2018 MINNESOTA HEALTH CARE DISPARITIES

by Race, Hispanic Ethnicity, Language and Country of Origin

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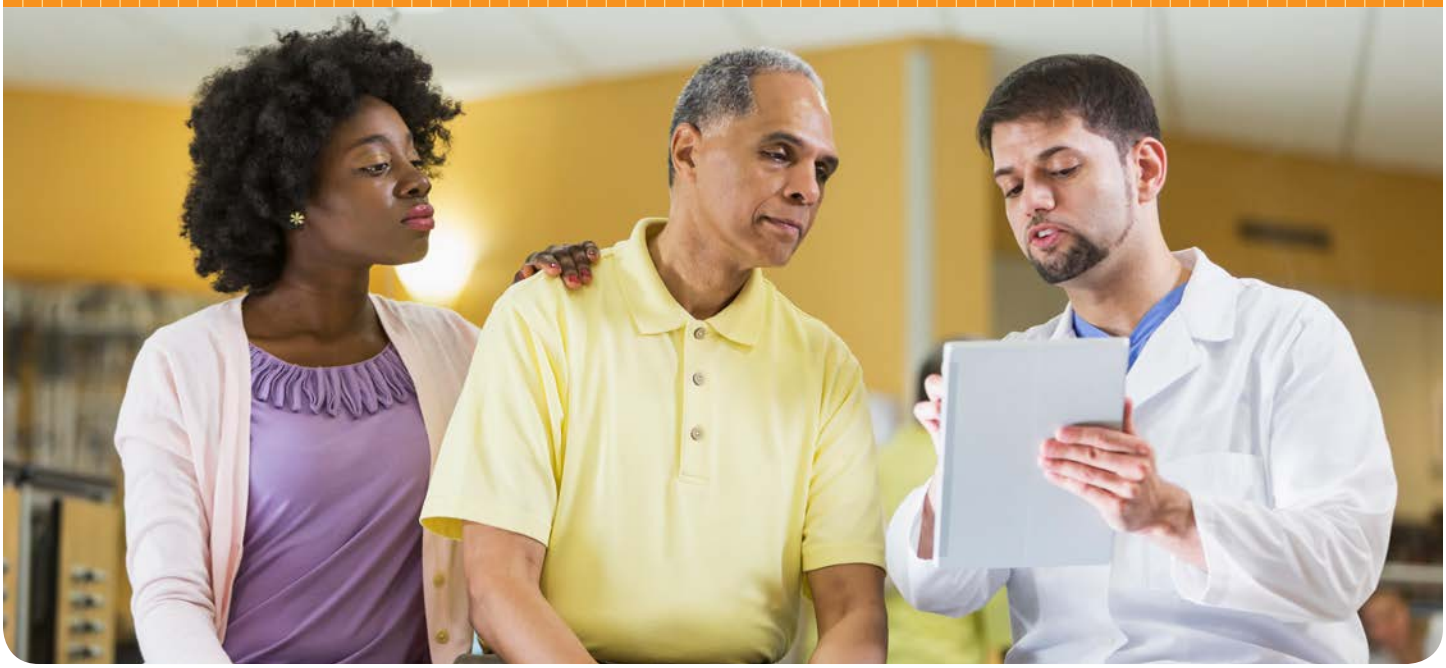

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MN Community MEASUREMENT
Measure Up To Better Health

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ONLINE APPENDICES

Who is MN Community Measurement?

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

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

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

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INTRODUCTION AND KEY FINDINGS

Minnesota consistently ranks as one of the healthiest states in the nation, according to analyses published by groups such as the United Health Foundation and the Commonwealth Fund. However, this overall high level of performance obscures wide variation in outcomes for some communities. In Minnesota, communities of color experience significantly higher rates of chronic and infectious diseases, illnesss and premature death. In addition, Minnesota's demographics are changing. According to the Minnesota State Demographic Center, populations of color are expected to continue to increase faster than the white non-Hispanic population, increasing to 25 percent of the total state population by 2035. As a result, the current challenge of addressing health disparities will become even more important over time.

Collecting and reporting data in a standardized way that allows for comparisons by race, Hispanic ethnicity, preferred language and country of origin (RELC) is one important way that we can measure progress in reducing disparities and identify opportunities for improvement. This is MNCM's fifth annual report featuring statewide performance rates stratified by RELC. The appendix includes detailed medical group results by RELC. The data presented in this report was collected by MNCM in 2018 for 2017 dates of service.

What's new?

This year's report includes information on nine quality measures. Changes this year include the following:

- This year's report includes summaries by race, Hispanic ethnicity, preferred language and country of origin for all measures, including trend over time.
- The report also includes an analysis of the potential impact of eliminating disparities by race and Hispanic ethnicity. For example, eliminating the disparity in the colorectal cancer screening rate for black/African American patients would increase their rate by 12.1 percentage points and 4,924 more black/African American patients would be screened.
- Three adult depression measures are included for the first time.
- Two measures reported previously are no longer being collected: Pediatric Overweight Counseling and Patient Experience. MNCM retired the Overweight Counseling measure because rates were high with little room for improvement. Patient Experience was retired because it was no longer a state quality reporting requirement.

Key findings include:

- Disparities by race and Hispanic ethnicity (see page 5):
  - For colorectal cancer screening and adult depression remission at 12 months, rates for populations of color are significantly below the statewide average. Conversely, more populations of color are significantly above the statewide average for the adolescent mental health and/or depression screening measure than any other measure.
  - For colorectal cancer screening, results for Black/African American patients and white patients have significantly increased since 2014.
  - American Indian/Alaskan Native, Black/African American, and Hispanic patients are significantly below the statewide rate on most measures.
  - Asian, White, and Non-Hispanic patients are significantly above the statewide rate on most measures.
- Disparities by preferred language: For most measures, people who speak Hmong, Karen, Somali, and Spanish have rates that are significantly below the statewide average. People who speak English and Vietnamese have rates that are significantly higher than the statewide rate for three measures (see page 6).
- Disparities by country of origin: For most measures, people who were born in Laos, Mexico, and Somalia have rates that are significantly below the statewide average. For three measures, people born in India have results that are significantly above the statewide average (see page 7).
- Substantial gains could be achieved for populations of color if performance on quality measures were raised to the statewide average. For example, if the disparities were eliminated for American Indian patients, 906 more American Indian patients would reach optimal diabetes control, which represents a 20.7 percentage point increase (see page 22).
- The range of results (lowest to highest) by preferred language is narrowing over time for colorectal cancer screening and for adolescent mental health and/or depression screening (see pages 19 and 21).

NOTE: The adult depression measures are new to the report for 2018 so comparisons to previous years cannot be made.

STATEWIDE SUMMARY TABLES

This section of the report focuses on statewide results for nine quality measures segmented by race, Hispanic ethnicity, preferred language and country of origin. Detailed results by medical group are available in the online appendix to this report.

Table 1 displays a statewide summary of results segmented by race and Hispanic ethnicity for these quality measures. As shown in the table, American Indian/Alaskan Native, Black/African American and Hispanic patients have rates that are significantly below the statewide rate on most of the measures. Asian, White and Non-Hispanic patients have rates that are significantly above the statewide rate on most measures.

Table 2 displays a statewide summary of results segmented by preferred language for each of the nine quality measures. According to the American Community Survey (ACS), approximately 11 percent of Minnesotans speak a language other than English at home. As shown in the table, for most measures, people who speak Hmong, Karen, Somali and Spanish have results that are significantly below the statewide average. People who speak English and Vietnamese have results that are significantly higher than the statewide rate on three measures.

Table 3 displays a statewide summary of results segmented by country of origin. According to the American Community Survey (ACS), approximately 8 percent of Minnesotans were born outside of the United States. For most measures, people who were born in Laos, Mexico, and Somalia have results that are significantly below the statewide average. People born in India have results significantly above the statewide average on three measures – the most of any non-U.S. country of origin.

