2014 Health Equity of Care Report
Stratification of Health Care Performance Results in Minnesota by Race, Hispanic Ethnicity, Preferred Language and Country of Origin
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Minnesota is one of the nation’s healthiest states; however, below the surface we are also home to some of the largest inequities in health status and incidence of chronic disease between populations. Those inequities are unacceptable for our community, and pose a threat to the economic and social fabric of our state.

Health inequities have historically been a complex and difficult thing to measure due to the relative lack and inconsistent collection of data. This inaugural Health Equity of Care Report: Stratification of Health Care Performance Results in Minnesota by Race, Hispanic Ethnicity, Preferred Language and Country of Origin provides, for the first time, clear benchmarks for our community to understand where inequity exists and its scope. This information is critical to effectively targeting efforts to reduce and eliminate it.

With this report, we are identifying, measuring and illuminating areas for improvement that exist in health care in Minnesota. Our success relies on a multi-stakeholder, collaborative model. When we began the journey in 2008 to collect and report data on health inequities, MNCM was in a unique position to collect and validate the information. We carried out this work at a deliberate, gradual pace designed to build trust in the process and credibility in the results. Both are critical elements to our continued ability to collect and report this data over time.

Moreover, our health care community should be commended and take great pride in its dogged pursuit of and support for the standard collection and reporting of race, Hispanic ethnicity, language and country of origin (REL) data. The clinics and medical groups in Minnesota surmounted technical, process and organizational barriers to provide the data that this report is based on. And they have done so willingly and enthusiastically.

This landmark report and its impact on our community are only possible because Minnesota’s health care leaders and their teams rallied around and prioritized this goal.

Minnesota is well positioned to be a national leader in the testing and use of socio-demographic factors, including REL, to improve outcomes for patients. Our community collects more data and follows best practices more widely than any other state, which allows us to target disparities in more meaningful ways.

However, data alone will not reduce disparities or achieve health equity goals. The real achievement will come when we begin to see reductions in disparities and the elimination of health inequities in Minnesota and our nation.

We are excited to continue working together toward our shared goal of improving the health and health care of all Minnesotans.

Thank you,

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2014 Health Equity of Care Report

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## Contents

**Introduction** .............................................. 6  
**Executive Summary** ........................................ 11  
**Summary of Results** ........................................ 14  

**MEASURES**

<table>
<thead>
<tr>
<th>Measure</th>
<th>Statewide Care</th>
<th>Regional Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optimal Diabetes Care</td>
<td>20</td>
<td>26</td>
</tr>
<tr>
<td>Optimal Vascular Care</td>
<td>37</td>
<td>43</td>
</tr>
<tr>
<td>Optimal Asthma Care - Adults</td>
<td>54</td>
<td>59</td>
</tr>
<tr>
<td>Optimal Asthma Care - Children</td>
<td>70</td>
<td>76</td>
</tr>
<tr>
<td>Colorectal Cancer Screening</td>
<td>87</td>
<td>96</td>
</tr>
</tbody>
</table>

**HOW TO USE THIS REPORT AND RESOURCES** ........................................ 111  
**FUTURE PLANS** ............................................ 113  
**APPENDIX**

<table>
<thead>
<tr>
<th>Appendix</th>
<th>116</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methodology</td>
<td></td>
</tr>
</tbody>
</table>
Introduction

“The real challenge lies not in debating whether disparities exist, the evidence is overwhelming, but in developing and implementing strategies to reduce and eliminate them.” – Alan Nelson, MD, Chairman IOM Committee: Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care, 2003

Health inequities affecting medically-underserved and historically-underrepresented populations in the United States and Minnesota are well documented and persistent. Despite decades of documentation, and while health care quality in general has improved, the gaps in care are not closing.1,2

Health equity is “the absence of avoidable or remediable differences among groups of people,” and specifically “access to the resources needed to improve and maintain health or health outcomes,” according to the World Health Organization.3

Racial and ethnic minorities represent about one-third of the United States population today and will become the majority by 2043.4 Minnesota is following a similar, although unique, trajectory.

- Minnesota’s foreign-born population is increasing faster than the national average, tripling since 1990 while the national average has only doubled.5
- Only about one-third of Minnesota’s immigrants were born in Latin America, compared to more than half of immigrants nationally. Similarly, one in five Minnesota immigrants were born in Africa, compared to only 4% nationally.6
- The Twin Cities, in particular, is home to a relatively large American Indian population, including members of the Little Earth of United Tribes and Shakopee Mdewakanton Sioux communities.7

As the diversity in our community increases, disparities in care become clearer while the reasons behind them are still very complex. “The sources of [racial and ethnic health] disparities are complex, are rooted in historic and contemporary inequalities, and involve many participants at several levels, including health systems, their administrative and bureaucratic processes, utilization managers, health care professionals and patients,” according to the Institute of Medicine’s landmark 2002 report Unequal Treatment: Confronting Racial and Ethnic Disparities in Healthcare.

In addition to health systems’ impact on inequities, it is also important to acknowledge that social determinants of health – such as income, education, pollution and neighborhood conditions – have a significant impact. Only about half of a person’s health can be affected by the health care system and their own individual behaviors (over which health care providers have some influence), according to a widely-used formula developed by the University of Wisconsin’s Population Health Institute.8 “When groups face serious social, economic and environmental disadvantages, such as structural racism and a widespread lack of economic and educational opportunities, health inequities are the result,” according to the Minnesota Department of Health’s report, Advancing Health Equity in Minnesota (2014).

While health care inequities cannot be addressed solely by health care providers, significant room for improvement exists within the health care system to address disparities those improvements will have a considerable impact on the health of both individuals and the population at large.

5 Immigration in Minnesota: 5 things you should know. Minnesota Compass. July 2013.
6 Immigration in Minnesota: 5 things you should know. Minnesota Compass. July 2013.
Introduction

Minnesota is one of the healthiest states in the nation. On a variety of indicators, from insurance status to life expectancy to the overall quality of health care, Minnesota ranks at or near the top among all states. But Minnesota also has some of the largest inequities in health status and incidence of chronic disease between populations. Communities of color in Minnesota are less likely to receive preventive care; more likely to suffer from serious illnesses and have less desirable health outcomes; and less likely to receive clinically-necessary procedures and services. These inequities pose a threat to the health and economic stability of all Minnesotans. A recent study indicated racial and ethnic disparities accounted for an estimated $60 billion in excess health care costs in 2009.

A significant obstacle to developing and evaluating programs to address and eliminate health inequities has been the relative lack and inconsistent collection of data, both locally and nationally. More recently, this has been recognized and the collection and reporting of health care disparities data has been prioritized as an essential tool to closing the gaps. The Affordable Care Act in 2009 included numerous provisions related to health inequity and, in particular, the importance of data collection and reporting to inform those efforts. “Consistent methods for collecting and reporting health data by race, ethnicity, and language are essential to informing evidence-based disparity reduction initiatives.”

MN Community Measurement’s Role in Advancing Health Equity

This inaugural Health Equity of Care Report: Stratification of Health Care Performance Results in Minnesota by Race, Hispanic Ethnicity, Preferred Language and Country of Origin presents data collected by medical groups using best practices and shines the spotlight on areas for improvement that exist in Minnesota. It features information on health care outcomes in five areas: Optimal Diabetes Care; Optimal Vascular Care; Optimal Asthma Care for Adults; Optimal Asthma Care for Children; and Colorectal Cancer Screening. Results for these measures are stratified by race, Hispanic ethnicity, preferred language and country of origin (REL) and reported at statewide and regional levels.

