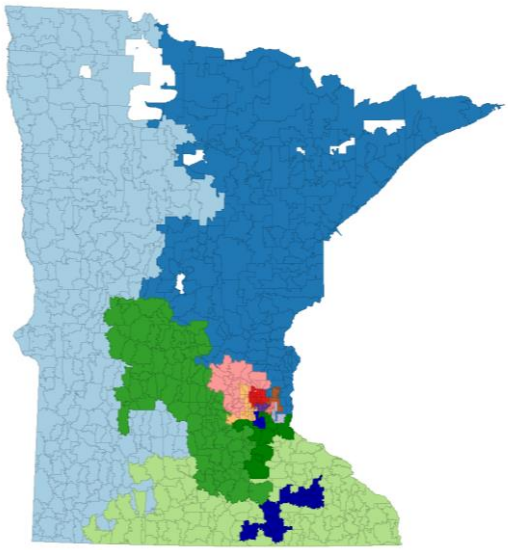
The following maps show the distribution of Hispanic/Latinx patients in the denominator for each measure. A minimum of five percent of the patients lives in each of the regions shown below. A complete list of the ZIP codes found in each region can be found in Appendix C.

OPTIMAL DIABETES CARE



Region	Rate for Hispanic Patients	Region	Rate for Hispanic Patients
1	32.9%	8	30.9%
2	33.7%	9	34.0%
3	27.3%	10	34.4%
4	36.2%	11	31.1%
5	32.6%	12	32.1%
6	36.8%	13	34.5%
7	35.6%	14	28.4%

OPTIMAL VASCULAR CARE

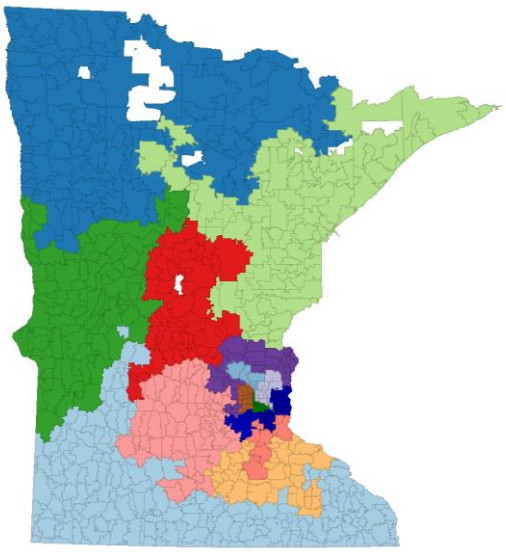


Region	Rate for Hispanic Patients	Region	Rate for Hispanic Patients
1	56.6%	8	56.8%
2	50.8%	9	52.7%
3	61.5%	10	46.2%
4	47.2%	11	60.5%
5	53.8%	12	54.2%
6	57.9%	13	56.9%
7	55.8%	14	49.4%

GEOGRAPHIC ANALYSIS
WHITE PATIENTS

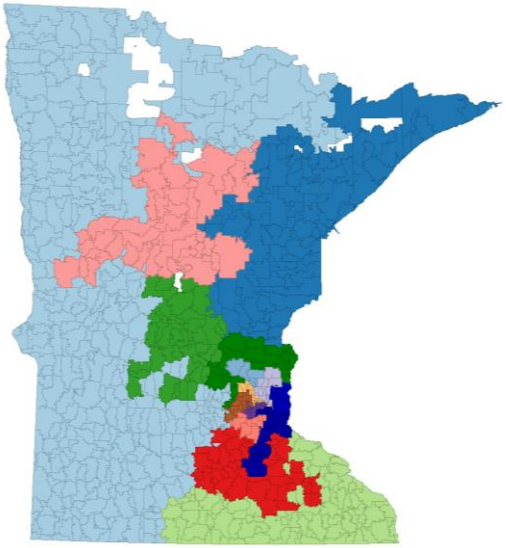
The following maps show the distribution of White patients in the denominator for each measure. A minimum of five percent of the patients lives in each of the regions shown below. A complete list of the ZIP codes found in each region can be found in Appendix C.

OPTIMAL DIABETES CARE



Region	Rate for White Patients	Region	Rate for White Patients
1	41.4%	9	41.6%
2	43.0%	10	44.2%
3	38.8%	11	43.0%
4	41.4%	12	42.8%
5	43.6%	13	43.1%
6	43.8%	14	41.0%
7	44.4%	15	43.5%
8	39.3%		

OPTIMAL VASCULAR CARE

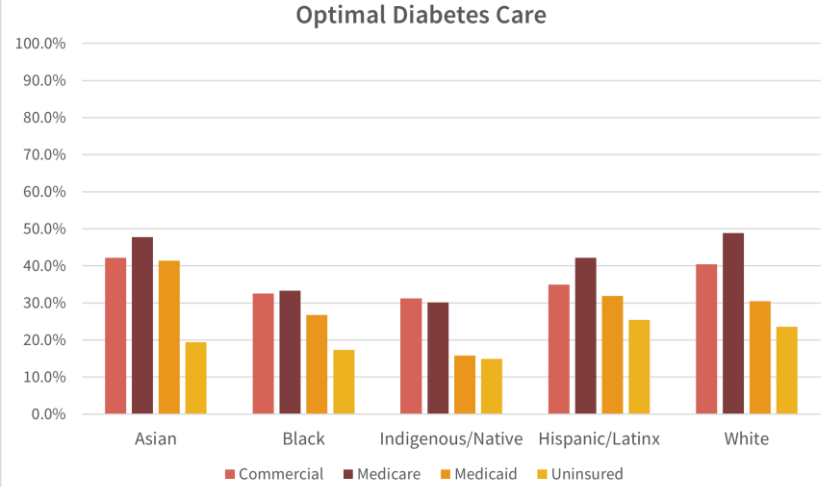


Region	Rate for White Patients	Region	Rate for White Patients
1	55.0%	9	53.7%
2	52.5%	10	55.4%
3	50.7%	11	55.7%
4	53.6%	12	56.5%
5	54.2%	13	55.5%
6	53.3%	14	57.5%
7	54.9%	15	54.1%
8	53.7%		