TABLE 1: Statewide Summary by Race and Hispanic Ethnicity

RACE/ETHNICITY	PREVENTIVE HEALTH	CHRONIC CONDITIONS				DEPRESSION			
	Colorectal Cancer Screening	Optimal Diabetes Care	Optimal Vascular Care	Optimal Asthma Control – Adult	Optimal Asthma Control – Children	Adolescent Mental Health Screening	Depression Follow Up – 12 Months	Depression Response – 12 Months	Depression Remission – 12 Months
American Indian or Alaskan Native	▼ 53.4%	▼ 24.2%	▼ 45.1%	▼ 38.8%	▼ 44.1%	▼ 59.4%	▼ 23.8%	▼ 7.3%	▼ 4.8%
Asian	▼ 60.7%	▲ 48.3%	▲ 67.7%	▲ 53.3%	▲ 61.9%	▲ 82.2%	● 28.7%	▼ 7.9%	▼ 4.6%
Black or African American	▼ 58.6%	▼ 33.4%	▼ 44.8%	▼ 38.5%	▼ 54.8%	▲ 79.8%	▼ 22.3%	▼ 6.5%	▼ 3.4%
Multi-Racial	▼ 61.3%	▼ 35.8%	▼ 49.7%	● 49.5%	● 59.5%	▲ 81.9%	▼ 21.8%	▼ 8.6%	▼ 4.1%
Native Hawaiian or Other Pacific Islander	▼ 58.6%	● 41.1%	● 55.2%	● 50.8%	● 53.0%	● 79.6%	● 20.3%	● 9.3%	▼ 3.4%
White	▲ 71.8%	▲ 46.7%	▲ 62.7%	▲ 53.5%	▲ 60.1%	● 79.1%	▲ 29.6%	▲ 12.8%	▲ 7.8%
Hispanic	▼ 57.4%	▼ 36.0%	▼ 57.5%	▼ 43.5%	▼ 54.0%	▼ 74.0%	▼ 21.0%	▼ 8.2%	▼ 4.0%
Non-Hispanic	● 70.8%	▲ 45.5%	● 62.0%	▲ 51.9%	▲ 59.2%	▲ 79.5%	▲ 28.9%	▲ 12.1%	▲ 7.4%
Statewide Average	**70.7%**	**44.9%**	**61.5%**	**50.8%**	**57.9%**	**78.8%**	**27.7%**	**11.5%**	**6.9%**

▲ Significantly above statewide average ● Average ▼ Significantly below statewide average

TABLE 2: Statewide Summary by Preferred Language

LANGUAGE	PREVENTIVE HEALTH	CHRONIC CONDITIONS				DEPRESSION			
	Colorectal Cancer Screening Rate	Optimal Diabetes Care Rate	Optimal Vascular Care Rate	Optimal Asthma Control – Adult Rate	Optimal Asthma Control – Children Rate	Adolescent Mental Health Screening Rate	Depression Follow-Up – 12 Months Rate	Depression Response – 12 Months Rate	Depression Remission – 12 Months Rate
Amharic	▼ 45.2%	● 44.1%							
Arabic	▼ 49.3%	● 42.7%	● 59.2%			● 81.8%	● 24.6%	▼ 5.3%	▼ 1.2%
Bosnia	▼ 53.9%	▼ 35.8%							
Burmese	▼ 59.9%								
Cambodian	● 71.8%	▲ 52.9%							
Cantonese	▲ 77.7%	▲ 68.6%							
Chinese	▼ 60.3%								
English	▲ 71.1%	● 45.2%	● 61.6%	▲ 51.5%	▲ 58.7%	● 79.0%	● 28.0%	● 11.7%	● 7.2%
French	▼ 54.3%								
Hindu	▼ 46.3%								
Hmong	▼ 36.9%	▼ 32.4%	● 62.6%	▼ 22.8%	▼ 35.5%	▼ 74.3%	● 28.7%	▼ 4.1%	▼ 2.0%
Karen	▼ 49.0%	▼ 33.0%		▼ 40.2%	▼ 45.1%	● 77.4%	▲ 35.7%	▼ 6.4%	▼ 1.9%
Korean	● 75.5%	● 51.0%							
Laotian	▼ 58.6%	● 48.0%	● 67.5%						
Mandarin	▼ 64.3%	▲ 54.0%							
Oromo	▼ 41.5%	● 42.2%				▼ 68.6%			
Russian	▼ 57.5%	● 43.2%	● 59.9%				● 28.0%	● 7.6%	● 5.9%
Sign Language	● 73.3%	● 44.0%	● 64.2%						
Somali	▼ 32.2%	▼ 40.7%	▼ 54.0%	▼ 34.7%	▼ 54.5%	● 77.5%	▼ 20.3%	● 12.1%	● 7.2%
Spanish	▼ 51.7%	▼ 35.5%	▼ 56.4%	▼ 31.6%	▼ 51.8%	▼ 71.5%	▼ 16.3%	▼ 7.0%	▼ 3.4%
Swahili	▼ 39.4%								
Tagalog	▼ 55.4%								
Tibetan	● 65.4%								
Tigrinya	▼ 49.2%								
Vietnamese	▲ 72.8%	▲ 61.0%	● 63.2%		● 64.4%	▲ 83.4%			

▲ Significantly above statewide average ● Average ▼ Significantly below statewide average Note: Measure results displayed in table if 100 or more patients identified for preferred language.

Note: According to the American Community Survey (ACS), the most commonly spoken languages in Minnesota are English, Spanish, Amharic/Somali/other Afro-Asiatic language, Hmong, and Chinese (includes Mandarin, Cantonese).

TABLE 3: Statewide Summary by Country of Origin

COUNTRY OF ORIGIN	PREVENTIVE HEALTH	CHRONIC CONDITIONS				DEPRESSION			
	Colorectal Cancer Screening Rate	Optimal Diabetes Care Rate	Optimal Vascular Care Rate	Optimal Asthma Control – Adult Rate	Optimal Asthma Control – Children Rate	Adolescent Mental Health Screening Rate	Depression Follow-Up – 12 Months Rate	Depression Response – 12 Months Rate	Depression Remission – 12 Months Rate
Belarus	▼ 63.4%								
Bhutan	● 66.3%								
Bosnia Herzegovina	▼ 58.2%	▼ 35.8%							
Brazil	● 68.1%								
Burma	▼ 61.3%	● 41.4%				● 83.1%			
Cambodia	● 68.4%	▲ 52.4%							
Cameroon	▼ 53.8%								
Canada	● 68.8%	● 42.3%	● 64.9%	● 49.8%			● 25.2%	● 12.6%	● 8.4%
China	● 70.5%	▲ 54.9%				▲ 86.1%			
Colombia	● 67.7%								
Cuba	▼ 56.5%								
Ecuador	▼ 58.2%	● 42.5%							
Egypt	▼ 60.3%	▲ 56.5%							
El Salvador	▼ 53.7%	▼ 38.1%							
Eritrea	▼ 56.6%								
Ethiopia	▼ 48.9%	▼ 41.6%		▼ 39.4%		▼ 71.7%			
France	● 70.3%								
Germany	● 70.7%	● 44.5%	● 60.5%				● 25.0%	▼ 6.5%	● 4.2%
Ghana	▼ 63.0%								
Guatemala	▼ 58.6%	● 39.2%				● 81.4%			
Guyana	▼ 65.4%	▲ 51.5%							
Honduras	▼ 56.9%								
India	▼ 59.0%	▲ 53.4%	▲ 82.6%	● 52.7%		▲ 89.7%			
Iran	● 71.9%								
Iraq	▼ 55.5%	▲ 53.9%					● 31.8%	▼ 4.5%	▼ 0.0%
Ireland	▲ 79.0%								

▲ Significantly above statewide average ● Average ▼ Significantly below statewide average Note: Measure results displayed in table if 100 or more patients identified for country of origin.

Note: According to the American Community Survey (ACS), the most common countries where Minnesotans are born include the United States, Mexico, Somalia, India, and Laos.

