

2015–16 Disparities Focused Study 12-Measure Report

Managed Care Quality and
Monitoring Division
California Department of
Health Care Services

July 2018



Table of Contents

1. Executive Summary	1
Background	1
Medi-Cal Managed Care Program and Disparities	2
Key Findings	3
Care for Children and Adolescents	3
Women’s Health	4
Care for Chronic Conditions	5
Appropriate Treatment and Utilization	5
2. Reader’s Guide	7
About the Measures	7
Demographic Subgroups	8
Age	8
Gender	9
Race/Ethnicity	9
Primary Language	9
County Groups and Counties	10
Analytic Methodology	11
Data Validation	11
Rate Calculation	12
Disparities Analysis	13
Cautions and Limitations	14
3. Findings	15
Statewide Performance	15
Care for Children and Adolescents	16
Childhood Immunization Status—Combination 3	16
Children and Adolescents’ Access to Primary Care Practitioners—12 to 19 Years	19
Immunizations for Adolescents—Combination 1	22
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	25
Women’s Health	28
Cervical Cancer Screening	28
Prenatal and Postpartum Care—Postpartum Care	31
Prenatal and Postpartum Care—Timeliness of Prenatal Care	34
Care for Chronic Conditions	37
Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)	37
Controlling High Blood Pressure	41
Medication Management for People With Asthma—Medication Compliance 75% Total	45
Appropriate Treatment and Utilization	49
All-Cause Readmissions	49
Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members	53
County Performance	57
Care for Children and Adolescents	57
Childhood Immunization Status—Combination 3	57

Children and Adolescents' Access to Primary Care Practitioners—12 to 19 Years	58
Immunizations for Adolescents—Combination 1	58
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life	59
Women's Health	60
Cervical Cancer Screening	60
Prenatal and Postpartum Care—Postpartum Care	60
Prenatal and Postpartum Care—Timeliness of Prenatal Care	61
Care for Chronic Conditions	63
Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)	63
Controlling High Blood Pressure	64
Medication Management for People With Asthma—Medication Compliance 75% Total	65
Appropriate Treatment and Utilization	66
All-Cause Readmissions	66
Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members	66
Comparison of National Evidence on Health Care Disparities	68
Appendix A. County/County Group Map	A-1

Background

Health disparity is defined as the difference in health outcomes between groups within a population—whether unjust or not.¹ To assess and improve health disparities, the Agency for Healthcare Research and Quality (AHRQ) has been reporting on health care disparities related to quality and access to care since 2002. In AHRQ’s most recent report, it was noted that access to health care in the United States improved dramatically from 2011 through 2014, largely because of the Affordable Care Act. Nationwide, AHRQ identified quality disparities where progress was being made in reducing racial/ethnic and socioeconomic status disparities.²

Despite the increased availability of health insurance, racial differences existed, according to the National Healthcare Interview Survey, for those who reported being uninsured as of March 2016, with Asians being the least likely to be uninsured (5.8 percent), followed by Whites (7.4 percent), Blacks (10.4 percent), and Hispanics/Latinos (18.6 percent).³ Blacks and Hispanics/Latinos were also less likely than Whites to report having a usual place to go for medical care, with rates ranging from nearly 90 percent on the high end for Whites, to approximately 83 percent for Hispanics on the low end of the range.⁴ Conversely, Hispanics have been shown to be less likely to delay needed care and more likely to see a doctor than those in other ethnic groups.⁵ Given national findings on demographic disparities and to improve health care for Medi-Cal beneficiaries, the California Department of Health Care Services (DHCS) requested that Health Services Advisory Group, Inc. (HSAG), evaluate health care disparities affecting beneficiaries enrolled in Medi-Cal managed care health plans (MCPs).

¹ Wyatt R, Laderman M, Botwinick L, Mate K, Whittington J. *Achieving Health Equity: A Guide for Health Care Organizations*. IHI White Paper. Cambridge, Massachusetts: Institute for Healthcare Improvement; 2016.