RESULTS OF DATA ANALYSIS CONTINUED

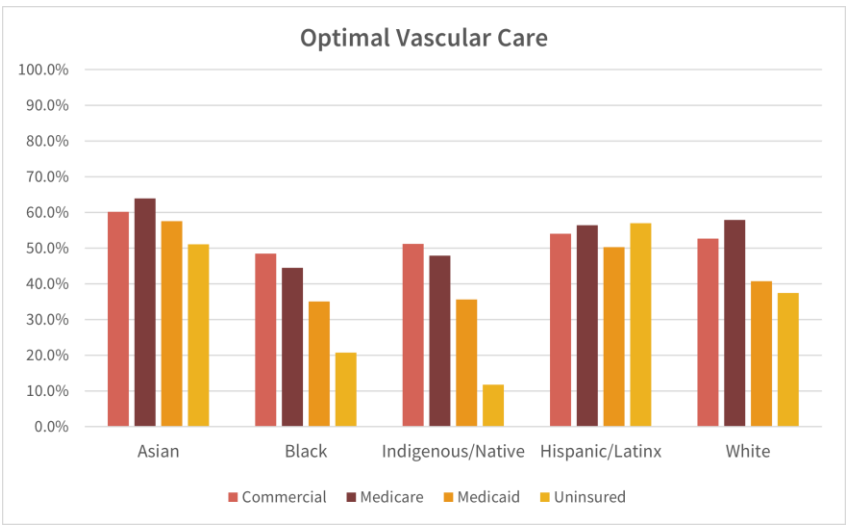
The following charts show statewide cross-sectional analysis by race/ethnicity and another variable for each measure:

BY INSURANCE PRODUCT



STATEWIDE RATES

39.7%	47.7%	30.3%	22.5%
Commercial	Medicare	Medicaid	Uninsured

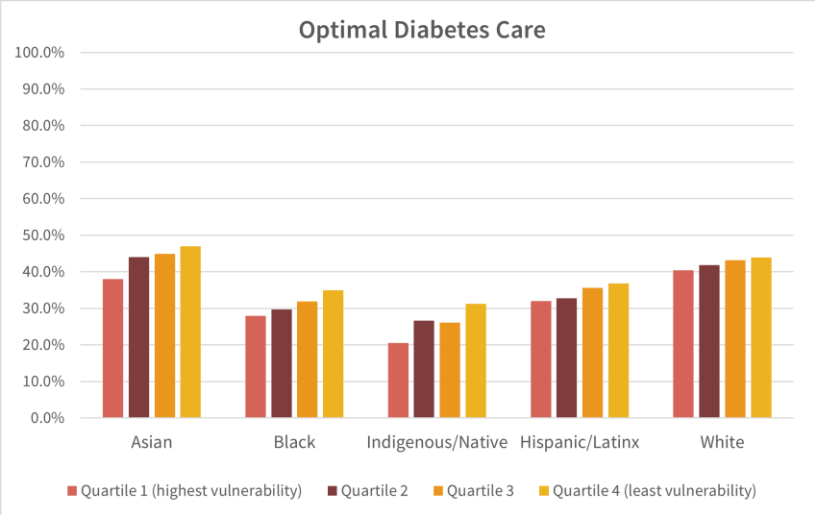


STATEWIDE RATES

52.8%	57.5%	41.0%	36.2%
Commercial	Medicare	Medicaid	Uninsured

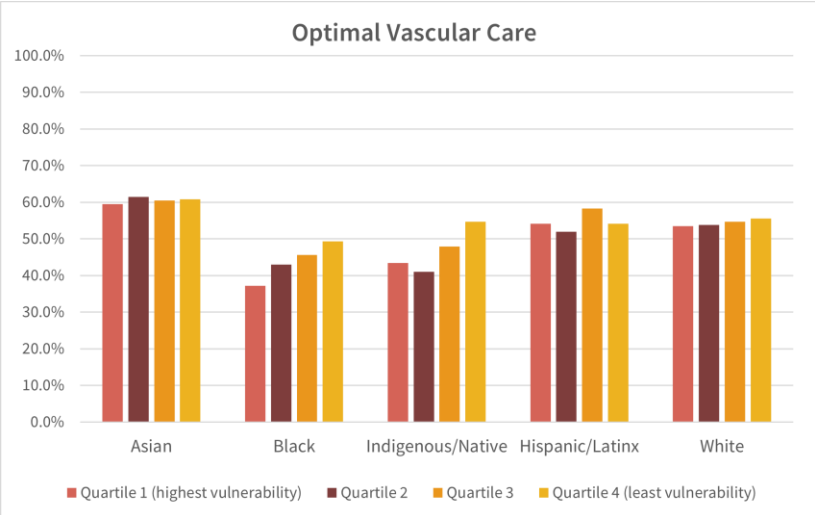
RESULTS OF DATA ANALYSIS CONTINUED

BY SOCIAL VULNERABILITY INDEX (SVI)