This report tells a compelling story: it not only supports other findings that much work remains to eliminate racial and ethnic disparities in health care, but it goes a step further and pinpoints results by regions within Minnesota. This will be vital to focusing and evaluating population health improvement opportunities and driving public policy and resource allocation to the geographic areas and populations most in need.

The foundation to advance accountability for health care outcomes among diverse populations is ongoing measurement. To reduce and eliminate health inequity, we must understand where it exists and its scope, so we can target effectively. Identification and increased awareness of disparities is a critical first step toward closing the gaps. Never before has data on performance results by race, Hispanic ethnicity, country of origin and language been available at a regional level in Minnesota – making it actionable for advocates, policymakers, public health professionals, community leaders and medical groups.

MNCM is a trusted source for health care measurement and public reporting in our community and nationally. Our mission is to accelerate the improvement of health through public reporting. With this report, we are identifying, measuring and illuminating health inequities to drive improvement and reduce gaps in care for Minnesota’s medically-underserved and historically-underrepresented patients.

Introduction

As the old adage goes, ‘what gets measured gets managed.’ Without specific measurement, disparities can go unnoticed by health care organizations, public health organizations, policymakers and others – even as they seek to improve the quality of care for all patients and citizens. “Standardized data collection can improve quality and effectiveness of the care received by targeting resources for populations (geographic populations or a patient population) at risk for specific conditions, crucial support services such as interpreters, or preventive screenings for specific populations. [This] data is essential for medical groups to plan their care and to understand cultural and economic barriers or complications to successful treatment.”

As noted, the lack of adequate, standardized data has been identified as a key barrier to recognizing that patient populations within the same medical group or clinic may not be attaining the same health outcomes. In 2008, MNCM set out to identify a common set of data elements that, if collected in a standard way and married with clinical results, could aid in the evaluation of health inequities in Minnesota.

MNCM was in a unique position to collect and validate REL data as a result of our existing Direct Data Submission (DDS) process, which was already being used by medical groups to submit patient-level data for quality measures. Between July 2008 and April 2009, MNCM convened an Early Adopters Work Group (EAWG) that was made up of representatives from local medical groups with already-established systems to collect REL data who were willing to share best practices. Using the national Institute of Medicine standards as its basis, the work group established local standards for data elements and best practices, as well as shared their expertise on critical steps other medical groups would need to undertake to implement similar systems. In 2009, the *Handbook on the Collection of Race/Ethnicity/Language Data in Medical Groups* was produced and released by MNCM. The handbook established a standard set of data elements for medical groups to collect REL data from patients using best practices. The effort was focused on those medical groups and clinics that participated in MNCM’s DDS process. This standardized collection and reporting would eventually allow comparison across organizations and regions.

One of the most important elements of the Handbook was crystalizing the definition of best practice for collection of race, Hispanic ethnicity, preferred language and country of origin from patients. The first critical element is that patients must be given the ability to *self-report* their information. “There is a general consensus that self-reported race/ethnicity data are considerably more accurate than observational reporting of race/ethnicity by health care staff. A body of empirical evidence supports this.” The second critical element is that clinics’ electronic health records (EHR) must be able to capture and report the selection of more than one race category.

In 2010, MNCM asked medical groups to voluntarily submit REL data with their quality measure data for 2009 dates of service. One year later, MNCM required REL data be submitted with quality data for 2010 dates of service. In June 2011, MNCM’s Measurement and Reporting Committee (MARC) approved public reporting of statewide REL results once 60 percent of medical groups were using the best practices outlined in the Handbook. In 2011 and 2012, MNCM conducted audits to affirm best practices were being followed by groups. These included validation of medical group’s processes and on-site audits.

In 2012, as MNCM approached the threshold for public reporting, a critical new challenge was discovered. One large medical group alerted MNCM that while it was allowing patients to select multiple race categories, its EHR was only capturing and reporting one race per patient. After analysis, MNCM identified many other medical groups in a similar

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Introduction

situation. Once taken into account, the percentage of groups that met best practice requirements dropped below the threshold for public reporting. The following year, MNCM conducted additional best practice audits of all groups with that EHR concern to ensure their systems were reporting all race categories identified by a patient.

During this several-year journey, Minnesota providers steadily improved their collection and reporting of REL data. As they surmounted technical, process and organizational barriers, the percentage of groups reporting data using best practices gradually increased. MNCM undertook this work at a deliberate, gradual pace in order to build trust with medical groups on the process and build credibility in the data. This trust is critical to ensure our ability to collect and report this data over time, and affirm the engagement of our community in this important goal.

In 2014, more than 70 percent of medical groups submitting REL data to MNCM were confirmed as using best practices. The remaining groups submit REL data but have not successfully passed an audit or provided evidence of using best practices.

We know it’s possible for providers to achieve optimal health outcomes for all patients, regardless of race, Hispanic ethnicity, preferred language or country of origin, because it’s happening in pockets within our community. Some of those stories are highlighted in this report. Effectively addressing health inequities on a large scale requires consistent, actionable data to provide a window into disparities in care, and allow all of us to gain a deeper understanding of their underlying causes and how to address them.

Community-driven initiative

Health inequity has historically been a complex and difficult thing to measure. MNCM has a unique ability to highlight where health care disparities exist in our state, then partner with stakeholders locally and nationally who are developing initiatives to address them.

An example of this is our role leading Minnesota’s Aligning Forces for Quality (AF4Q) Alliance, one of 16 alliances nationwide that are focused on lifting the quality of health care and reducing health inequities. The AF4Q initiative is funded by the Robert Wood Johnson Foundation. A central goal of the AF4Q initiative is to stratify quality performance data by race, ethnicity or language to provide meaningful, actionable information with which to target interventions that will improve health equity. With this report, Minnesota becomes the first AF4Q alliance to comprehensively attain this goal by publishing findings for patients covered by all insurance types and across our entire state.

MNCM’s success relies on a multi-stakeholder, consensus-based, collaborative effort. Our Board of Directors includes physicians; health plans; hospitals and state government representatives; employers; and consumers. We partner with a wide variety of local and national organizations through initiatives such as AF4Q, the RARE Campaign and measure development workgroups. We regularly work with over 300 medical groups, representing more than 1,600 clinics, who submit data to MNCM each year.

We highly value the work of others in our community who are also focused on this common goal and who have shared their expertise with us over the years. One partnership that has been critical over the past seven years is with the Minnesota Department of Human Services (DHS). Since 2007, MNCM and DHS have worked together to produce the Health Care Disparities Report for Minnesota Health Care Programs. The report evaluates socioeconomic disparities by comparing care received by patients insured through Minnesota Health Care Programs (MHCP) and patients covered by other payers; additionally, for the past four years, it has included some statewide race and ethnicity information for MHCP patients.
Introduction

Before the release of MNCM’s first Health Care Disparities Report, national and state reports of health inequities were dismissed as being the result of patient factors and issues outside medical groups’ control, or because of the perception that gaps in care might exist elsewhere but not in their own medical groups. “Providers often underestimate the magnitude of disparities in their own patient panel, and staff may not notice barriers patients face during the course of usual care”. 17

As more providers adopted best practices for collection and reporting of REL data, MNCM also worked to provide those medical groups with REL data on their own patients to inform their quality improvement efforts. Beginning in 2013, MNCM worked with medical groups to develop reports that would allow them to see optimal care results stratified by REL for their patients. In early 2014, the reports were made available to all medical groups collecting, reporting and submitting data using best practices. This medical group-level report supplies objective, repeatable data so medical groups can reflect on inequities in their own patient population and identify areas for improvement. MNCM hopes to make medical group-level information publicly available in the future, after evaluation of the most appropriate way to report it since small numbers may prevent reporting all data elements for all medical groups.