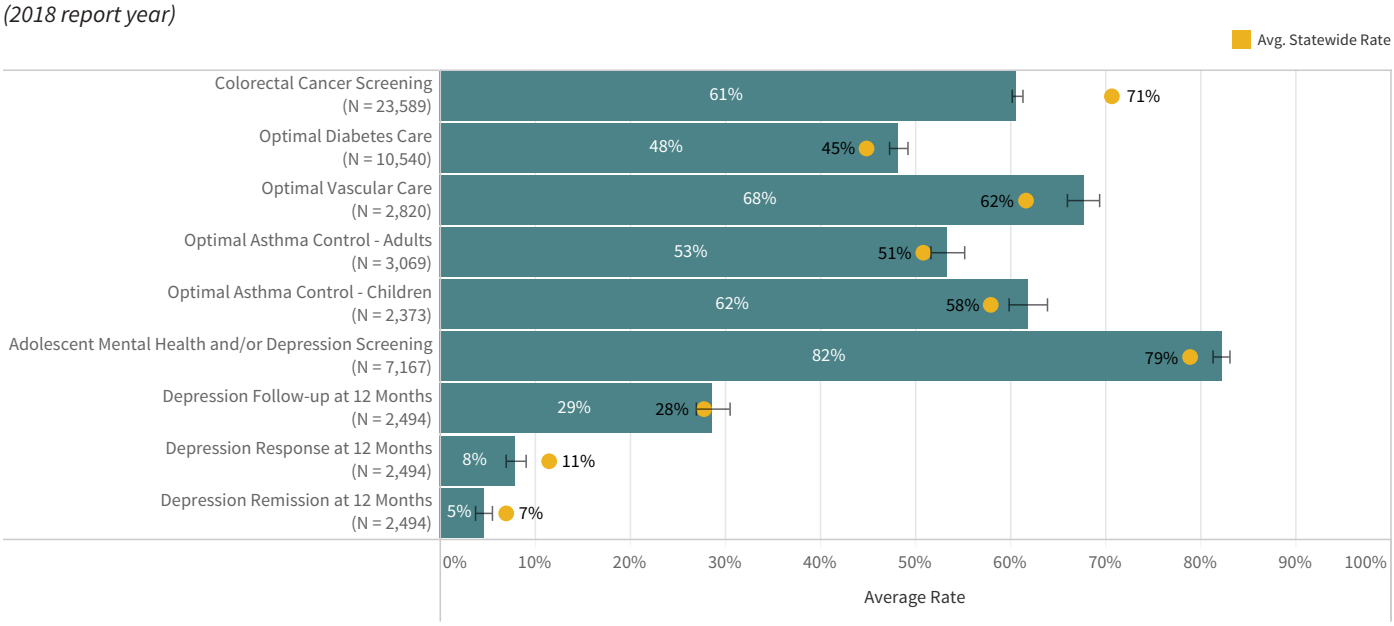
COUNTRY OF ORIGIN	PREVENTIVE HEALTH	CHRONIC CONDITIONS				DEPRESSION			
	Colorectal Cancer Screening Rate	Optimal Diabetes Care Rate	Optimal Vascular Care Rate	Optimal Asthma Control – Adult Rate	Optimal Asthma Control – Children Rate	Adolescent Mental Health Screening Rate	Depression Follow-Up – 12 Months Rate	Depression Response – 12 Months Rate	Depression Remission – 12 Months Rate
Italy	● 66.8%								
Jamaica	● 67.0%								
Japan	● 71.3%								
Kenya	▼ 55.2%	▼ 38.6%				● 75.8%			
Laos	▼ 41.8%	▼ 36.6%	▲ 66.5%	▼ 28.5%			● 28.3%	▼ 4.5%	▼ 2.1%
Lebanon	● 73.6%								
Liberia	▼ 54.2%	▼ 40.1%							
Mexico	▼ 52.9%	▼ 34.1%	● 59.3%	▼ 34.8%		▼ 67.0%	▼ 16.0%	▼ 6.1%	▼ 3.1%
Nepal	▼ 61.1%								
Netherlands	● 71.6%								
Nigeria	▼ 61.8%	● 45.1%							
Pakistan	▼ 53.4%	▲ 55.9%							
Peru	● 70.2%								
Philippines	▼ 62.7%	▲ 51.8%	● 66.7%						
Poland	● 68.1%								
Puerto Rico	▼ 60.6%								
Russia	▼ 64.7%	▲ 50.9%	● 67.0%			▲ 87.3%	● 24.0%	● 7.3%	● 4.0%
Somalia	▼ 33.5%	▼ 39.0%	▼ 54.2%	▼ 36.7%	● 54.2%	▼ 73.2%	▼ 17.2%	▼ 7.8%	● 4.5%
South Africa	▼ 59.0%								
South Korea	● 74.0%	● 47.4%		▲ 57.3%					
Sudan	▼ 48.4%								
Taiwan	● 74.6%								
Thailand	▼ 59.1%	● 40.6%				● 77.7%			
Ukraine	▼ 61.8%								
United Arab Emirates	▼ 63.9%								
United Kingdom	● 70.6%	▲ 54.3%	● 63.0%						
United States	▲ 71.8%	● 44.9%	● 61.2%	● 50.7%	● 58.1%	▼ 78.1%	▼ 26.5%	▼ 10.7%	▼ 6.4%
Venezuela	▼ 52.3%								
Vietnam	▲ 73.4%	▲ 59.3%	● 63.7%	● 54.8%		● 79.0%			

▲ Significantly above statewide average ● Average ▼ Significantly below statewide average

SUMMARIES BY RACE AND HISPANIC ETHNICITY

FIGURE 1: Summary by Race: Asian

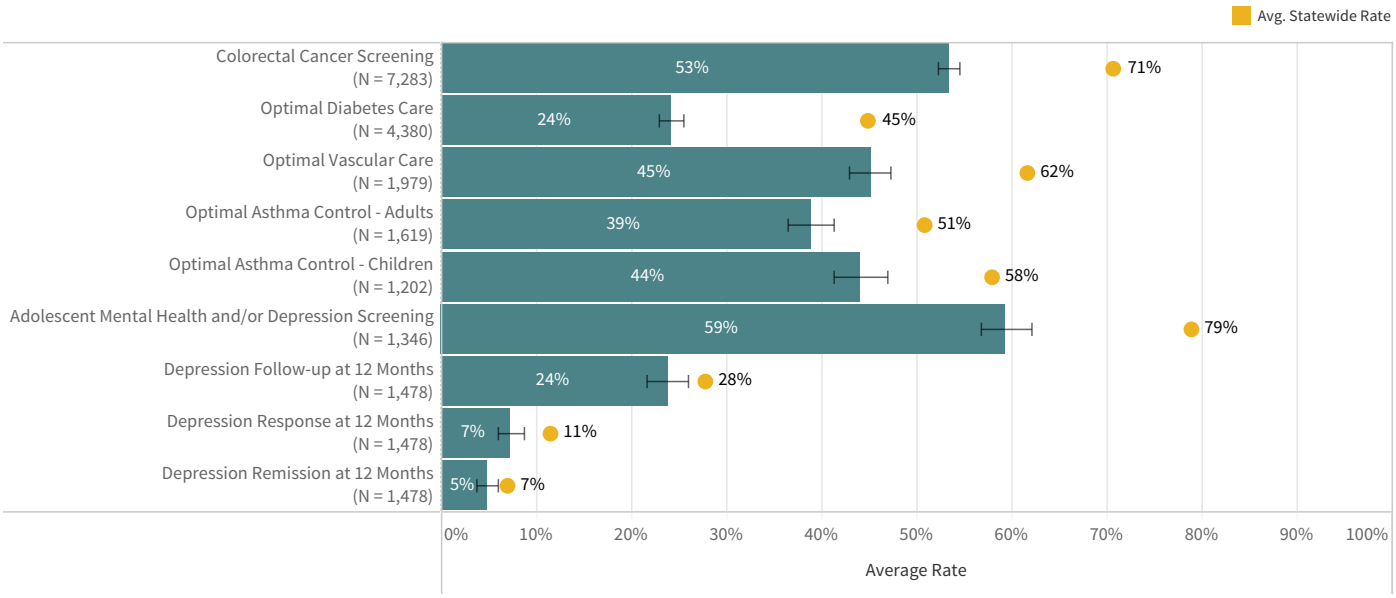
(2018 report year)



The Asian population has rates significantly above the statewide average on all four chronic condition measures as well as adolescent mental health and/or depression screening. Rates are significantly below the statewide average for colorectal cancer screening and the adult depression outcome measures.