STATEWIDE RATES

Quartile 1	Quartile 2	Quartile 3	Quartile 4
37.2%	40.5%	42.4%	43.3%

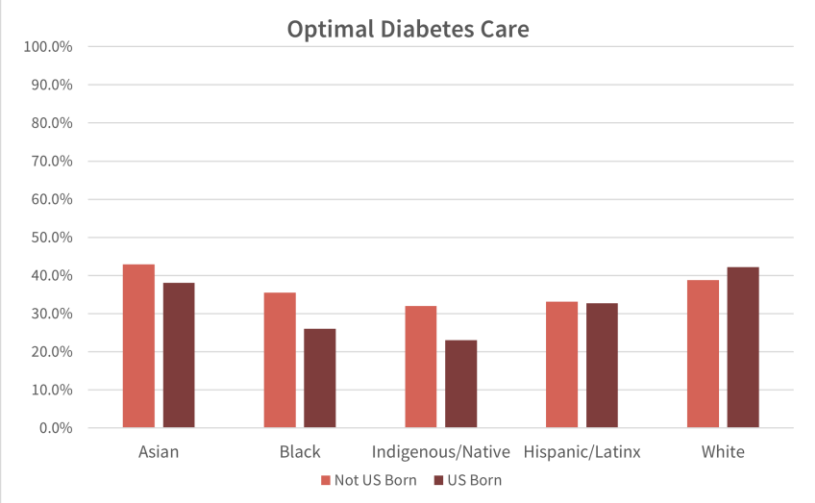


STATEWIDE RATES

Quartile 1	Quartile 2	Quartile 3	Quartile 4
51.9%	53.3%	54.6%	55.5%

RESULTS OF DATA ANALYSIS CONTINUED

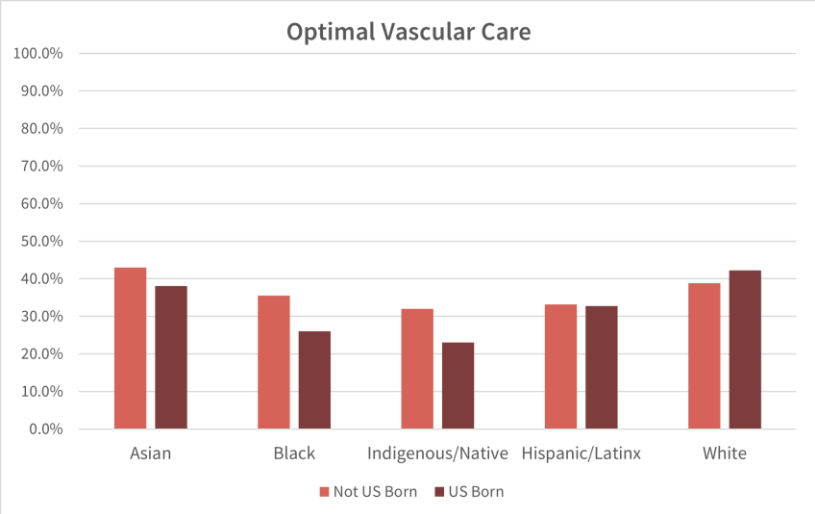
BY COUNTRY OF ORIGIN



STATEWIDE RATES

38.3% Not U.S.-born

40.6% U.S.-born



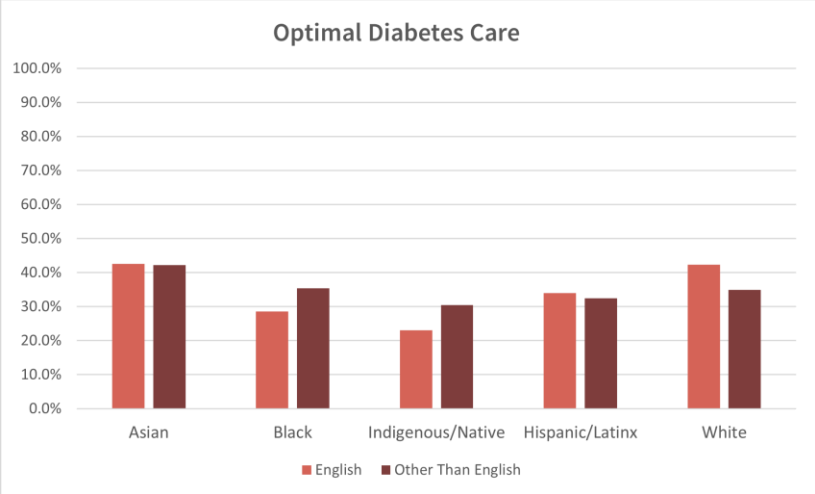
STATEWIDE RATES

56.3% Not U.S.-born

53.5% U.S.-born

RESULTS OF DATA ANALYSIS CONTINUED

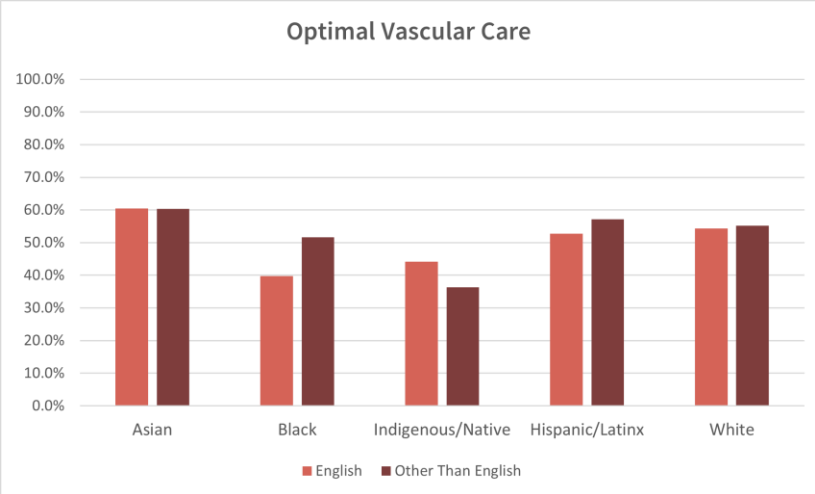
BY PREFERRED LANGUAGE



STATEWIDE RATES

40.8% English

36.8% Other than English



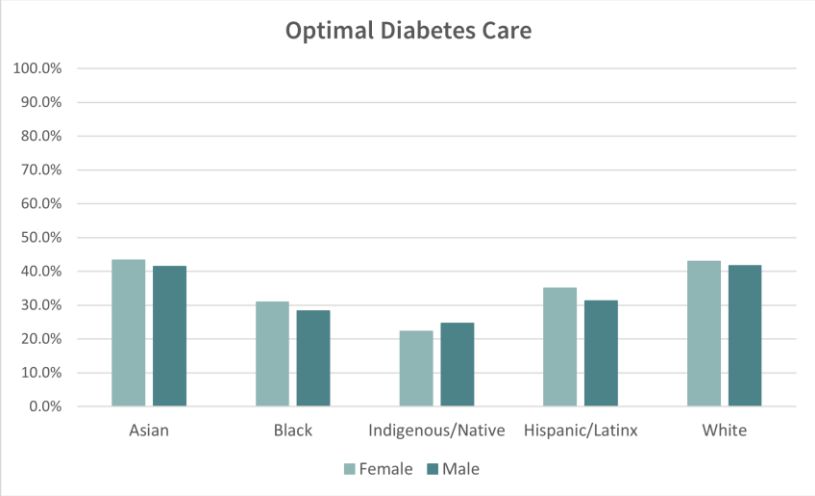
STATEWIDE RATES

53.7% English

56.6% Other than English

RESULTS OF DATA ANALYSIS CONTINUED

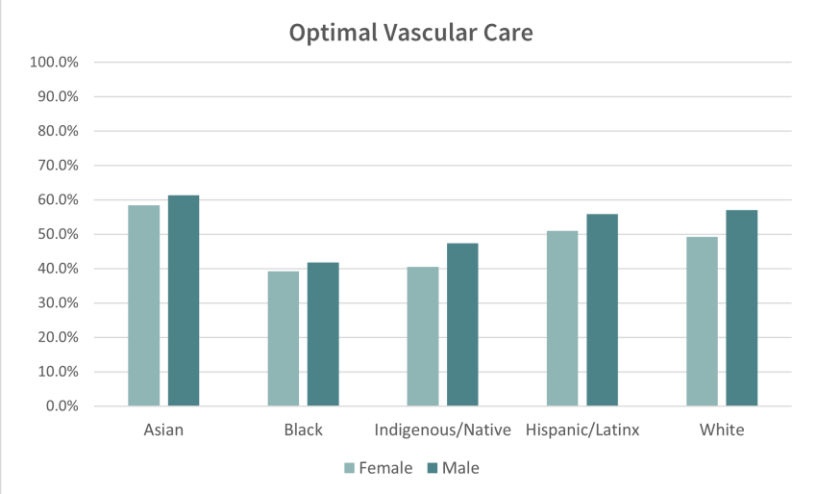
BY PATIENT SEX AT BIRTH



STATEWIDE RATES

41.0%
Female

40.0%
Male



STATEWIDE RATES

48.6%
Female

56.4%
Male

KEY TAKEAWAYS
ASIAN PATIENTS

OPTIMAL DIABETES CARE

- The Optimal Diabetes Care rate among Asian patients is significantly higher than the statewide average (42.4% vs 40.5%, respectively).