We cannot underscore enough the enormous contribution by medical groups who submit REL data to MNCM. We recognize it’s not always easy to ask patients for this information; however, medical groups have persevered and set the wheels in motion to reduce health care disparities and increase health equity for all Minnesotans.

Moreover, our health care community should be extremely proud to not only have identified, prioritized and championed the standardized collection and reporting of REL data; but also to have “walked the talk” by willingly and enthusiastically implementing this voluntarily, without a state mandate. This landmark report and its impact on our community are only possible because Minnesota’s health care leaders and their teams rallied around this goal; they should be commended.

New perspective on an ongoing conversation

This report should serve as a call to action to our community to examine and use this data to build a foundation for understanding and reducing health inequity in our state and communities.

Eliminating disparities will improve our population’s health and create a more productive society by reducing the economic and personal costs of health care. Our state and country benefits when everyone has the opportunity to live healthy, productive lives.

Medical groups, policymakers, public health professionals, advocates, communities of color and others can utilize this information to guide the development of smart policies and priorities, and to ground future decisions in common, standardized and validated data. Our community can focus on identifying and implementing solutions, knowing the results of those efforts will be evaluated on an ongoing basis by MNCM to guide future enhancements and iterations. We look forward to working closely with communities of color in Minnesota on this critical work.

Data alone will not achieve health equity goals – the real achievement will come when we start to see reductions in disparities and the elimination of health inequities in Minnesota and our nation.

Stratification of Health Care Performance Results in Minnesota by Race, Hispanic Ethnicity, Preferred Language and Country of Origin

Executive Summary

The 2014 Health Equity of Care Report pinpoints distinct differences in health care outcomes between diverse groups and geographic regions in Minnesota. It lays unmistakably clear the fact that some patient groups have consistently lower health care outcomes than others.

Across multiple measures and geographic regions, White and Asian patients generally had higher health care outcome rates, and American Indian or Alaskan Native and Black or African American patients generally had the lowest rates both statewide and across regions. Similarly, Hispanics generally had significantly lower health care outcome rates than non-Hispanics across every quality measure and most geographic regions.

Patients who were born in or preferred speaking the native languages of Asian countries tended to have higher outcome rates across multiple measures and geographic regions. In contrast, patients born in or speaking native languages of African countries had lower health care outcome rates, most notably Somali patients.

It’s also noteworthy what’s not in this report. Many geographic areas, particularly those in Greater Minnesota, had too few patients to report results for many race, ethnicity and language groups – particularly for the Optimal Vascular Care and Optimal Asthma Care (both adults and children) measures. While we cannot assign a cause, it could be a reflection of gaps in access, unfamiliarity with available services, or difficulty navigating medical care systems by some communities, or it could be simply reflective of a less diverse patient population in those areas.

Themes by Racial and Hispanic Ethnicity Group

Patients who identified as White generally had higher health care outcome rates across most measures and most geographic areas. The metro area, and in particular the West Metro region, tended to have the highest rates of optimal care for White patients. The Asian racial group also generally had higher rates of the measures reported. However, there was wide variation throughout Minnesota, even in the measures where Asian patients had the highest rates. For instance, Optimal Diabetes Care rates ranged from 25 percent in the Southwest region to 57 percent in the Southeast region. Colorectal Cancer Screening was the only measure where Asian patients had rates lower than the statewide average. Notably, the trend of Asian patients having high rates has been seen in national data as well.1

Native Hawaiian or Other Pacific Islander patients had a mix of low and high rates. They had the highest rate of any racial group for asthma care for adults, but had rates lower than the statewide average in all four other measures - although not all were significantly lower. And due to the relatively small population of Native Hawaiian or Other Pacific Islander patients in Minnesota, regional rates were not available for most measures. The challenge of fully assessing health care disparities for this racial group is due to its small numbers and this is also noted in national reports.2

The American Indian or Alaskan Native and Black or African American racial groups had the lowest health care outcome rates across all geographic regions. Both groups had rates below the statewide average in all five measures evaluated by this report. This is similar to national trends, as documented in the 2013 National Healthcare Disparities Report.

Generally, the highest health care outcome rates for Black or African American patients were found in the East Metro region across multiple measures. The group’s lowest rates were generally found in the Southern portion of Minnesota, both in the Southwest and Southeast regions. Interestingly, there was no regional consistency in the highest rates for American Indian and Alaska Native patients; however, this group’s lowest rates were generally in the Northeast region across multiple measures.

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Executive Summary

From a statewide perspective, Hispanics had lower health care outcome rates than Non-Hispanics in every measure, which follows national trends. However, this pattern was not consistent across regions. In three of nine regions, Hispanics had higher health care outcome rates than Non-Hispanics for both vascular care and asthma care for adults. In particular, Hispanics had higher rates in the East Metro and St. Paul regions for both measures.

Themes by Preferred Language and Country of Origin

Patients who were born in Vietnam and preferred speaking Vietnamese had higher rates of health care outcomes across several measures and multiple regions. This was consistent with a trend in this report of patients who originated from countries in Asia having better health outcomes than patients from other global regions, in addition to Vietnam, this was particularly true for patients born in India, Philippines and South Korea.

An exception to this pattern was patients born in Laos and/or who preferred speaking Hmong. Laotian-born patients had low statewide health care outcome rates for the three measures where they could be reported. Similarly, Hmong-speaking patients had rates lower than the statewide average on the three measures where the group could be reported. Many geographic regions did not have reportable Hmong or Laotian patient populations; however, both Hmong speaking and Laotian patients had the lowest rates of colorectal cancer screenings in the Southwest region.

While patients who prefer to speak a language other than English have varying levels English proficiency, only 56 percent of Hmong and 50 percent of Laotian speakers reported speaking English “very well,” according to the U.S. Census Bureau. Variation in English proficiency can add to the challenges of health care access and the attainment of better health care outcomes.

Spanish-speaking patients had health care outcome rates below the statewide average across most measures and geographic areas. Likewise, patients born in Mexico had low rates particularly in three measures. And, similar to Hmong and Laotian patients, English proficiency is a challenge for these patients: only 56 percent of Spanish speakers reported speaking English “very well” and 9 percent reported not speaking English at all.

Patients who preferred speaking Somali and/or were born in Somalia had the lowest health care outcome rates overall. Patients from these groups had the lowest rates across all five measures, and often had the lowest rate in every geographic area where they were reportable.

Since Minnesota is home to the largest population of Somali immigrants in North America, there is little national data for specific comparison; however, the results in this report are consistent with a national trend of patients born in Africa having poorer health outcomes.

Themes by Geographic Region

The health care outcome rates in each geographic area vary considerably across the measures evaluated by this report. However, some general trends could be identified.

The East and West Metro regions generally had higher health care outcome rates across multiple measures for most racial and ethnic groups compared to other regions. The East Metro region had particularly high rates of optimal diabetes care and colorectal cancer screening across all racial groups. The West Metro region had high rates of optimal vascular care and optimal asthma care for children across all racial groups, as well as optimal care for diabetes across all country of origin groups.

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Executive Summary

Minnesota’s Central region had high rates of optimal asthma care, for both adults and children, across all racial groups.

Generally, the Southwest and Northeast regions had lower health care outcome rates across multiple measures for most racial, ethnic and language categories. In particular, the Southwest region had the lowest rates of optimal diabetes care for most racial groups and for colorectal cancer screening across most racial, ethnic and preferred language groups.

The 2013 National Healthcare Disparities Report noted health inequities for residents of rural areas, regardless of race, ethnicity, language or country of origin. It noted that rural residents are less likely to receive recommended preventive services and more likely to defer other types of health care due to costs and transportation challenges. They also face greater language access barriers. These and other factors could contribute to the lower health care outcome rates in Greater Minnesota regions.