FIGURE 2: Summary by Race: American Indian/Alaska Native

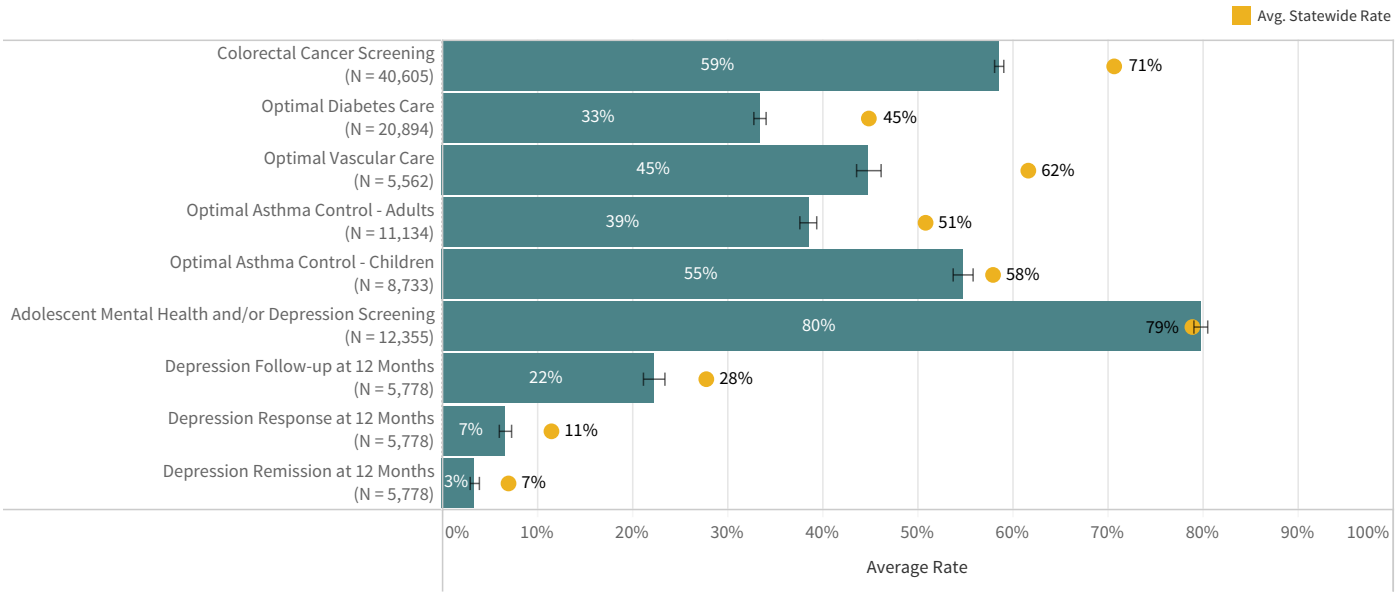
(2018 report year)



The American Indian/Alaska Native population has rates significantly below the statewide average for all nine measures.

FIGURE 3: Summary by Race: Black/African American

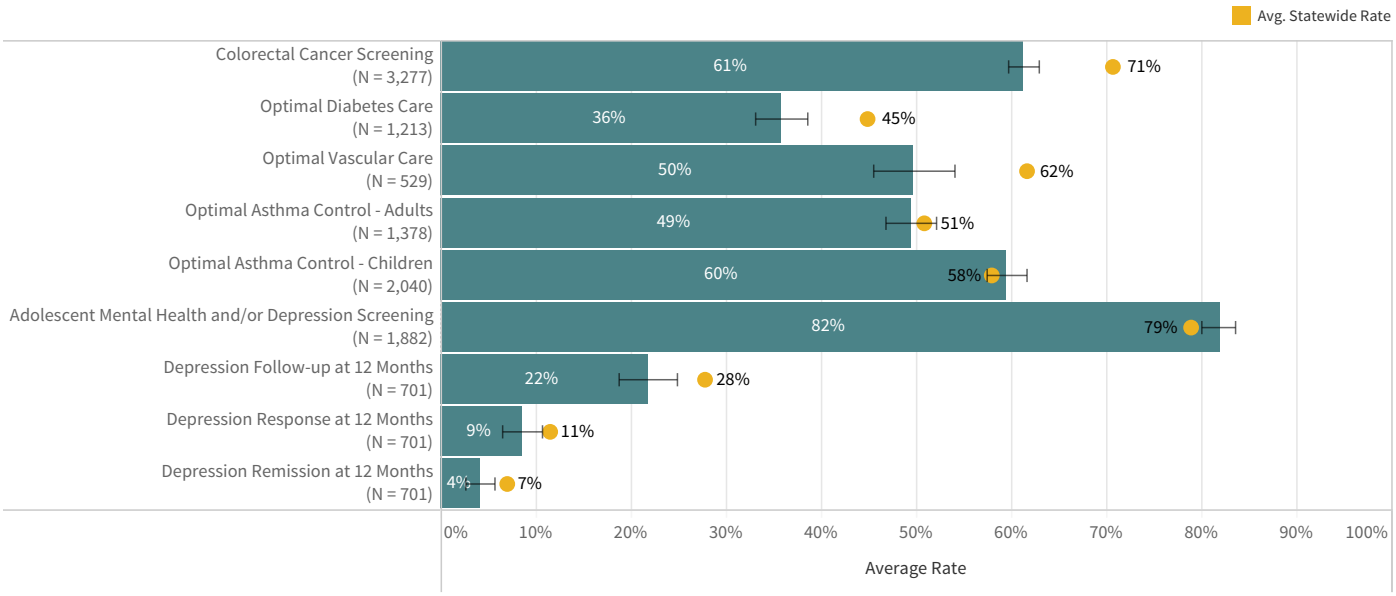
(2018 report year)



The Black/African American population has rates significantly below the statewide average for eight of the nine measures.

FIGURE 4: Summary by Race: Multi-Racial

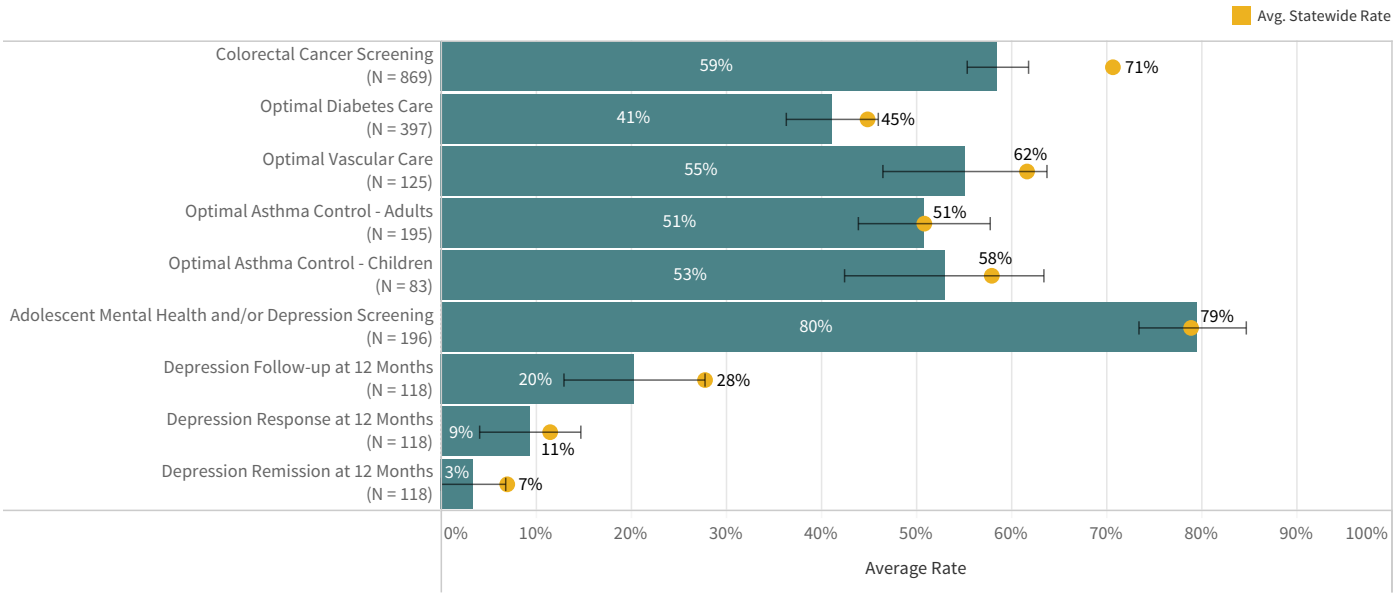
(2018 report year)



The Multi-Racial population has rates significantly below the statewide average for six of the nine measures.