- The rates for four of the five measure components among Asian patients are similar to or significantly higher than the statewide average.
- The rate of HbA1c control among Asian patients is significantly lower than the statewide average (64.8% vs 67.1%, respectively).
- Among Asian patients, the rates of HbA1c control is significantly lower for:
    - U.S.-born compared to those born outside the U.S. (60.0% vs 65.3%, respectively)
    - Non-English speakers compared to English-speakers (62.7% vs 66.3%, respectively)
    - Patients residing in St. Paul compared to overall average for Asian patients (59.7% vs 64.8%, respectively)

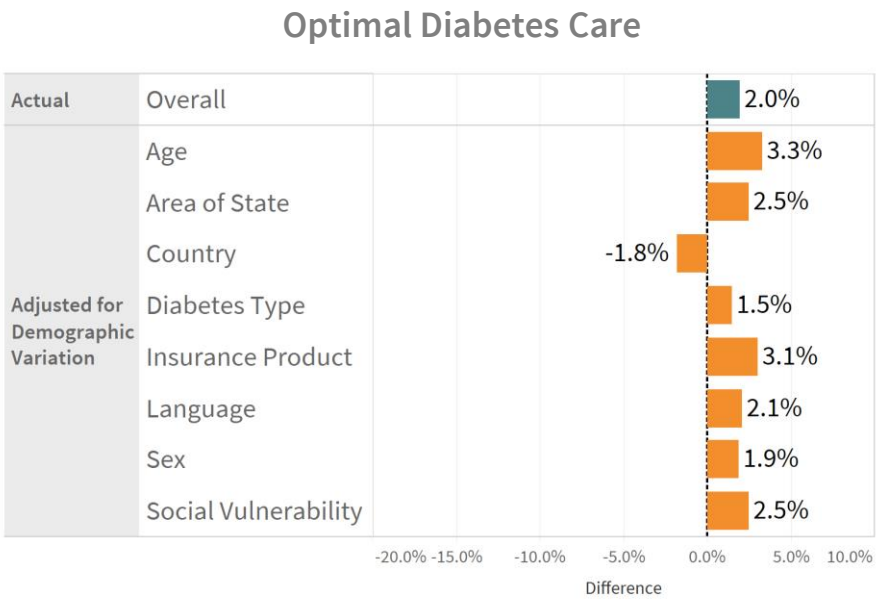
OPTIMAL VASCULAR CARE

- The Optimal Vascular Care rate among Asian patients is significantly higher than the statewide average (60.3% vs 53.7%, respectively).
- The rates for three of the four measure components among Asian patients are similar to or significantly higher than the statewide average.
- The rate of blood pressure control among Asian patients is significantly lower than the statewide average (74.5% vs 76.8%, respectively).