To reduce and eliminate health inequities, we must understand where they exist and their scope. However, measuring inequities has historically been complex and difficult. The granular information contained in this report should aid advocates, policymakers, public health professionals, communities of color and medical groups in pinpointing where their efforts to reduce health disparities can be most impactful.
Summary of Results

This is MN Community Measurement’s first annual Health Equity of Care Report, which includes health care performance results stratified at statewide and regional levels by race, Hispanic ethnicity, preferred language and country of origin in Minnesota. Five measures that are collected using MNCM’s Direct Data Submission (DDS) process are featured in this report: Optimal Diabetes Care, Optimal Vascular Care, Optimal Asthma Care – Adults, Optimal Asthma Care – Children and Colorectal Cancer Screening.

Summary of Statewide Rates by Race

American Indian or Alaskan Native
The American Indian or Alaskan Native racial group had the lowest rate for two measures: Optimal Vascular Care and Optimal Asthma Care - Children.

The American Indian or Alaskan Native racial group’s rate was significantly lower than the statewide average for all five measures. There were no measures where this racial group had the highest rate.

Asian
The Asian racial group had the highest rate for two measures: Optimal Diabetes Care and Optimal Asthma Care – Children.

For three measures (Optimal Diabetes Care, Optimal Vascular Care and Optimal Asthma Care – Children), this racial group had a performance rate significantly higher than the statewide average. For one measure (Colorectal Cancer Screening), this racial group had a performance rate significantly lower than the statewide average.

Black or African American
There were no measures where the Black or African American racial group had the highest or lowest rate.

For all five measures, this racial group had a performance rate significantly lower than the statewide average.

Multi-racial
The Multi-racial group did not have the highest or lowest rate for any measure.

This racial group did not have a significantly higher rate than the statewide average for any measure. There were three measures (Optimal Diabetes Care, Optimal Vascular Care and Colorectal Cancer Screening) where the Multi-racial group had a performance rate significantly lower than the statewide average.

Native Hawaiian or Other Pacific Islander
The Native Hawaiian or Other Pacific Islander racial group had the highest rate for one measure (Optimal Asthma Care – Adults); however, this rate was not significantly higher than the statewide average. This racial group did not have the lowest rate for any measure.

For one measure (Colorectal Cancer Screening), this racial group had a performance rate significantly lower than the statewide average.

White
The White racial group had the highest rate for one measure: Colorectal Cancer Screening. This racial group did not have the lowest rate for any measure. For all measures, this racial group had a performance rate that was significantly above the statewide average.

Unknown
The Unknown racial group had the lowest performance rate for three measures (Optimal Diabetes Care, Colorectal Cancer Screening and Optimal Asthma Care – Adults).

For four measures (Optimal Diabetes Care, Colorectal Cancer Screening, Optimal Asthma Care – Children and Optimal Asthma Care – Adults), this racial group had a performance rate that was significantly below the statewide average.

Some Other Race
The Some Other Race racial group had the highest performance rate for one measure: Optimal Vascular Care. This racial group did not have the lowest rate for any measure. However for three measures (Optimal Asthma Care - Adults, Optimal Asthma Care - Children and Colorectal Cancer Screening), this racial group had a performance rate that was significantly below the statewide average.
Summary of Results

Summary of Statewide Rates by Hispanic Ethnicity

Hispanic
For all measures, Hispanics had lower rates compared to Non-Hispanics. For four measures (Optimal Diabetes Care, Optimal Asthma Care – Adults, Optimal Asthma Care - Children and Colorectal Cancer Screening), the rates for Hispanics were significantly below the statewide average.

Non-Hispanic
For all measures, Non-Hispanics had higher rates compared to Hispanics. Non-Hispanics had a rate significantly above the statewide average for Optimal Diabetes Care, Optimal Asthma Care – Adults and Colorectal Cancer Screening.

Summary of Statewide Rates by Preferred Language

For Optimal Diabetes Care and Optimal Vascular Care, patients who indicated they preferred speaking Vietnamese had the highest rate compared to other preferred language groups; however, both rates were not significantly above the statewide averages for those measures.

Patients who indicated they preferred speaking English had the highest rate for both Asthma measures; however, their Optimal Asthma Care – Children rate was not significantly above the statewide average.

For all measures, patients who indicated they preferred speaking Somali had the lowest rate, and all rates were significantly below the statewide average.

Patients who preferred speaking Spanish had a rate significantly below the statewide average in four out of the five measures.

Patients who preferred speaking Hmong had a rate significantly below the statewide average for all measures this group was reportable.

Summary of Statewide Rates by Country of Origin

Generally speaking, patients born in Asian countries had the highest rates. Notably, patients born in India, Laos and the Philippines had higher rates compared to other country of origin groups.

Patients born in African countries had the lowest rates. Notably, patients born in Somalia had a lower rate compared to other country of origin groups.

The United States country of origin group had a rate significantly higher than the statewide average for two measures (Optimal Asthma Care – Adults and Colorectal Cancer Screening); however, this group’s rate was significantly below the statewide average for Optimal Vascular Care.
Summary of Results

Summary of Statewide Rates by Measure

Optimal Diabetes Care
Asians had the highest rate, and patients who indicated they did not know their race had the lowest rate. Non-Hispanic patients had a higher rate than Hispanics and the statewide average. Patients who preferred speaking Vietnamese had the highest rate, while patients who preferred speaking Somali had the lowest rate. Patients born in Vietnam had the highest rate, and the lowest rate was held by patients born in Iraq.

Optimal Vascular Care
Patients who indicated they are of Some Other Race had the highest rate, and American Indian or Alaskan Native patients had the lowest rate. Non-Hispanics patients had a higher rate than Hispanics, but it was not significantly above the statewide average. Similar to diabetes care, patients who preferred speaking Vietnamese had the highest rate, while patients who preferred speaking Somali had the lowest rate. Patients born in India had the highest rate, and the lowest rate was held by patients born in Somalia.

Optimal Asthma Care - Adults
Native Hawaiians or Other Pacific Islanders had the highest rate, but it was not significantly above the statewide average. Patients who indicated they did not know their race had the lowest rate. Non-Hispanics had a higher rate than Hispanics and the statewide average. Patients who preferred speaking English had the highest rate, while patients who preferred speaking Somali had the lowest rate. Patients born in South Korea had the highest rate, and the lowest rate was held by patients born in Somalia.

Optimal Asthma Care - Children
Asians had the highest rate, and American Indian or Alaskan Native patients had the lowest rate. Non-Hispanics had a higher rate than Hispanics, but it was not significantly above the statewide average. Patients who preferred speaking English had the highest rate; however, it was not significantly above the statewide average. Patients who preferred speaking Somali had the lowest rate. Patients born in the United States had the highest rate, although it was not significantly above the statewide average. The lowest rate was held by patients born in Somalia.

Colorectal Cancer Screening
Whites had the highest screening rate, and patients who indicated they did not know their race had the lowest screening rate. Non-Hispanics had a higher screening rate than Hispanics and the statewide average. Patients who preferred speaking Tibetan had the highest screening rate, while patients who preferred speaking Somali had the lowest screening rate. Patients born in Argentina had the highest screening rate, and the lowest screening rate was held by patients born in Somalia.
Summary of Results

Summary of Regional Rates by Measure

Optimal Diabetes Care

- **Race** – Almost all racial groups’ highest rate were found in the East Metro region. Lower rates were generally in the Southwest region for most racial groups. The Asian racial group had the highest rate in five regions, tying the Multi-racial group for the highest rate in the Northwest region. In six regions, the American Indian or Alaskan Native racial group had the lowest rate.

- **Hispanic Ethnicity** – In eight regions, Non-Hispanics had a higher rate than Hispanics. Both ethnic populations had their highest rate in the East Metro region.