FIGURE 5: Summary by Race: Native Hawaiian or Other Pacific Islander

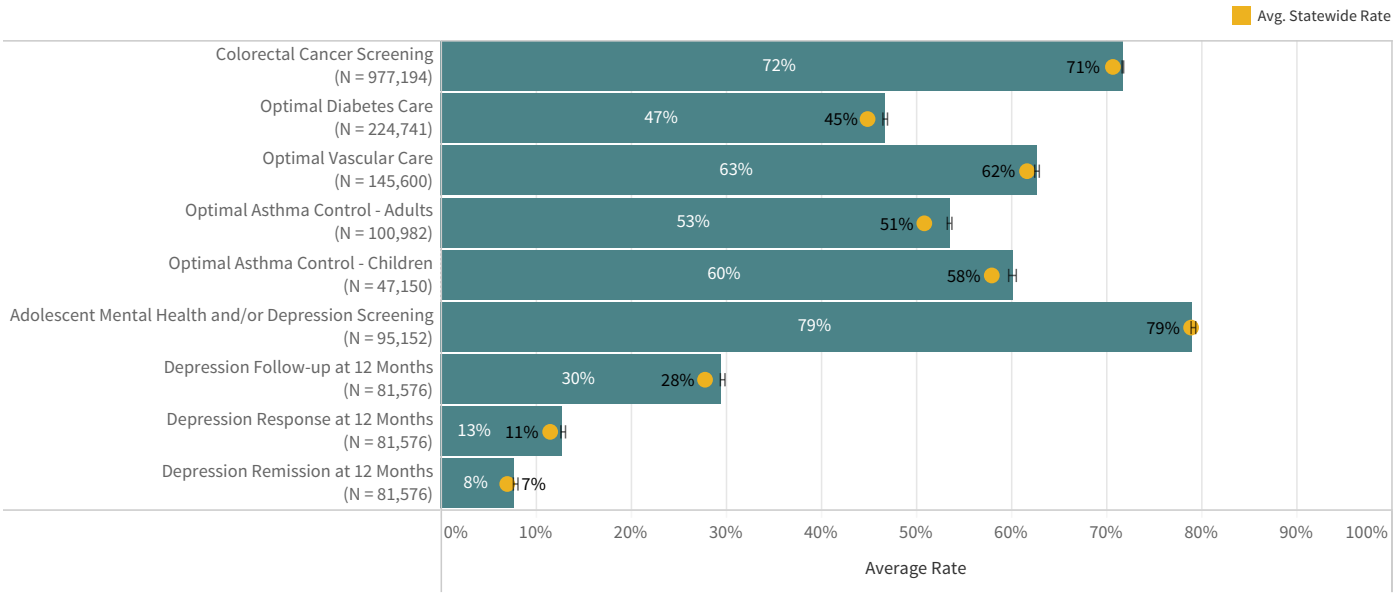
(2018 report year)



The Native Hawaiian or Other Pacific Islander population has rates that are similar to the statewide average for most measures. They have rates significantly below the statewide average for colorectal cancer screening and the adult depression remission at 12 months measures.

FIGURE 6: Summary by Race: White

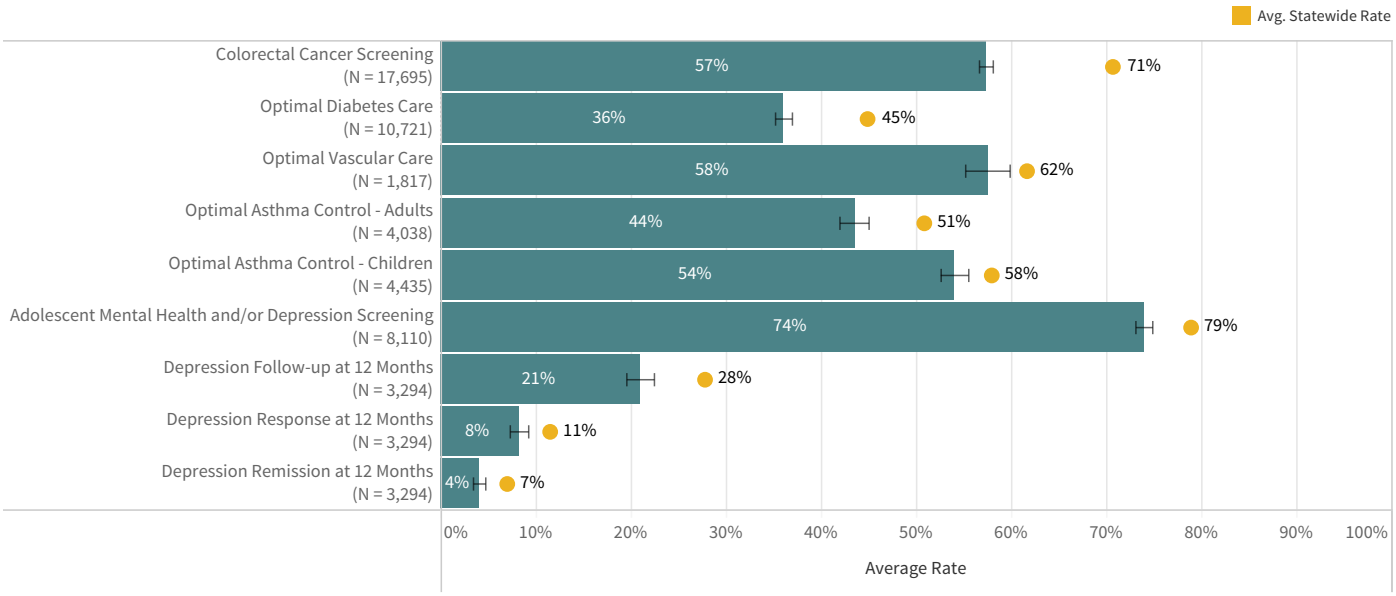
(2018 report year)



The White population has rates significantly above the statewide average for eight of nine measures.