IMPACT OF DEMOGRAPHIC MIX

ASIAN PATIENTS

The following charts show the impact on results for the Asian population if the group had the same demographic distribution as statewide:



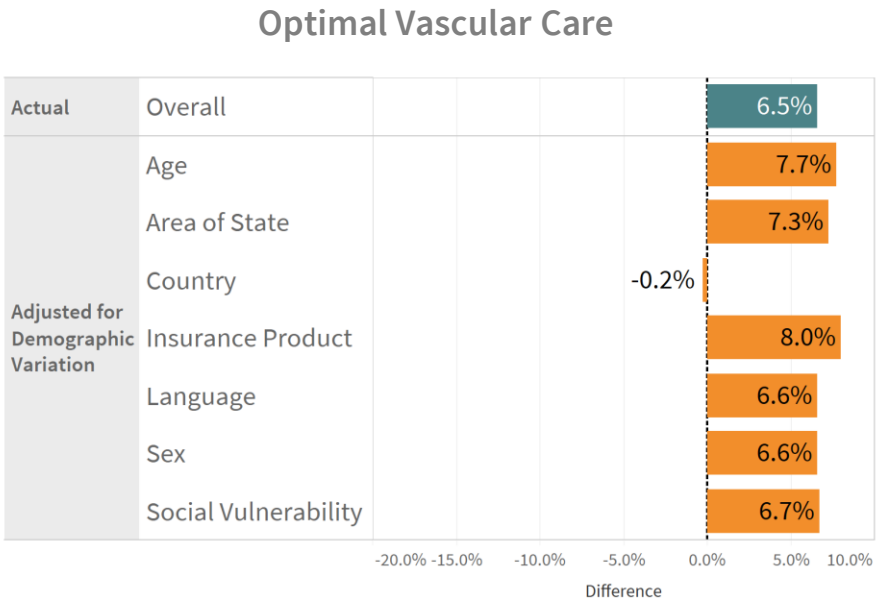


Chart Interpretation Example

For the Asian population, the ODC actual, or unadjusted, rate is 2 percentage points higher than the statewide rate. If the population had the same distribution of age as statewide, the ODC rate for Asian patients would be 3.3 percentage points higher than the statewide rate.

KEY TAKEAWAYS
BLACK PATIENTS

OPTIMAL DIABETES CARE

- The Optimal Diabetes Care rate among Black patients is significantly lower than the statewide average (29.6% vs 40.5%, respectively).
- The rates of HbA1c control, blood pressure control, being tobacco-free and statin use among Black patients are significantly lower than the statewide average.
- Among Black patients, the rates of HbA1c control is significantly lower for:
    - Patients with Type 1 diabetes compared to Type 2 (31.1% vs 59.7%, respectively).
    - Patients in all SVI quartiles compared to statewide average (e.g., 60.9% for Black patients in "least vulnerable" quartile vs 69.4% statewide average in "least vulnerable" quartile).
- Among Black patients, the rates of blood pressure control is significantly lower for:
    - U.S.-born compared to those born outside the U.S. (66.7% vs 72.1%).
    - English-speakers compared to non-English speakers (67.4% vs 74.0%).
    - Patients in all SVI quartiles compared to the statewide averages for the SVI quartiles.
- Among Black patients, the rate of being tobacco-free is significantly lower for U.S.-born population compared to statewide average (71.0% vs 84.1%).

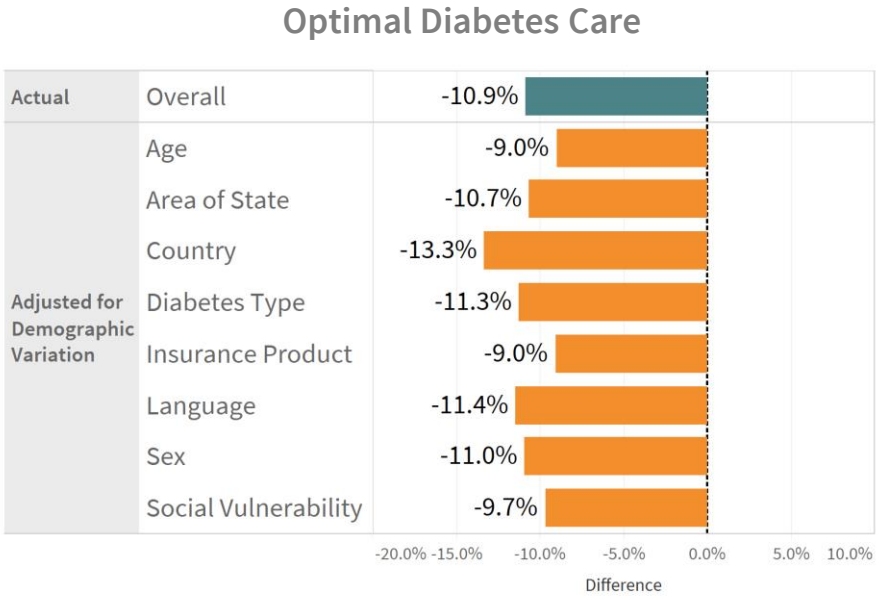
OPTIMAL VASCULAR CARE

- The Optimal Vascular Care rate among Black patients is significantly lower than the statewide average (40.7% vs 53.7%, respectively).
- The rate of blood pressure control among Black patients is significantly lower than the statewide average (66.5% vs 76.8%, respectively).
- The rate of being tobacco-free among Black patients is significantly lower than the statewide average (70.8% vs 82.1%, respectively).
- The rate of statin use among Black patients is significantly lower than the statewide average (88.5% vs 91.0%, respectively).
- The tobacco-free rate is significantly lower among U.S.-born Black patients compared to statewide average (65.5% vs 82.1%, respectively).