- **Preferred Language** – In eight regions, either patients who preferred speaking Vietnamese or patients who preferred speaking English had the highest rate. Patients who preferred speaking Spanish had the lowest rate in three regions.

- **Country of Origin** – Patients born in the United States had the highest rate in three regions. In four regions, patients born in Somalia had the lowest rate. St. Paul and the West Metro region generally had higher rates for each country of origin group.

Optimal Vascular Care

- **Race** - For almost all racial groups, their highest rate was found in the West Metro region. The White racial group had the highest rate in six regions. In four regions, the Black or African American racial group had the lowest rate.

- **Hispanic Ethnicity** – In four regions, Non-Hispanics had a higher rate compared to Hispanics. Hispanics had a higher rate compared to Non-Hispanics in three regions. There were two regions where the Hispanics did not meet the minimum reporting threshold.

- **Preferred Language** – In four regions, the only reportable preferred language group was English; this group's highest rate was found in the West Metro region. Notably, patients who preferred speaking Spanish had the highest rate in the Southeast region and the lowest rate in the St. Paul region.

- **Country of Origin** – In five regions, the only reportable country of origin group was the United States; this group's highest rate was found in the West Metro region. Notably, patients born in Canada had the highest rate in the Northeast region and the lowest rate in the Central region.

Optimal Asthma Care - Adults –

- **Race** – The Northern regions of Minnesota (Northeast and Northwest) generally had lower rates compared to other regions. The White racial group had the highest rate in six regions. The White racial group was the only reportable group in the Southwest region. Both the Black or African American and American Indian or Alaskan Native racial groups had the lowest rate in three regions.

- **Hispanic Ethnicity** – Non-Hispanics had a higher rate compared to Hispanics in five regions. Hispanics had a higher rate compared to Non-Hispanics in three regions. Rates were very similar for the two ethnic groups in the East Metro region.

- **Preferred Language** – Patients who preferred speaking English had the highest rate in all of the nine regions. The English preferred language group was the only reportable group in six of the regions. Patients who preferred speaking Spanish had the highest rate in the Minneapolis region and their lowest rate in the Northwest region.

- **Country of Origin** – The United States country of origin group was the only reportable group in seven regions, with this group's highest rate found in the East Metro region.
Summary of Results

Optimal Asthma Care - Children –

- **Race** – The West Metro region generally had higher rates compared to other regions. The border regions of Minnesota (Northeast, Northwest, Southeast and Southwest) generally had lower rates compared to more inner Minnesota regions. The White racial group had the highest rate in three regions. Both the Black or African American and the American Indian or Alaskan Native racial groups had the lowest rate in three regions.

- **Hispanic Ethnicity** – Non-Hispanics had a higher rate compared to Hispanics in four regions. Hispanics and Non-Hispanics had the same rate in the Minneapolis region. Both ethnic groups had their highest rate in the West Metro region.

- **Preferred Language** – Patients who preferred speaking English had the highest rate in four regions. The English preferred language group was the only reportable group for the Northwest and Northeast region. Patients who preferred speaking Spanish had the highest rate in four regions. Patients who preferred speaking Somali had the lowest rate in three regions.

- **Country of Origin** – The United States country of origin group was the only reportable group in seven regions, with this group's highest rate found in the West Metro region.

Colorectal Cancer Screening

- **Race** – The St. Paul and East Metro regions generally had higher screening rates than other regions. The Southwest region generally had lower screening rates than other regions. The White racial group had the highest screening rate in eight regions; the American Indian or Alaskan Native racial group had a higher screening rate than the White racial group in the Southeast region. The Black or African American racial group had the lowest screening rate in four regions.

- **Hispanic Ethnicity** – Non-Hispanics had a higher screening rate compared to Hispanics in all nine regions. Both ethnic groups' lowest rate were found in the Southwest region.

- **Preferred Language** – Patients who preferred speaking English had the highest screening rate in four regions. Patients who preferred speaking Somali had the lowest screening rate in six regions. The lowest screening rates were found more often in the Southwest region for all preferred language groups compared to other regions.

- **Country of Origin** – Patients born in Canada had the highest screening rate in two regions and had the lowest screening rate in one region. The United States and Germany country of origin groups each had the highest rate in one region. Patients born in Somalia had the lowest screening rate in seven regions.
Please see next page.
STATEWIDE RESULTS

Optimal Diabetes Care

This measures the percentage of patients with diabetes (Type 1 and Type 2) ages 18-75 who reached all five of the following treatment goals to reduce cardiovascular risk:

- Blood pressure less than 140/90 mmHg
- LDL-C less than 100 mg/dl
- Hemoglobin A1c (HbA1c) less than 8
- Daily aspirin use for diabetes patients with a comorbidity of ischemic vascular disease unless contraindicated
- Documented tobacco-free status

The statewide rate for Optimal Diabetes Care is 39%.

Credit is given for achieving this composite rate when all five measure components are met. Data collected for this measure are submitted directly to MNCM by medical groups/clinics from electronic health records or paper-based medical charts.
STATEWIDE RESULTS BY RACE

Optimal Diabetes Care

Figure 1 shows statewide Optimal Diabetes Care rates by race. The Asian racial group had the highest rate of optimal care at 44%, which is significantly above the statewide average (39%). It was also significantly above the White racial group, which was the only other racial group significantly above the statewide average at 41%. The Unknown racial group had the lowest rate of optimal care at 24%, and this was significantly below the statewide average rate. Additionally, the Multi-racial, Black or African American, and American Indian or Alaskan Native racial groups had rates significantly below the statewide average as well.

FIGURE 1: STATEWIDE RATES FOR OPTIMAL DIABETES CARE BY RACE
STATEWIDE RESULTS BY HISPANIC ETHNICITY

Optimal Diabetes Care

Figure 2 shows statewide Optimal Diabetes Care rates by Hispanic ethnicity. Non-Hispanics had a significantly higher rate of optimal care (40%) than both the statewide average (39%) and Hispanics (32%). Hispanics had a rate of optimal care that was lower than the statewide average.

**FIGURE 2: STATEWIDE RATES FOR OPTIMAL DIABETES CARE BY HISPANIC ETHNICITY**

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<th>Rate</th>
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</thead>
<tbody>
<tr>
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<tr>
<td>Hispanic or Latino</td>
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<tr>
<td>Statewide Average</td>
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<td></td>
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</table>
STATEWIDE RESULTS BY PREFERRED LANGUAGE

Optimal Diabetes Care

Figure 3 shows statewide Optimal Diabetes Care rates by preferred language. Patients who indicated Vietnamese was their preferred language had the highest rate of optimal care (52%), and that rate was significantly higher than the statewide average (39%) and the English rate (39%). Patients who indicated Cambodian and English were their preferred languages also had optimal care rates higher than the statewide average. The lowest rate of optimal care was held by patients that indicated Somali as their preferred language at 21%; this rate is significantly below the statewide average. Notably, patients that selected Spanish and Hmong as their preferred languages also had optimal care rates below the statewide average.
Figure 4 shows statewide Optimal Diabetes Care rates by country of origin. Patients born in Vietnam had the highest rate of optimal care at 54%, which was significantly above the statewide average (39%) and the rate of patients born in the United States (39%). Other countries of origin that had optimal rates above the statewide average were China, Cambodia, Philippines, Egypt and India. Patients born in Iraq had the lowest optimal rate at 22%, which was significantly lower than the statewide average. Notably, patients born in Laos, Mexico and Somalia also had rates of optimal care below the statewide average and the United States-born optimal rate.
Please see next page.
REGIONAL RESULTS

Optimal Diabetes Care

Statewide results showed variation in performance among the different geographic regions in Minnesota. Boundaries of the nine regions were determined by synthesizing health care and geopolitical data, including from the Metropolitan Council and State of Minnesota. The nine regions in alphabetical order are: Central, East Metro, Minneapolis, Northeast, Northwest, St. Paul, Southeast, Southwest and West Metro.