FIGURE 7: Summary by Ethnicity: Hispanic

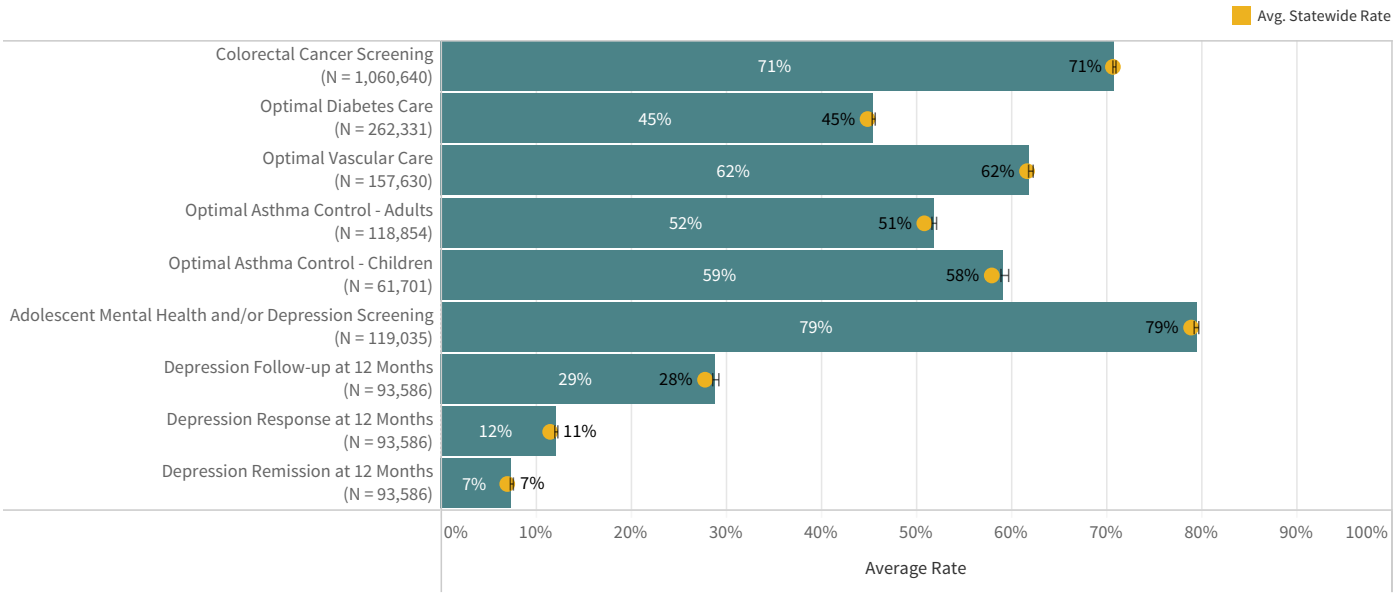
(2018 report year)



The Hispanic ethnicity population has rates significantly below the statewide average for all nine measures.

FIGURE 8: Summary by Ethnicity: Non-Hispanic

(2018 report year)



The non-Hispanic ethnicity population has rates significantly above the statewide average for eight of nine measures.

KEY TRENDS

This section of the report focuses on disparities over time for two measures – Colorectal Cancer Screening and Adolescent Mental Health and/or Depression Screening. The other measures in this report are excluded because of measure definition changes over time or because they were new to the report, making it difficult to draw conclusions regarding disparities over time.

Table 4 displays trends between 2014 and 2018 for colorectal cancer screening by race, Hispanic ethnicity, preferred language and country of origin. Colorectal cancer screening significantly increased over time for Black/African American, White, and non-Hispanic patients, while rates significantly decreased for Asian and Multi-racial patients. By preferred language, colorectal cancer screening rates increased significantly for patients who speak Cambodian, English, Laotian, Oromo, Somali and Spanish. By country of origin, rates increased significantly for patients born in Mexico, Somalia, or the United States. *Figure 9* illustrates trend over time for colorectal cancer screening by preferred language.

Table 5 displays the trend from 2015 to 2018 for adolescent mental health and/or depression screening by race, Hispanic ethnicity, preferred language and country of origin. Rates for this measure significantly increased for all race, ethnicity, preferred language and country of origin populations. *Figure 10* illustrates trend over time for adolescent mental health screening by preferred language.

TABLE 4: Trend for Colorectal Cancer Screening

	2014	2018	Change	Patients (2018)
RACE				
American Indian or Alaska Native	54.6%	53.4%		7,283
Asian	62.4%	60.7%	▼	23,589
Black or African American	56.4%	58.6%	▲	40,605
Multi Racial*	67.3%	61.3%	▼	3,277
Native Hawaiian/ Other Pacific Islander	57.6%	58.6%		869
White	71.1%	71.8%	▲	977,194
ETHNICITY				
Hispanic or Latino	57.7%	57.4%		17,695
Not Hispanic	70.3%	70.8%	▲	1,060,640
PREFERRED LANGUAGE				
Cambodian	64.1%	71.8%	▲	902
English	70.6%	71.1%	▲	1,120,490
Hmong	34.3%	36.9%		5,006
Karen	46.2%	49.0%		1,155
Laotian	49.4%	58.6%	▲	978
Oromo	33.6%	41.5%	▲	815
Russian	54.3%	57.5%		1,431
Somali	20.8%	32.2%	▲	4,728
Spanish	44.1%	51.7%	▲	9,924
Vietnamese	70.8%	72.8%		3,163
COUNTRY OF ORIGIN				
Canada	69.4%	68.8%		2,262
Ethiopia	45.9%	48.9%		2,271
Germany	68.1%	70.7%		1,905
India	60.2%	59.0%		1,764
Laos	40.5%	41.8%		5,831
Mexico	44.6%	52.9%	▲	6,706
Philippines	60.6%	62.7%		1,584
Somalia	22.5%	33.5%	▲	4,629
United States	70.5%	71.8%	▲	963,877
Vietnam	70.8%	73.4%		3,504

FIGURE 9: Trend for Colorectal Cancer Screening by Preferred Language

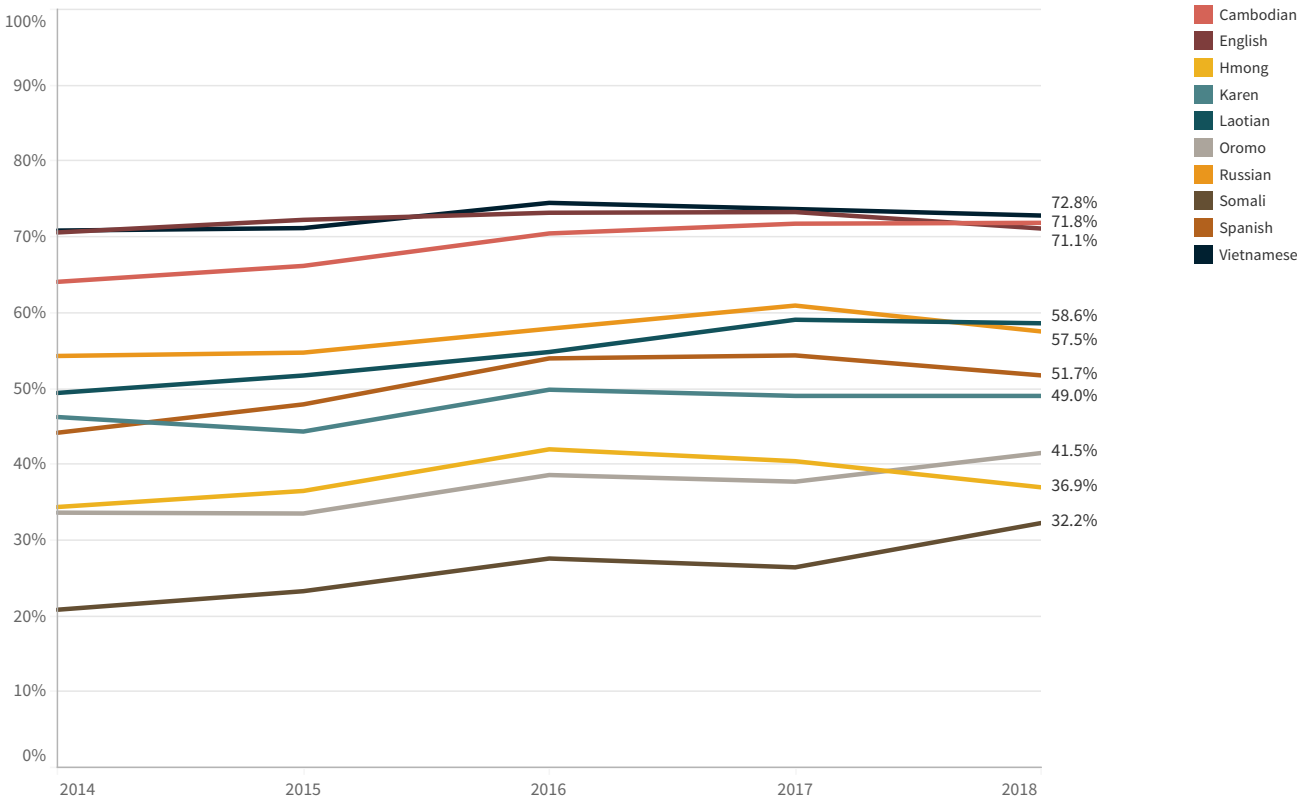
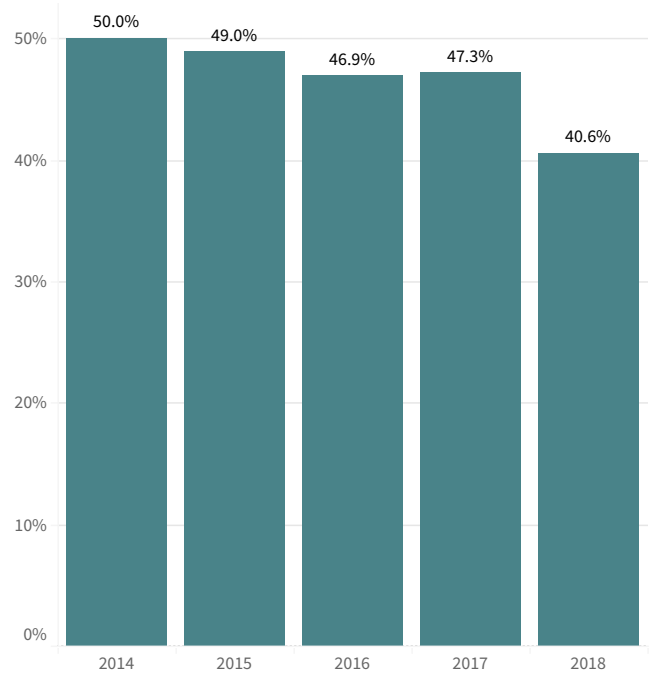