IMPACT OF DEMOGRAPHIC MIX

BLACK PATIENTS

The following charts show the impact on results for the Black population if the group had the same demographic distribution as statewide:



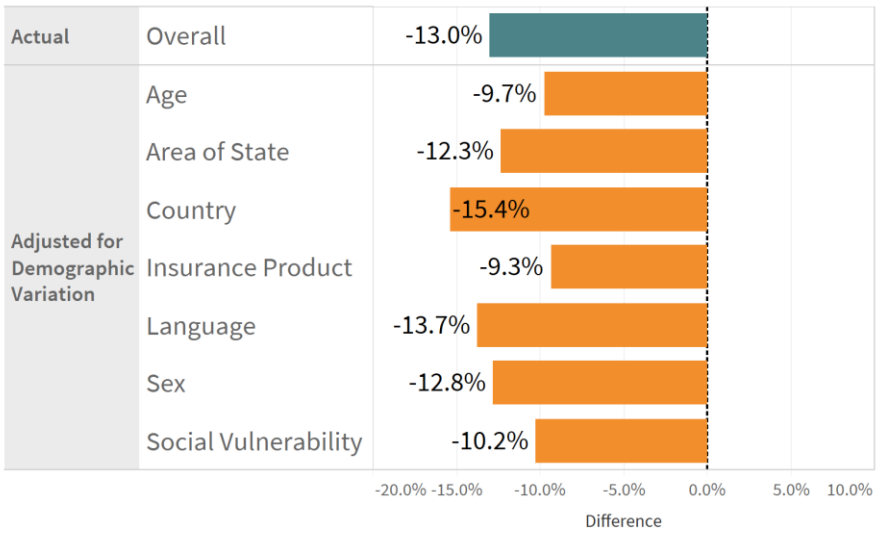


Chart Interpretation Example

For the Black population, the OVC actual, or unadjusted, rate is 13 percentage points lower than the statewide rate. If the population had the same distribution of sex as statewide, the OVC rate for Black patients would be 12.8 percentage points lower than the statewide rate.

KEY TAKEAWAYS
INDIGENOUS/NATIVE PATIENTS

OPTIMAL DIABETES CARE

- The Optimal Diabetes Care rate among Indigenous/Native patients is significantly lower than the statewide average (23.3% vs 40.5%, respectively).
- Among Indigenous/Native patients, the rates of HbA1c control, being tobacco-free and statin use are significantly lower than the statewide average.
- Among Indigenous/Native patients, the rates of HbA1c control and being tobacco-free are significantly lower than the statewide rates in almost all subpopulations.
- Among Indigenous/Native patients, there are large gaps in HbA1c control and tobacco-free rates compared to the statewide averages at all SVI levels.

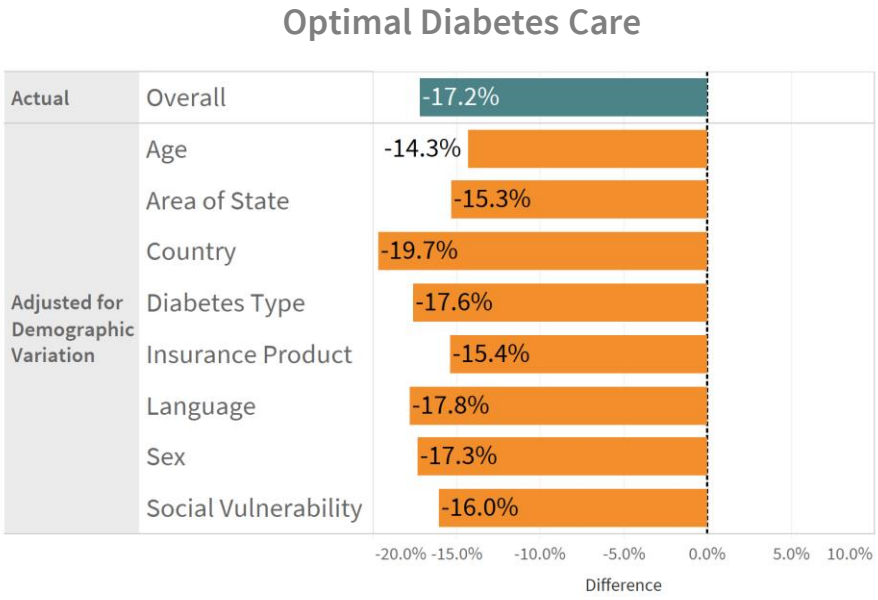
OPTIMAL VASCULAR CARE

- The Optimal Vascular Care rate among Indigenous/Native patients is significantly lower than the statewide average (44.2% vs 53.7%, respectively).
- The rate of blood pressure control among Indigenous/Native patients is the significantly higher than the statewide average (79.4% vs 76.8%, respectively).
- The rate of daily aspirin use among Indigenous/Native patients is significantly higher than the statewide average (91.5% vs 87.9%, respectively).
- The rate of being tobacco-free among Indigenous/Native patients is significantly lower than the statewide average (62.1% vs 82.1%, respectively).
- The rate of being tobacco-free is significantly lower among Indigenous/Native females compared to statewide average (59.1% vs 82.1%, respectively).

IMPACT OF DEMOGRAPHIC MIX

INDIGENOUS/NATIVE PATIENTS

The following charts show the impact on results for the Indigenous/Native population if the group had the same demographic distribution as statewide:



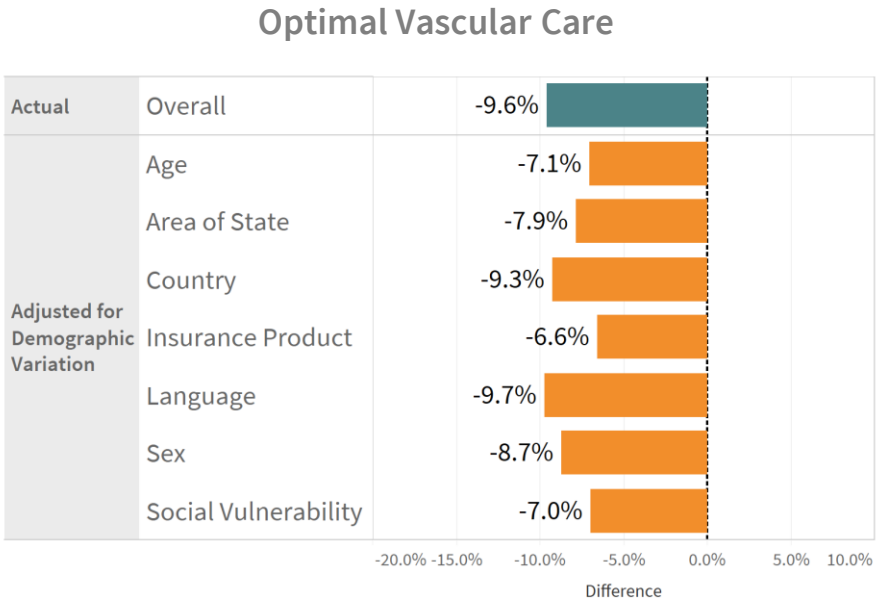


Chart Interpretation Example

For the Indigenous/Native population, the ODC actual, or unadjusted, rate is 17.2 percentage points lower than the statewide rate. If the population had the same distribution of language as statewide, the ODC rate for Indigenous/Native patients would be 17.8 percentage points lower than the statewide rate.