Regional Results by Race

Statewide rates for each racial group were stratified by region for comparative analyses. For Optimal Diabetes Care, the East Metro region had the highest rate for almost all of the racial groups. The Southwest region produced lower rates for almost all racial groups.

The highest and lowest rates for each racial group were found in the following regions:

- **American Indian or Alaskan Native**: The highest rate for this racial group was found in the East Metro region at 38%; the lowest rate was found in the Southwest region at 11%.
- **Asian**: The highest rate for this racial group was found in the Southeast region at 57%; the lowest rate was found in the Southwest region at 25%.
- **Black or African American**: The highest rate for this racial group was found in the St. Paul region at 33%; the lowest rate was found in the Southwest region at 14%.
- **Multi-racial**: The highest rate for this racial group was found in the East Metro region at 45%; the lowest rate was found in the Northeast region at 14%.
- **Native Hawaiian or Other Pacific Islander**: This racial group was only reportable in the Minneapolis region with a rate of 35%.
- **Some Other Race**: The highest rate for this racial group was found in the East Metro region at 47%; the lowest rate was found in the Northwest region at 30%.
- **White**: The highest rate for this racial group was found in the West Metro region at 49%; the lowest rate was found in the Southwest region at 32%.

The Asian racial group had the highest rate in five out of the nine regions (tied for highest with the Multi-racial group for the Northwest region). The American Indian or Alaskan Native racial group had the lowest rate in six out of the nine regions.

The highest and lowest rates were held by the following racial groups in each region:

- **Minneapolis**: White patients had the highest rate at 45%; American Indian or Alaskan Native patients had the lowest rate at 23%.
- **West Metro**: Asian patients had the highest rate at 50%; American Indian or Alaskan Native patients had the lowest rate at 25%.
REGIONAL RESULTS

Optimal Diabetes Care

- **St. Paul**: White patients had the highest rate at 47%; American Indian or Alaskan Native patients had the lowest rate at 32%.
- **East Metro**: Asian patients had the highest rate at 50%; Black or African American patients had the lowest rate at 32%.
- **Northwest**: Asian and Multi-racial patients had the highest rate at 35%; American Indian or Alaskan Native patients had the lowest rate at 16%.
- **Central**: Asian patients had the highest rate at 46%; American Indian or Alaskan Native patients had the lowest rate at 22%.
- **Northeast**: Patients with Some Other Race had the highest rate at 43%; Multi-racial patients had the lowest rate at 14%.
- **Southeast**: Asian patients had the highest rate at 57%; Black or African American patients had the lowest rate at 25%.
- **Southwest**: White patients had the highest rate at 32%; American Indian or Alaskan Native patients had the lowest rate at 11%.

The following pages display graphics comparing Optimal Diabetes Care regional rates by race. Denominator values (N) are displayed for reportable groups.
Optimal Diabetes Care Rates by Race

- American Indian or Alaskan Native
- Asian
- Black or African American
- Multi Racial
- Native Hawaiian or Other Pacific Islander
- Some Other Race
- White

Map showing diabetes care rates by region in Minnesota.
Optimal Diabetes Care Rates by Race

N = The total number of patients within that REL or geographic category (denominator), out of which the percentage received optimal care.
REGIONAL RESULTS

Optimal Diabetes Care

Regional Results by Hispanic Ethnicity

Statewide rates for each ethnic group were stratified by region for comparative analyses. Non-Hispanics had a higher rate compared to Hispanics in eight regions; Non-Hispanics had a lower rate (32%) compared to Hispanics (34%) in the Northwest region.

Hispanics had the highest rate in the East Metro region at 44%, and the lowest rate in the Southwest region at 22%.

Similar to Hispanics, Non-Hispanics had the highest rate in the East Metro region at 47%. The lowest rate for Non-Hispanics was found in the Northwest region at 32%.

The following page displays graphics comparing Optimal Diabetes Care regional rates by Hispanic ethnicity. Rates are not displayed for ethnic groups that have less than 30 patients in a region. Denominator values (N) are displayed for reportable groups.
Optimal Diabetes Care Rates by Hispanic Ethnicity

N = The total number of patients within that REL or geographic category (denominator), out of which the percentage received optimal care.
REGIONAL RESULTS

Optimal Diabetes Care

Regional Results by Preferred Language

Statewide rates for each language group were stratified by region for comparative analyses. The highest and lowest rates were held by the following preferred language groups for each region:

- **Minneapolis**: Patients who preferred speaking Cantonese had the highest rate at 73%; patients who preferred speaking Somali had the lowest rate at 18%.
- **West Metro**: Patients who preferred speaking Vietnamese had the highest rate at 64%; patients who preferred speaking Somali had the lowest rate at 29%.
- **St. Paul**: Patients who preferred speaking Vietnamese had the highest rate at 52%; patients who preferred speaking Spanish had the lowest rate at 22%.
- **East Metro**: Patients who preferred speaking Vietnamese had the highest rate at 62%; patients who preferred speaking Hmong had the lowest rate at 30%.
- **Northwest**: Patients who preferred speaking English had the highest rate at 31%; patients who preferred speaking Spanish had the lowest rate at 27%.
- **Central**: Patients who preferred speaking English had the highest rate at 38%; patients who preferred speaking Somali had the lowest rate at 21%.
- **Northeast**: There was only one reportable preferred language group for this region.
- **Southeast**: Patients who preferred speaking Vietnamese had the highest rate at 44%; patients who preferred speaking Somali had the lowest rate at 22%.
- **Southwest**: The highest rate was held by two preferred language groups, English and Somali, with rates at 35%; patients who preferred speaking Spanish had the lowest rate at 25%.

Patients who preferred speaking **Vietnamese** had the highest rate in four out of the five regions the group was reportable for; the highest rate was in the West Metro region at 64%.

Patients who preferred speaking **Spanish** had the lowest rate in three out of the eight regions the group was reportable for; the lowest rate was in the St. Paul region at 22%.

Patients who preferred speaking **English** had the highest rate for four out of the nine regions the group was reportable for; the highest rate was in the East Metro region at 47%.

Patients who preferred speaking **Somali** had the lowest rate for four out of the six regions the group was reportable for; the lowest rate was found in the Minneapolis region at 18%.

The following page displays graphics comparing Optimal Diabetes Care regional rates by preferred language. Rates are not displayed for language groups that have less than 30 patients in a region. Denominator values (N) are displayed for reportable groups.
Optimal Diabetes Care Rates by Preferred Language

N = The total number of patients within that REL or geographic category (denominator), out of which the percentage received optimal care.
REGIONAL RESULTS

Optimal Diabetes Care

Regional Results by Country of Origin

Statewide rates for each country of origin group were stratified by region for comparative analyses. The highest and lowest rates were held by the following country of origin groups for each region:

- **Minneapolis**: Patients born in Vietnam had the highest rate at 57%; the lowest rate was held by three country of origin groups (El Salvador, Kenya and Somalia) with rates at 19%.
- **West Metro**: Patients born in Vietnam had the highest rate at 64%; patients born in Guyana had the lowest rate at 20%.
- **St. Paul**: Patients born in China had the highest rate at 61%; patients born in Thailand had the lowest rate at 17%.
- **East Metro**: Patients born in India had the highest rate at 64%; patients born in Somalia had the lowest rate at 20%.
- **Northwest**: Patients born in Mexico had the highest rate at 39%; patients born in the United States had the lowest rate at 32%.
- **Central**: Patients born in the Philippines had the highest rate at 50%; patients born in Somalia had the lowest rate at 23%.
- **Northeast**: Patients born in the United States had the highest rate at 35%; patients born in Germany had the lowest rate at 17%.
- **Southeast**: Patients born in the United States had the highest rate at 41%; patients born in Somalia had the lowest rate at 15%.
- **Southwest**: Patients born in the United States had the highest rate at 35%; patients born in Laos had the lowest rate at 24%.