FIGURE 10: Colorectal Cancer Screening Variation by Preferred Language

(Range between lowest and highest by year)



Colorectal cancer screening rates significantly improved for patients who speak Cambodian, English, Laotian, Oromo, Somali and Spanish. In addition, the range of rates (lowest to highest) by preferred language is narrowing over time.

TABLE 5: Trend for Adolescent Mental Health and/or Depression Screening

	2015	2018	Change	Patients
RACE				
American Indian or Alaska Native	17.4%	59.4%	▲	1,346
Asian	39.1%	82.2%	▲	7,167
Black or African American	37.6%	79.8%	▲	12,355
Multi Racial*	44.5%	81.9%	▲	1,882
Native Hawaiian/ Other Pacific Islander	36.0%	79.6%	▲	196
White	33.5%	79.1%	▲	95,152
ETHNICITY				
Hispanic or Latino	39.0%	74.0%	▲	8,110
Not Hispanic	34.1%	79.5%	▲	119,035
PREFERRED LANGUAGE				
Arabic	38.9%	81.8%	▲	203
English	33.7%	79.0%	▲	129,461
Hmong	22.8%	74.3%	▲	942
Karen	17.2%	77.4%	▲	500
Somali	40.7%	77.5%	▲	3,007
Spanish	38.4%	71.5%	▲	4,390
Vietnamese	28.1%	83.4%	▲	362
Somali	20.8%	32.2%	▲	4,728
Spanish	44.1%	51.7%	▲	9,924
Vietnamese	70.8%	72.8%		3,163
COUNTRY OF ORIGIN				
Burma	13.3%	83.1%	▲	231
China	50.8%	86.1%	▲	296
Ethiopia	47.6%	71.7%	▲	544
India	57.8%	89.7%	▲	253
Kenya	43.0%	75.8%	▲	592
Mexico	36.1%	67.0%	▲	485
Somalia	40.0%	73.2%	▲	795
Thailand	34.5%	77.7%	▲	525
United States	35.1%	78.1%	▲	114,843
Vietnam	41.6%	79.0%	▲	167

FIGURE 11: Trend for Adolescent Mental Health and/or Depression Screening by Preferred Language

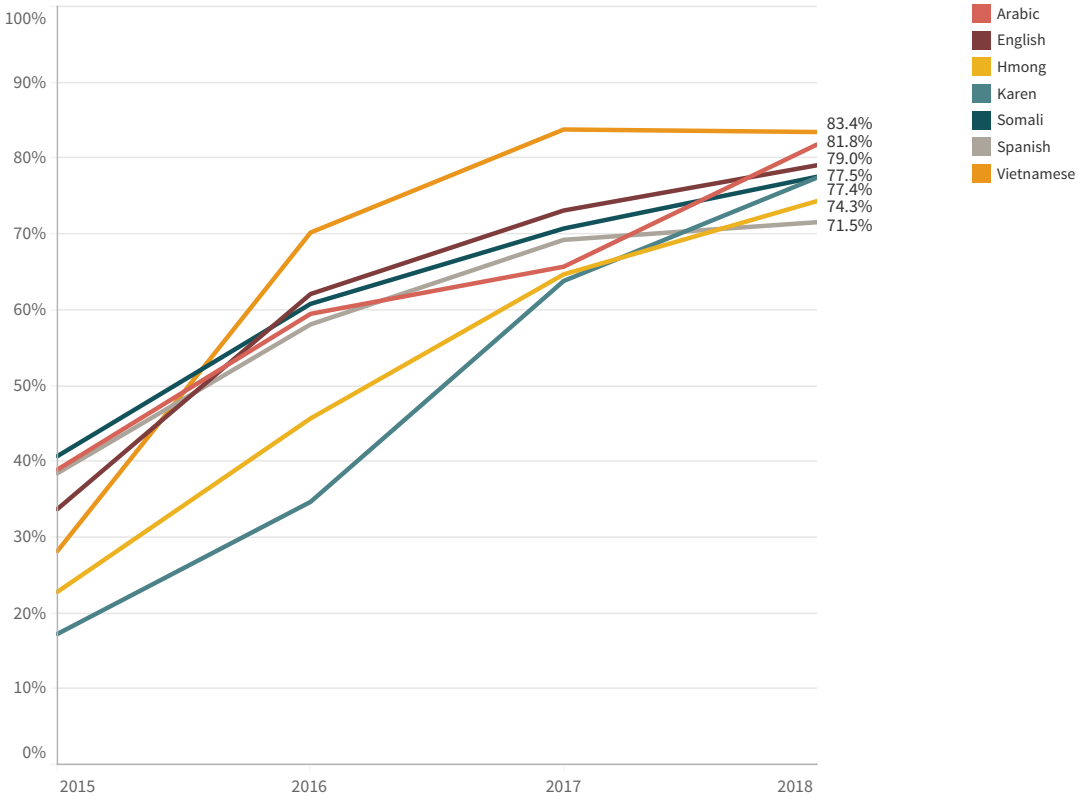
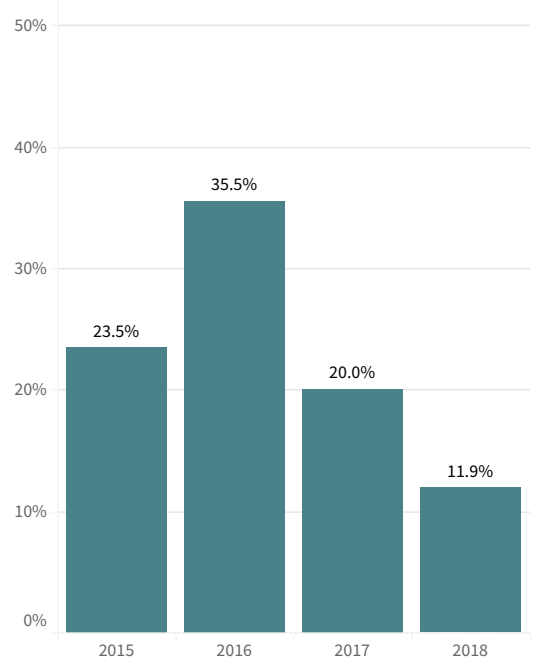


FIGURE 12: Adolescent Mental Health and/or Depression Screening Variation by Preferred Language

(Range between lowest and highest by year)



Adolescent mental health and/or depression screening rates significantly improved for all preferred languages. In addition, the range of rates (lowest to highest) by preferred language is narrowing over time.