KEY TAKEAWAYS:
HISPANIC/LATINX PATIENTS

OPTIMAL DIABETES CARE

- The Optimal Diabetes Care rate among Hispanic/Latinx patients is significantly lower than the statewide average (33.2% vs 40.5%, respectively).
- The rates of HbA1c control and statin use are significantly lower than the statewide average.
- Among Hispanic/Latinx patients, the rates of HbA1c control is significantly lower for:
    - U.S.-born (54.7%) and those born outside of the U.S. (54.0%) patients compared to statewide average (67.1%).
    - English speakers (56.0%) and non-English speakers (52.8%) compared to statewide average (67.1%).
    - All SVI quartile levels compared to statewide average.
- Among Hispanic/Latinx patients, the rates of statin use is significantly lower for:
    - Non-English speakers compared to statewide average (83.6% vs 87.4%, respectively).
    - Patients born outside of the U.S. compared to statewide average (83.3% vs 87.4%, respectively).

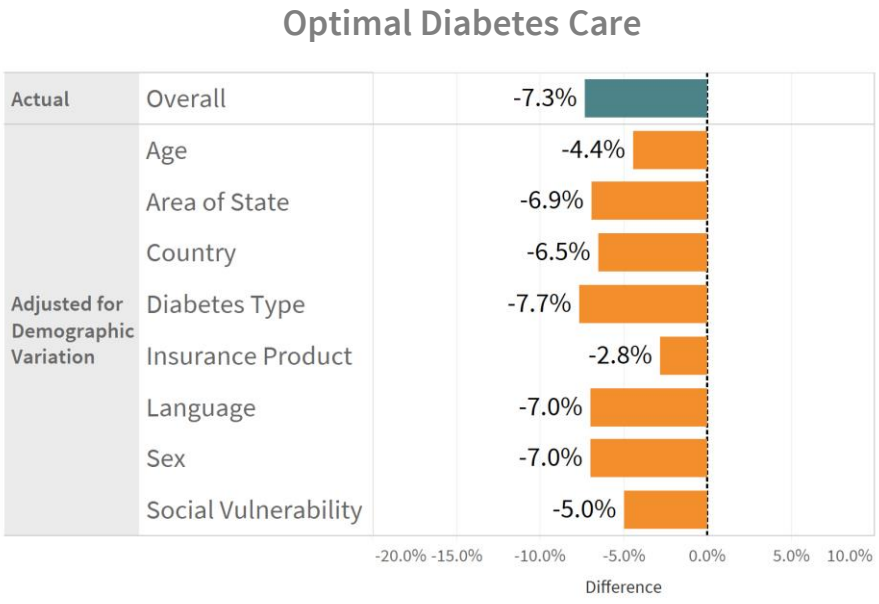
OPTIMAL VASCULAR CARE

- The Optimal Vascular Care rate among Hispanic/Latinx patients is similar to the statewide average.
- Among Hispanic/Latinx patients, U.S.-born patients have a significantly lower rate of being tobacco-free compared to patients born outside of the U.S. (81.1% vs 89.3%, respectively).

IMPACT OF DEMOGRAPHIC MIX

HISPANIC/LATINX PATIENTS

The following charts show the impact on results for the Hispanic/Latinx population if the group had the same demographic distribution as statewide:



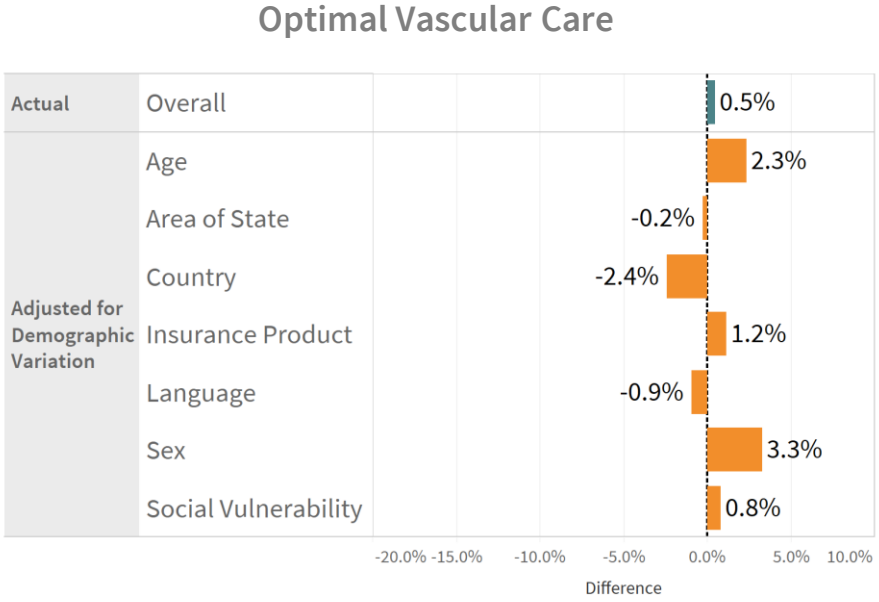


Chart Interpretation Example

For the Hispanic/Latinx population, the OVC actual, or unadjusted, rate is 0.5 percentage points higher than the statewide rate. If the population had the same distribution of age as statewide, the OVC rate for Hispanic/Latinx patients would be 2.3 percentage points higher than the statewide rate.