Patients born in the **United States** had the highest rate in three out of the nine regions they were reportable for; the highest rate was found in the East Metro region at 46%. Similarly, patients born in Mexico and India had their highest rates in the East Metro region at 46% and 64%, respectively.

**Somalian born** patients had the lowest rate in four out of the seven regions the group was reportable for; their lowest rate was found in the Southeast region at 15%.

Patients born in **Laos** had their highest rate in the West Metro region at 38%, and their lowest rate in the Southwest region at 24%.

Patients born in **Vietnam** had generally higher rates for all regions this group was reportable. This group’s highest rate was found in the West Metro Region at 64%.

The following page displays graphics comparing Optimal Diabetes Care regional rates by country of origin. Rates are not displayed for countries that have less than 30 patients in a region. Denominator values (N) are displayed for reportable groups.
### Optimal Diabetes Care Rates by Country of Origin

#### N = The total number of patients within that REL or geographic category (denominator), out of which the percentage received optimal care.

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Please see next page.
STATEWIDE RESULTS

Optimal Vascular Care

This measures the percentage of patients ages 18-75 with vascular disease who reached these four treatment goals to reduce the risk of cardiovascular disease:

- Blood pressure less than 140/90 mmHg
- LDL-C less than 100 mg/dl
- Daily aspirin use unless contraindicated
- Documented tobacco-free status

The statewide rate for Optimal Vascular Care is 50%.

Credit is given for achieving this composite rate when all four measure components are met. Data collected for this measure are submitted directly to MNCM by medical groups/clinics from electronic health records or paper-based medical charts.
**STATEWIDE RESULTS BY RACE**

**Optimal Vascular Care**

Figure 5 shows statewide Optimal Vascular Care rates by race. Patients that reported being Some Other Race had the highest optimal care rate at 55%, but this rate was not significantly above the statewide average (50%). The Asian (54%) and White (51%) racial groups were significantly above the statewide average. American Indians or Alaskan Natives had the lowest rate of optimal care at 35%, which was significantly below the statewide average. Additionally, the Multi-racial and Black or African American racial groups had optimal care rates significantly below the statewide average as well.

Comparing across racial categories, statewide rates for Some Other Race, Asian, and White were significantly higher than statewide rates for Multi-racial, Black or African American, and American Indian or Alaskan Natives.
STATEWIDE RESULTS BY HISPANIC ETHNICITY

Optimal Vascular Care

**Figure 6** shows statewide Optimal Vascular Care rates by Hispanic ethnicity. Non-Hispanics had the highest optimal care rate (50%), but it was not significantly higher than the statewide average (50%) or the Hispanic optimal care rate (48%).
STATEWIDE RESULTS BY PREFERRED LANGUAGE

Optimal Vascular Care

Figure 7 shows statewide Optimal Vascular Care rates by preferred language. Patients who indicated Vietnamese was their preferred language had the highest rate of optimal care (53%), but that rate was not significantly higher than the statewide average (50%). There were no preferred language groups with rates of optimal care significantly above the statewide average. Patients who indicated Somali was their preferred language had the lowest optimal care rate at 37%; this rate was significantly below the statewide average. Notably, patients that noted Spanish and Hmong were their preferred languages also had rates of optimal care below the statewide average. Statewide rates for patients who preferred Vietnamese and English as their languages were significantly higher than rates for patients who indicated Hmong and Somali as their preferred languages. The statewide rate for patients who preferred English and Spanish as their languages were not significantly different from each other.
Statewide Results by Country of Origin

Optimal Vascular Care

Figure 8 shows statewide Optimal Vascular Care rates by country of origin. Patients born in India had the highest rate of optimal care at 66%, which was significantly higher than the statewide average (50%). No other countries of origin had optimal care rates above the statewide average. Patients born in Somalia had the lowest rate of optimal care at 40%, which was significantly lower than the statewide average. Patients born in the United States and Laos also had an average optimal care rate below the statewide average. The statewide rate for patients born in India was the only rate significantly higher than the rate for United States-born patients. In contrast, the statewide rates for patients born in Laos and Somalia were significantly lower than the statewide rate of optimal care for United States-born patients.

**Figure 8: Statewide Rates for Optimal Vascular Care by Country of Origin**
REGIONAL RESULTS

Optimal Vascular Care

Statewide results showed variation in performance among the different geographic regions in Minnesota. Boundaries of the nine regions were determined by synthesizing health care and geopolitical data, including from the Metropolitan Council and State of Minnesota. The nine regions in alphabetical order are: Central, East Metro, Minneapolis, Northeast, Northwest, St. Paul, Southeast, Southwest and West Metro.

Regional Results by Race

Statewide rates for each racial group were stratified by region for comparative analyses. For Optimal Vascular Care, the West Metro region had the highest rate for most racial groups.

The highest and lowest rates for each racial group were found in the following regions:

- **American Indian or Alaskan Native**: The highest rate for this racial group was found in the St. Paul region at 41%; the lowest rate was found in the Northeast region at 25%.
- **Asian**: The highest rate for this racial group was found in the West Metro region at 63%; the lowest rate was found in the St. Paul region at 52%.
- **Black or African American**: The highest rate for this racial group was found in the East Metro region at 42%; the lowest rate was found in the Minneapolis region at 33%.
- **Multi-racial**: The highest rate for this racial group was found in the West Metro region at 56%; the lowest rate was found in the Central region at 33%.
- **Native Hawaiian or Other Pacific Islander**: This racial group was not reportable for any of the regions.
- **Some Other Race**: The highest rate for this racial group was found in the St. Paul region at 70%; the lowest rate was found in the Northeast region at 50%.
- **White**: The highest rate for this racial group was found in the West Metro region at 59%; the lowest rate was found in the Southwest region at 46%.

The White racial group had the highest rate in six out of the nine regions (this racial group was the only reportable group for the Southeast and Southwest regions). The Black or African American racial group had the lowest rate in four out of the nine regions.

The highest and lowest rates were held by the following racial groups in each region:

- **Minneapolis**: Three racial groups tied for the highest rate at 53%: Asians, patients with Some Other Race and Whites; Multi-racial patients had the lowest rate at 33%.
- **West Metro**: Asian patients had the highest rate at 63%; Black or African American patients had the lowest rate at 40%.
REGIONAL RESULTS

Optimal Vascular Care

- **St. Paul**: Patients with Some Other Race had the highest rate at 70%; Black or African American patients had the lowest rate at 37%.

- **East Metro**: White patients had the highest rate at 56%; Black or African American patients had the lowest rate at 42%.

- **Northwest**: White patients had the highest rate at 46%; American Indian or Alaskan Native patients had the lowest rate at 31%.

- **Central**: Asian patients had the highest rate at 55%; both American Indian or Alaskan Native patients and Multi-racial patients had the lowest rate at 33%.

- **Northeast**: Patients with Some Other Race had the highest rate at 50%; American Indian or Alaskan Native patients had the lowest rate at 25%.

- **Southeast**: This region only contained one reportable racial group.

- **Southwest**: This region only contained one reportable racial group.