² 2015 National Healthcare Quality and Disparities Report and 5th Anniversary Update on the National Quality Strategy. Rockville, MD: Agency for Healthcare Research and Quality; Apr 2016. AHRQ Pub. No. 16-0015.

³ Cohen RA, Martinez ME, Zammitti EP. *Health Insurance Coverage: Early Release of Estimates From the National Health Interview Survey, January–March 2016*. Division of Health Interview Statistics, National Center for Health Statistics. Available at: <https://www.cdc.gov/nchs/data/nhis/earlyrelease/insur201609.pdf>. Accessed on: Nov 2, 2017.

⁴ 2015 National Healthcare Quality and Disparities Report and 5th Anniversary Update on the National Quality Strategy. Rockville, MD: Agency for Healthcare Research and Quality; Apr 2016. AHRQ Pub. No. 16-0015.

⁵ Chen J, Vargas-Bustamante A, Mortensen K, et al. *Racial and Ethnic Disparities in Health Care Access and Utilization Under the Affordable Care Act*. *Med Care*. 2016; 54(2): 140–146. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4711386>. Accessed on: Aug 4, 2017.

Medi-Cal Managed Care Program and Disparities

DHCS' vision is to preserve and improve the health of all Californians.⁶ DHCS focuses on three interconnected goals to advance this strategy:

- ◆ Improve the health of all Californians.
- ◆ Enhance quality, including the patient care experience, in all DHCS programs.
- ◆ Reduce the Department's per capita health care program costs.

In the DHCS Strategy for Quality Improvement in Health Care, one of seven priorities identified by DHCS is the assessment and elimination of disparities in health care among Californians. Identification and reduction of health disparities is also a priority of the Medi-Cal Managed Care Quality Strategy. To identify and understand health disparities affecting Medi-Cal beneficiaries, it is important to consider the population mix of the Medi-Cal managed care program. In 2015, the racial/ethnic distribution of the Medi-Cal managed care population consisted of Hispanics/Latinos (46 percent), Whites (22 percent), Asians/Pacific Islanders (13 percent), Other/Unknown (11 percent), and Blacks (8 percent). In addition, the Medi-Cal managed care program's age distribution in 2015 was 18 to 64-year-olds (50 percent), less than one-year-olds to 17-year-olds (42 percent), and 65 and older (8 percent).⁷

DHCS requested that HSAG analyze health care quality data collected using the External Accountability Set (EAS) measures reported by MCPs to identify disparities based on age, gender, race/ethnicity, or primary language. HSAG's report highlights health disparities based on EAS measure data at the statewide and county levels; however, this report does not address health inequities which would require a more systemic analysis of injustice. This report is the first annual health disparities report for the Medi-Cal managed care program and is a step toward assessing the nature and extent of disparities across the State and between subgroups of the population—and reducing those disparities.

In 2015, DHCS contracted with 22 full-scale MCPs⁸ to provide health care services to Medi-Cal beneficiaries. The contracts required MCPs to report the 30 EAS measures as well as demographic information about their beneficiaries, including the demographic characteristics chosen for analysis in this report for reporting year 2016 (RY2016), also known as measurement year 2015 (MY2015). Of the 30 EAS measures, this report focuses on 10 Healthcare Effectiveness Data and Information Set (HEDIS®)⁹ measures (11 indicators) and one measure originally developed by DHCS and the MCPs, for a total of 12 measures at the statewide and county levels for MY2015.¹⁰ DHCS grouped the measures

⁶ DHCS Strategy for Quality Improvement in Health Care. California Department of Healthcare Services, April 2016. Available at: http://www.dhcs.ca.gov/services/Documents/DHCS_Quality_Strategy_2016.pdf. Accessed on: Jul 13, 2017.

⁷ Medi-Cal Managed Care Performance Dashboard, June 2016. Available at <http://www.dhcs.ca.gov/services/Documents/MMCD/June152016Release.pdf>. Accessed on: Sept 13, 2017.