COMMUNITY ADVISORY GROUP

To interpret the data analysis findings and use them to create data-driven strategies for interventions to reduce disparities, the project was guided by a community advisory group ("advisory group"). The group included diverse representation from a variety of stakeholders including health care providers and health systems, Medicaid, health plans, health care purchasers, public health and human service agencies, regional health improvement collaboratives, community-based organizations, and others with expertise in addressing health equity. A list of the advisory group members and the organizations represented is included in Appendix D.

The charge to the advisory group was to provide guidance to ensure that the project achieved its aims, inform the work products developed under the project, and provide recommendations on how the analysis can be translated into action necessary to address systemic racism and inequity in the health care system. The advisory group met in February and March 2022 and provided input on a draft of this report in April 2022.

At its first meeting, the advisory group discussed the results of the initial data analysis and a framework for identifying and prioritizing action strategies. The framework included the following principles for prioritization of strategies:

COMMUNITY ADVISORY GROUP CONTINUED

The advisory group defined types of stakeholder groups that could potentially use these tools for interventions to address health disparities: health care providers, health plans, Medicaid/state policy makers, federal policy makers, employers/health care purchasers, public health, tribal organizations, community organizations, social services organizations, and regional collaboratives. Next, the advisory group discussed the range of tools available for interventions, including data collection and analysis; payment models; policy changes; insurance coverage and benefits; patient education and engagement; supports for individuals; and supports for communities. Together, the tools and the stakeholders combine to create the "who" and the "what" of action strategies to address identified disparities.

RECOMMENDED STRATEGIES BY STAKEHOLDER GROUP

Between the advisory group's first and second meetings, advisory group members were asked to provide suggestions both on data analysis and strategies and on potential interventions (who and what). The project team compiled advisory group responses for discussion and prioritization at the second meeting. During the second meeting, members were asked to rank the top strategies for each stakeholder group that would be the most impactful in addressing disparities in diabetes and vascular care. For each stakeholder group, the strategies that received the most votes are summarized below:

HEALTH CARE PROVIDERS

- Collect social determinants of health (SDOH) data to better analyze impact on chronically ill patients.
- Provide culturally responsive care (e.g., diabetes self-management education with culturally appropriate food recommendations).
- Partner with communities to gain understanding of culture embedded in communities.

RECOMMENDED STRATEGIES CONTINUED

HEALTH PLANS

- Change pay-for-performance program goals from hitting improvement targets overall for measures to reducing disparities within those measures, as measured at the contract level.
- Drive grant making activities based on SDOH issues identified. Co-develop interventions with community organizations to reduce disparities and address SDOH needs.
- Work with health plan members who have been identified with care gaps to connect with their provider or connect them to a provider, if they do not have one. Assist members to obtain appointments as appropriate.

MEDICAID/STATE POLICY MAKERS

- Provide funding for community-based resources and other social needs interventions (e.g., housing, food, broadband, etc.).
- Include funding/payment for community organizations to address SDOH needs.
- Payment reform and include community health worker reimbursement in more robust ways.

EMPLOYERS/PURCHASERS

- Support wholistic care that includes addressing SDOH needs.
- Make patient engagement easy/accessible and include as work time.
- Require health plans to support activities to address SDOH needs.

RECOMMENDED STRATEGIES CONTINUED

PUBLIC HEALTH

- Link MNCM data with public health and other data sources to give broader picture.
- Partner with communities to gain understanding of culture embedded in communities.
- Provide population-level education on access, resources, etc.

TRIBAL ORGANIZATIONS

- Data provided to tribal organizations should include breakdowns of data by tribes and differences between populations living on tribal land.
- Develop and fund ways to increase staffing from Indigenous/Native populations to serve tribal populations.
- Payment reform and include community health worker reimbursement in more robust ways.

COMMUNITY ORGANIZATIONS

- Utilize data specific to the organization (e.g., who is served, how their services can make an impact, etc.).
- Utilize geographically-based linkages to public health and other community organizations to use data to make collective decisions around health activities in the community.
- Seek funding/payments necessary for community organizations to address SDOH needs.

RECOMMENDED STRATEGIES CONTINUED

SOCIAL SERVICES

- Provide intentional linkages with health systems around food, housing and other SDOH access.
- Utilize data specific to the organization (e.g., who is served, how their services can make an impact, etc.).
- Seek funding/payments necessary for social service organizations to address SDOH needs.

REGIONAL COLLABORATIVES

- Use data to identify organizations that are doing well at closing health equity gaps and engage them to share promising practices.
- Provide statewide analytics on social needs so that we can target social resources appropriately.
- Require representation from populations being impacted by disparities in all efforts at the policy level.

After prioritizing the most impactful strategies at the stakeholder level, advisory group members identified the top three priority strategies overall in reducing health disparities in diabetes and vascular care:

1. **Data** – Data, especially SDOH data, is essential to creating successful strategies to reduce disparities. The data will help inform decisions around collective actions, support funding of interventions and assist with the evaluation of strategies.
2. **Community-informed Interventions** – Using data, stakeholders can develop community-informed interventions and identify the resources available within communities to address SDOH needs.
3. **Collaboration** – In order for strategies to be successful, it is imperative that collaboration and partnerships occur across stakeholders and within communities most impacted by disparities and social disadvantage.

NEXT STEPS

The information provided in this report was presented at MNCM's annual conference in April 2022. Following the conference, a live and recorded webinar along with presentation slides will also be made available for the public.

SPECIAL THANKS

MNCM would like to extend a special thanks to the Minnesota Department of Human Services (DHS) and Assistant Professor, Dr. David Haynes at the University of Minnesota's Institute for Health Informatics for their partnership and collaboration in completing this project. MNCM would also like to thank the participants of the advisory group for their time, collaboration and insights. Finally, MNCM would like to thank the Preparedness Treatment and Equity Coalition for this grant-funded opportunity.

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