The following pages display graphics comparing Optimal Vascular Care regional rates by race. Rates are not displayed for racial groups that have less than 30 patients in a region. Denominator values (N) are displayed for reportable groups.
Optimal Vascular Care Rates by Race

- American Indian or Alaskan Native
- Asian
- Black or African American
- Multi Racial
- Native Hawaiian or Other Pacific Islander
- Some Other Race
- White

Stratification of Health Care Performance Results in Minnesota by Race, Hispanic Ethnicity, Preferred Language and Country of Origin
Optimal Vascular Care Rates by Race

### Stratification of Health Care Performance Results in Minnesota by Race, Hispanic Ethnicity, Preferred Language and Country of Origin

N = The total number of patients within that REL or geographic category (denominator), out of which the percentage received optimal care.

- **American Indian or Alaskan Native**
  - Northeast: 25%
  - Northwest: 31%
  - Central: 33%
  - Minneapolis: 40%
  - St. Paul: 41%
  - East Metro: 55%
  - West Metro: 53%
  - Southeast: 52%
  - Southwest: 63%

- **Asian**
  - Northeast: 38%
  - Northwest: 41%
  - Central: 41%
  - Minneapolis: 55%
  - St. Paul: 52%
  - East Metro: 54%
  - West Metro: 63%
  - Southeast: 42%
  - Southwest: 40%

- **Black or African American**
  - Northeast: 33%
  - Northwest: 33%
  - Central: 37%
  - Minneapolis: 33%
  - St. Paul: 42%
  - East Metro: 46%
  - West Metro: 52%
  - Southeast: 52%
  - Southwest: 56%

- **Multi Racial**
  - Northeast: 39%
  - Northwest: 52%
  - Central: 46%
  - Minneapolis: 52%
  - St. Paul: 56%
  - East Metro: 59%
  - West Metro: 58%
  - Southeast: 56%
  - Southwest: 50%

- **Some Other Race**
  - Northeast: 50%
  - Northwest: 48%
  - Central: 47%
  - Minneapolis: 53%
  - St. Paul: 70%
  - East Metro: 56%
  - West Metro: 59%
  - Southeast: 58%
  - Southwest: 46%

- **White**
  - Northeast: 48%
  - Northwest: 46%
  - Central: 47%
  - Minneapolis: 53%
  - St. Paul: 70%
  - East Metro: 56%
  - West Metro: 59%
  - Southeast: 58%
  - Southwest: 46%
REGIONAL RESULTS

Optimal Vascular Care

Regional Results by Hispanic Ethnicity

Statewide rates for each ethnic group were stratified by region for comparative analyses. Non-Hispanics had a higher rate compared to Hispanics in four regions (Central, Minneapolis, West Metro and Southwest). Hispanics had a higher rate compared to Non-Hispanics in three regions (Northwest, St. Paul and East Metro). There were two regions where the Hispanic population did not meet the minimum reporting threshold; no comparison could be made.

Hispanics had the highest rate in the East Metro region at 57%, and the lowest rate in the Southwest region at 42%.

Non-Hispanics had the highest rate in the West Metro region at 58%. The lowest rate for Non-Hispanics was found in the Northwest region at 46%.

The following page displays graphics comparing Optimal Vascular Care regional rates by Hispanic ethnicity. Rates are not displayed for ethnic groups that have less than 30 patients in a region. Denominator values (N) are displayed for reportable groups.
Optimal Vascular Care Rates by Hispanic Ethnicity

<table>
<thead>
<tr>
<th>Region</th>
<th>Hispanic</th>
<th>Non-Hispanic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Northeast</td>
<td>55%</td>
<td>47%</td>
</tr>
<tr>
<td>Northwest</td>
<td>55%</td>
<td>47%</td>
</tr>
<tr>
<td>Central</td>
<td>45%</td>
<td>47%</td>
</tr>
<tr>
<td>Minneapolis</td>
<td>47%</td>
<td>51%</td>
</tr>
<tr>
<td>St. Paul</td>
<td>51%</td>
<td>49%</td>
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<td>55%</td>
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<td>51%</td>
</tr>
<tr>
<td>Southwest</td>
<td>42%</td>
<td>47%</td>
</tr>
</tbody>
</table>

N = The total number of patients within that REL or geographic category (denominator), out of which the percentage received optimal care.
REGIONAL RESULTS

Optimal Vascular Care

Regional Results by Preferred Language

Statewide rates for each language group were stratified by region for comparative analyses. The highest and lowest rates were held by the following preferred language groups for each region:

- **Minneapolis**: Patients who preferred speaking Laotian had the highest rate at 60%; patients who preferred speaking Somali had the lowest rate at 35%.
- **West Metro**: Patients who preferred speaking English had the highest rate at 58%; patients who preferred speaking Russian had the lowest rate at 47%.
- **St. Paul**: Patients who preferred speaking Vietnamese had the highest rate at 55%; patients who preferred speaking Spanish had the lowest rate at 37%.
- **East Metro**: There was only one reportable preferred language group for this region.
- **Northwest**: There was only one reportable preferred language group for this region.
- **Central**: There was only one reportable preferred language group for this region.
- **Northeast**: There was only one reportable preferred language group for this region.
- **Southeast**: Patients who preferred speaking Spanish had the highest rate at 57%; patients who preferred speaking Arabic had the lowest rate at 53%.
- **Southwest**: There were only two reportable preferred language groups and both had rates at 47%.

For four regions, the only reportable preferred language group was **English**. The highest rate for this group was found in the West Metro region at 58%; the lowest rate was found in the Northwest region at 46%.

The highest rate for patients who preferred speaking **Spanish** was found in the Southeast region at 57%; the lowest rate was found in the St. Paul region at 37%.

The following page displays graphics comparing Optimal Vascular Care regional rates by preferred language. Rates are not displayed for language groups that have less than 30 patients in a region. Denominator values (N) are displayed for reportable groups.
Stratification of Health Care Performance Results in Minnesota by Race, Hispanic Ethnicity, Preferred Language and Country of Origin

Optimal Vascular Care Rates by Preferred Language

N = The total number of patients within that REL or geographic category (denominator), out of which the percentage received optimal care.
REGIONAL RESULTS

Optimal Vascular Care

Regional Results by Country of Origin

Statewide rates for each country of origin group were stratified by region for comparative analyses. The highest and lowest rates were held by the following country of origin groups for each region:

- **Minneapolis**: Patients born in India had the highest rate at 63%; patients born in the Philippines had the lowest rate at 36%.
- **West Metro**: There was only one reportable country of origin group for this region.
- **St. Paul**: Patients born in India had the highest rate at 69%; patients born in Russia had the lowest rate at 34%.
- **East Metro**: There was only one reportable country of origin group for this region.
- **Northwest**: There was only one reportable country of origin group for this region.
- **Central**: Patients born in the United States had the highest rate at 47%; patients born in Canada had the lowest rate at 31%.
- **Northeast**: Patients born in Canada had the highest rate at 60%; patients born in the United States had the lowest rate at 47%.
- **Southeast**: There was only one reportable country of origin group for this region.
- **Southwest**: There was only one reportable country of origin group for this region.

For five regions, the only reportable country of origin group was the United States (West Metro, East Metro, Northwest, Southeast and Southwest). The highest rate for this group was found in the West Metro region at 57%; the lowest rate was found in five regions at 47% (St. Paul, Northwest, Central, Northeast and Southwest).

Patients born in Canada had the highest rate in the Northeast region at 60%, and the lowest rate in the Central region at 31%.

The following page displays graphics comparing Optimal Vascular Care regional rates by country of origin. Rates are not displayed for countries that have less than 30 patients in a region. Denominator values (N) are displayed for reportable groups.
Optimal Vascular Care Rates by Country of Origin

N = The total number of patients within that REL or geographic category (denominator), out of which the percentage received optimal care.
Please see next page.