⁸ Note: HSAG refers to Kaiser NorCal and Kaiser SoCal as two separate MCPs in this report; however, DHCS only holds one contract with Kaiser (KP Cal, LLC).

⁹ HEDIS® is a registered trademark of the National Committee for Quality Assurance (NCQA).

¹⁰ DHCS Strategy for Quality Improvement in Health Care. California Department of Healthcare Services, April 2016. Available at: http://www.dhcs.ca.gov/services/Documents/DHCS_Quality_Strategy_2016.pdf. Accessed on: Jul 13, 2017.

into the following four domains: Care for Children and Adolescents, Women’s Health, Care for Chronic Conditions, and Appropriate Treatment and Utilization. DHCS selected the 12 measures to represent a range of clinical health topics of interest that impact Medi-Cal beneficiaries throughout their lives.

In this report, HSAG uses “performance measure” or “measure” (rather than indicator) to describe the EAS measures. In addition, HSAG uses “county/county group” to refer to preset regions in the county analysis.

Key Findings

DHCS selected 12 EAS measures for HSAG to analyze by demographic categories. The following findings provide a high-level summary of the measures identified by DHCS and assessed by HSAG at the statewide and county levels. For this report, a “disparity” is defined as a relative difference greater than or equal to 10 percent for a particular demographic subgroup when compared to the reference group. For each demographic category, the reference group for a particular measure is the subgroup with the most favorable rate. Please note, demographic data are not complete; therefore, exercise caution when interpreting these findings.

Care for Children and Adolescents

In this domain, HSAG analyzed four measures related to childhood access to care, immunizations, and well-child visits at the statewide and county levels.

Statewide Findings

- ◆ For the gender demographic category, there were no disparities demonstrated for any of the measures between genders, demonstrating a success story.
- ◆ For the race/ethnicity demographic category, Hispanics/Latinos had the highest rate for *Immunizations for Adolescents—Combination 1* and the second-highest rate for *Childhood Immunization Status—Combination 3*; *Children and Adolescents’ Access to Primary Care Practitioners—12 to 19 Years*; and *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life*. Asians/Pacific Islanders had the highest rate for *Childhood Immunization Status—Combination 3* and *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life*.
 - Conversely, Blacks had the lowest rate for *Childhood Immunization Status—Combination 3* and *Children and Adolescents’ Access to Primary Care Practitioners—12 to 19 Years* and the second-lowest rate for *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life*. Whites had the lowest rate for *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* and the second-lowest rate for *Children and Adolescents’ Access to Primary Care Practitioners—12 to 19 Years* and *Immunizations for Adolescents—Combination 1*.
- ◆ For the language demographic category, Other European language speakers had the lowest rate for every measure, except for *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life*, where they had the second-lowest rate.

County Findings

- ◆ For the *Children and Adolescents' Access to Primary Care Practitioners—12 to 19 Years* measure, Black beneficiaries had the lowest rate statewide, and disparities (relative differences greater than or equal to 10 percent) for the Black population were demonstrated in less than half (13 of 30) of the counties/county groups with reported rates for Blacks.
- ◆ For the *Immunizations for Adolescents—Combination 1* measure, the American Indians/Alaskan Natives subgroup had low rates and showed a disparity at the statewide level, yet they demonstrated the highest rate in three counties/county groups: Los Angeles County, Region 1, and Northwest.

Women's Health

HSAG analyzed three women's health measures related to cervical cancer screening and prenatal and postpartum care at the statewide and county levels.

Statewide Findings

- ◆ For the age demographic category, the 24 to 29, 18 to 24, and younger than 18 age groups had the lowest rates for *Cervical Cancer Screening*, *Prenatal and Postpartum Care—Postpartum Care*, and *Prenatal and Postpartum Care—Timeliness of Prenatal Care*, respectively. The 18 to 24 age group demonstrated a disparity for the *Prenatal and Postpartum Care—Postpartum Care* measure, and the younger than 18 age group demonstrated a disparity for the *Prenatal and Postpartum Care—Timeliness of Prenatal Care* measure.
- ◆ For the race/ethnicity demographic category, Black beneficiaries had the lowest and second-lowest rate for the *Prenatal and Postpartum Care—Postpartum Care* and *Timeliness of Prenatal Care* measures, respectively, demonstrating disparities. Conversely, Asian/Pacific Islander beneficiaries had the highest and second-highest rate for these measures, respectively.
- ◆ For the language demographic category, Armenian and Vietnamese language speakers were among the top three highest rates for the *Cervical Cancer Screening* and *Prenatal and Postpartum Care—Timeliness of Prenatal Care* measures.