Table 6 provides an overview of the potential impact of eliminating disparities for patient populations who currently have below average results for many measures. For example, eliminating the disparity in the colorectal cancer screening rate for black/African American patients would increase their rate by 12.1 percentage points and 4,924 more black/African American patients would be screened. Likewise, if the disparity in optimal diabetes care were eliminated for American Indian patients, the rate would increase by 20.7 percentage points and 906 more American Indian patients would reach optimal diabetes control status.

There are two important caveats to this analysis:

» First, some patient populations experience barriers to achieving optimal outcomes. While there are examples of medical groups achieving or exceeding the statewide rate while serving disproportionately high numbers of these patients, it might not be possible for all without interventions to directly address these barriers.

» Second, in many cases there is substantial room for statewide improvement beyond the statewide average; therefore, the statewide average should not be interpreted as a goal. As an example, the statewide average for adult depression remission at 12 months is currently 6.9 percent. The fact that the statewide average is so low is an indicator that broad-based improvement across all populations is needed to help as many patients as possible in achieving this outcome.

TABLE 6: Potential Impact of Eliminating Disparities by Race and Ethnicity

QUALITY MEASURE	AMERICAN INDIAN/ALASKA NATIVE		BLACK/AFRICAN AMERICAN		HISPANIC ETHNICITY	
	Number of patients added *Numerator*	Percent Point Change *To achieve statewide rate*	Number of patients added *Numerator*	Percent Point Change *To achieve statewide rate*	Number of patients added *Numerator*	Percent Point Change *To achieve statewide rate*
Colorectal Cancer Screening	1,264	17.4%	4,924	12.1%	2,355	13.3%
Optimal Diabetes Care	906	20.7%	2,403	11.5%	950	8.9%
Optimal Vascular Care	326	16.5%	928	16.7%	73	4.0%
Optimal Asthma Control – Adults	194	12.0%	1,369	12.3%	295	7.3%
Optimal Asthma Control – Children	167	13.9%	275	3.2%	176	4.0%
Adolescent Mental Health and/or Depression Screening	261	19.4%	N/A	N/A	393	4.8%
Depression Follow-up at 12 Months	57	3.9%	313	5.4%	221	6.7%
Depression Response at 12 Months	62	4.2%	285	4.9%	107	3.2%
Depression Remission at 12 Months	32	2.1%	202	3.5%	96	2.9%

N/A = Not applicable; rate was significantly above statewide average

MEASURE DESCRIPTIONS

Preventive Health

Cancer Screening Measure

- Colorectal Cancer Screening: The percentage of adults ages 50-75 who are up-to-date with the appropriate screening for colorectal cancer. Appropriate screenings include one of the following:
  - Colonoscopy during the measurement year or the nine years prior, or
  - Flexible sigmoidoscopy during the measurement year or the four years prior, or
  - CT colonography during the measurement year or the four years prior, or
  - Fecal immunochemical test (FIT)-DNA during the measurement year or the two years prior, or
  - Guaiac-based fecal occult blood test (gFOBT) or FIT during the measurement year.

Chronic Conditions

Diabetes Measure

- Optimal Diabetes Care: The percentage of patients 18-75 years of age with diabetes (type 1 or type 2) and whose diabetes was optimally managed as defined by achieving ALL five of the following:
  - HbA1c less than 8.0 mg/dL
  - Blood Pressure less than 140/90 mmHg
  - On a statin medication, unless allowed contraindications or exceptions are present
  - Non-tobacco user
  - Patient with ischemic vascular disease on daily aspirin or anti-platelets, unless allowed contraindications or exceptions are present

Vascular Measure

- 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 as defined by achieving ALL four of the following:
  - Blood Pressure less than 140/90 mmHg
  - On a statin medication, unless allowed contraindications or exceptions are present
  - Non-tobacco use
  - On daily aspirin or anti-platelets, unless allowed contraindications or exceptions are present

Asthma Measures

- Optimal Asthma Care – Adults: The percentage of adults 18-50 years of age who had a diagnosis of asthma and whose asthma was optimally controlled as defined by achieving the following:
  - Asthma well-controlled as defined by the most recent asthma control tool result
  - Patient not at risk of exacerbation (i.e., fewer than two emergency department visits and/or hospitalizations due to asthma in the last 12 months)
- Optimal Asthma Care – Children: The percentage of adults (5-17 years of age) who had a diagnosis of asthma and whose asthma was optimally controlled as defined by achieving the following:
  - Asthma well-controlled as defined by the most recent asthma control tool result
  - Patient not at risk of exacerbation (i.e., fewer than two emergency department visits and/or hospitalizations due to asthma in the last 12 months)

Depression

Adolescent Depression

- Adolescent Mental Health and/or Depression Screening: The percentage of patients ages 12-17 who were screened for mental health and/or depression at a well-child visit using a specified tool.

Adult Depression

- PHQ-9 Follow-up at 12 Months: The percentage of patients with depression who have a completed PHQ-9 tool within 12 months after the index event (+/- 30 days).
- 12 Month Response: The percentage of patients with depression who demonstrated a response to treatment (at least 50 percent improvement) 12 months after the index event (+/- 30 days).
- 12 Month Remission: The percentage of patients with depression who reached remission (PHQ-9 score less than five) 12 months after the index event (+/- 30 days).

DEFINITIONS

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

- Optimal Diabetes Care
- Optimal Vascular Care
- Optimal Asthma Control – Adults
- Optimal Asthma Control – Children

Direct Data Submission (DDS) measures: Measures collected using data submitted by medical groups/clinics. DDS measures in this report include:

- Colorectal Cancer Screening
- Optimal Diabetes Care
- Optimal Vascular Care
- Optimal Asthma Control – Children
- Optimal Asthma Control – Adults
- Adolescent Mental Health and/or Depression Screening
- Adult Depression Measures
    - Follow-up at 12 Months
    - Response at 12 Months
    - Remission at 12 Months

All measures in this report are calculated using data submitted by medical groups/clinics. These data come from electronic health records or paper-based medical charts. See the Methodology Appendix for more information.

Outcome measures: These measures reflect the actual results of care. They are generally the most relevant measures for patients and the measures that providers most want to change. The outcome measures in this report include:

- Optimal Diabetes Care
- Optimal Vascular Care
- Optimal Asthma Control – Adults
- Optimal Asthma Control – Children
- Adult Depression Measures
    - Response at 12 Months
    - Remission at 12 Months

Patient Reported Outcome (PRO): Information reported by the patient.

Patient Reported Outcome Measure (PROM): A validated instrument or survey tool that collects data from a patient.

- *Optimal Asthma Control measures – Adults and Children:* Asthma Control Test (ACT); Childhood Asthma Control Test (C-ACT); Asthma Control Questionnaire (ACQ); Asthma Therapy Assessment Questionnaire (ATAQ)
- *Adult depression response and remission at 12 months measures:* Patient Health Questionnaire – 9 item version (PHQ-9)

Patient Reported Outcome – Performance Measure (PRO-PM): Measures built from a PROM.

The PRO-PM ***outcome*** measures in this report include:

- Optimal Asthma Control – Adults
- Optimal Asthma Control – Children
- Adult Depression Measures
  - Response at 12 Months
  - Remission at 12 Months

The PRO-PM ***process*** measures in this report include:

- Adolescent Mental Health and/or Depression Screening
- Adult depression follow-up at 12 Months

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

- Colorectal Cancer Screening
- Adolescent Mental Health and/or Depression Screening
- Adult depression follow-up at 12 Months

Online Appendices

- Methodology
- Detailed Medical Group and Clinic Level Tables