County Findings

- ◆ For the *Cervical Cancer Screening* measure, American Indians/Alaskan Natives had the third lowest rate and demonstrated a disparity at the statewide level. However, American Indians/Alaskan Natives demonstrated the highest rates in eight counties/county groups, including Alameda County, Los Angeles County, Orange County, Monterey/Santa Cruz, Southwest, San Diego County, San Mateo County, and Santa Barbara County, demonstrating success stories.
- ◆ For the *Prenatal and Postpartum Care—Timeliness of Prenatal Care* measure, beneficiaries in the younger than 18 age group had the lowest rates at the statewide level; however, this age group also demonstrated the highest rate in two of the counties/county groups (Region 1 and San Joaquin) and relative differences of less than 10 percent in three of the counties/county groups (Alameda, Southeast, and Tulare) of the 16 counties/county groups that had a reported rate for the younger than 18 age group.

Care for Chronic Conditions

HSAG analyzed three chronic conditions related to diabetes control, high blood pressure, and medication management for asthma at the statewide and county levels.

Statewide Findings

- ◆ For the age demographic category, older beneficiaries (i.e., the 60 and older age group and the 51 to 64 age group) had more favorable rates for all three measures.
- ◆ For the gender demographic category, Males reported higher (less favorable) rates for *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* and lower rates for the *Medication Management for People With Asthma—Medication Compliance 75% Total* measures. For both these measures, Males demonstrated disparities when compared to Females.
- ◆ For the race/ethnicity demographic group, Blacks and American Indians/Alaskan Natives demonstrated less favorable rates and disparities for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* and *Controlling High Blood Pressure* measures, while Asians/Pacific Islanders demonstrated more favorable rates for all three measures in this domain.

County Findings

- ◆ For the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure, American Indians/Alaskan Natives demonstrated the highest (least favorable) rates at the statewide level for this measure, but they demonstrated the lowest (most favorable) rates in three of the 12 counties/county groups (Fresno, Riverside/San Bernardino, and Region 1) that reported rates for this population.
- ◆ For the *Controlling High Blood Pressure* measure, American Indians/Alaskan Natives had the lowest rate at the statewide level, but they had the highest rate in four of the 19 counties/county groups (Kern, Orange, Santa Barbara, and Tulare counties) with reportable rates for American Indians/Alaskan Natives.

Appropriate Treatment and Utilization

HSAG analyzed two measures related to all-cause hospital readmissions and emergency department (ED) utilization at the statewide and county levels.

Statewide Findings

- ◆ For the age demographic category, beneficiaries in the 21 to 44 age group had the lowest (most favorable) reportable hospital readmission rates, while beneficiaries in the Unknown/Other age group and younger than 1 age group had the highest ED utilization rates.
- ◆ For the gender demographic category, Females had lower readmission rates but higher ED utilization rates compared to Males.
- ◆ For the race/ethnicity demographic category, Blacks had the highest readmission and ED utilization rates. Conversely, beneficiaries of Other race/ethnicity had the lowest (most favorable) readmission rate and Asians/Pacific Islanders had the second-lowest readmission rate. Asians/Pacific Islanders

also had the lowest ED utilization, and beneficiaries of Other race/ethnicity had the second-lowest ED utilization rate.

- ◆ For the language demographic category, English speakers had the highest (least favorable) readmission rate, while Other European language speakers had the lowest (most favorable) readmission rate. English speakers also had the highest ED utilization rate, while Korean speakers had the lowest rate. In addition, Chinese and Vietnamese language speakers had two of the three lowest (most favorable) rates for readmission and two of the three lowest rates for ED utilization.

County Findings

- ◆ For the *All-Cause Readmissions* measure, Blacks had the highest rates (least favorable) at the statewide level, but they had the lowest rates (most favorable) in four county groups (Amador/El Dorado/Placer/Sacramento, Monterey/Santa Cruz, Southwest, and Northeast), demonstrating success stories.

About the Measures

DHCS selected 10 HEDIS measures (11 indicators), and one measure originally developed by DHCS and MCPs (with guidance from HSAG), for a total of 12 EAS measures. The EAS measures included in this disparities study, abbreviations for each measure, and the methodology for each measure (i.e., administrative [A] or hybrid [H]) are included in Table 2.1. Appendix A includes a map displaying the geographic locations of the counties/county groups.

Table 2.1—EAS Measures, Measure Abbreviations, and Methodology

Measure	Abbreviation	Methodology
Care for Children and Adolescents		
<i>Childhood Immunization Status—Combination 3</i>	CIS-3	H
<i>Children and Adolescents’ Access to Primary Care Practitioners—12 to 19 Years</i>	CAP-1219	A
<i>Immunizations for Adolescents—Combination 1</i>	IMA-1	H
<i>Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life</i>	W34	H
Women’s Health		
<i>Cervical Cancer Screening</i>	CCS	H
<i>Prenatal and Postpartum Care—Postpartum Care</i>	PPC-Pst	H
<i>Prenatal and Postpartum Care—Timeliness of Prenatal Care</i>	PPC-Pre	H
Care for Chronic Conditions		
<i>Comprehensive Diabetes Care—HbA1c Poor Control (>9.0 Percent)</i>	CDC-H9	H
<i>Controlling High Blood Pressure</i>	CBP	H
<i>Medication Management for People With Asthma—Medication Compliance 75% Total</i>	MMA-75	A
Appropriate Treatment and Utilization		
<i>All-Cause Readmissions</i>	ACR	A
<i>Ambulatory Care—Emergency Department (ED) Visits¹¹</i>	AMB-ED	A

¹¹ In accordance with DHCS’ request, HSAG calculated this measure per 1,000 members instead of per 1,000 member months.

Demographic Subgroups

HSAG stratified analytic results by age, gender, race/ethnicity, and primary language group.

Age

For the age demographic subgroups, the age parameter varied for each measure. HSAG used the age breakdowns by measure, as displayed in Table 2.2.

Table 2.2—Age Subgroups by Measure

Subgroups by Age			
Measure Domain	Measure	Age Breakdowns	
Care for Children and Adolescents	<i>Childhood Immunization Status—Combination 3</i>	2 years	
	<i>Children and Adolescents' Access to Primary Care Practitioners—12 to 19 Years</i>	12–19 years	
	<i>Immunizations for Adolescents—Combination 1</i>	13 years	
	<i>Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life</i>	3–6 years	
Women's Health	<i>Cervical Cancer Screening</i>	24–29 years 30–64 years	
	<i>Prenatal and Postpartum Care—Postpartum Care</i>	< 18 years 18–24 years	25–34 years 35+ years
	<i>Prenatal and Postpartum Care—Timeliness of Prenatal Care</i>	< 18 years 18–24 years	25–34 years 35+ years
Care for Chronic Conditions	<i>Comprehensive Diabetes Care—HbA1c Poor Control (>9.0 Percent)</i>	18–39 years 40–59 years 60+ years	
	<i>Controlling High Blood Pressure</i>	18–39 years 40–59 years 60+ years	
	<i>Medication Management for People With Asthma—Medication Compliance 75% Total</i>	5–11 years 12–18 years	19–50 years 51–64 years
Appropriate Treatment and Utilization	<i>All-Cause Readmissions</i>	18–20 years 21–44 years	45–64 years 65+ years
	<i>Ambulatory Care—Emergency Department (ED) Visits</i>	0–1 year 1–5 years 6–11 years 12–17 years	18–20 years 21–44 years 45–64 years 65+ years

For some measures, an additional age subgroup was Unknown/Other. This age subgroup was only used if the data were Unknown or Other within the patient-level detail (PLD) files.

Gender

For gender, the subgroups included Male, Female, and Unknown/Missing. Three measures were applicable to Females only:

- ◆ *Cervical Cancer Screening*
- ◆ *Prenatal and Postpartum Care—Postpartum Care*
- ◆ *Prenatal and Postpartum Care—Timeliness of Prenatal Care*

Race/Ethnicity

HSAG collaborated with DHCS to define the following eight race/ethnicity subgroups for the analysis:

- ◆ White
- ◆ Black
- ◆ Hispanic/Latino
- ◆ Asian/Pacific Islander
- ◆ American Indian/Alaskan Native
- ◆ Multiracial
- ◆ Other
- ◆ Unknown/Missing

Primary Language

For primary language spoken, HSAG and DHCS defined the most meaningful and prevalent groups for comparisons for each measure, as outlined in Table 2.3. The groups displayed in bold were the major language subgroups that HSAG used for comparisons. The languages that were combined to form the major comparison subgroups are also listed in the table.

Table 2.3—Primary Language Subgroups

Primary Languages		
English		Other Asian Language Cambodian, Hmong, Ilocano, Japanese, Lao, Mien, Samoan, Thai
Spanish		Korean
Middle Eastern	Arabic, Farsi, Hebrew	Tagalog
Armenian		Vietnamese
Other European Language	French, Italian, Polish, Portuguese, Russian, Turkish	Unknown/Missing
Chinese	Cantonese, Mandarin, Other Chinese	Other Other Non-English, American Sign Language, Other Sign Language

County Groups and Counties

Table 2.4 displays the 31 county groups and counties that HSAG included when assessing the demographics for each measure. More than one MCP may be serving in each county/county group.

Table 2.4—County Groups and Counties

County Group	Counties
	Alameda
	Contra Costa
	Fresno
	Imperial
	Kern
	Kings
Amador/El Dorado/Placer/Sacramento	Amador, El Dorado, Placer, Sacramento
	Los Angeles
	Madera
	Merced
	Orange
Region 1	Butte, Colusa, Glenn, Plumas, Sierra, Sutter, Tehama
Region 2	Alpine, Amador, Calaveras, El Dorado, Inyo, Mariposa, Mono, Nevada, Placer, Tuolumne, Yuba
Monterey/Santa Cruz	Monterey, Santa Cruz
Riverside/San Bernardino	Riverside, San Bernardino
Southwest	Lake, Marin, Mendocino, Sonoma
Southeast	Napa, Solano, Yolo
Northwest	Del Norte, Humboldt
Northeast	Lassen, Modoc, Shasta, Siskiyou, Trinity
	Sacramento
	San Benito
	San Diego
	San Francisco
	San Joaquin
	San Luis Obispo
	San Mateo
	Santa Barbara
	Santa Clara
	Stanislaus
	Tulare
	Ventura

Analytic Methodology

For the statewide and county analyses, HSAG calculated aggregated rates for each measure listed in Table 2.1. The section below provides more details on the calculation of administrative and hybrid measure rates at the statewide and county levels.

Data Validation

The National Committee for Quality Assurance (NCQA) required each MCP to generate PLD files. HSAG used these PLD files, along with supplemental files (e.g., Interactive Data Submission System [IDSS] files submitted by MCPs), to conduct the disparities evaluation. HSAG obtained the following files from each MCP:¹²

- ◆ NCQA-required PLD file
- ◆ CA-required *All-Cause Readmissions* PLD file
- ◆ CA-required *Ambulatory Care* PLD file
- ◆ CA-required demographic file
 - Date of birth
 - ZIP code (nine digits)
 - Gender
 - Race/Ethnicity
 - Primary language
 - County

Once data were received, HSAG performed the following validation checks to confirm the reasonability and completeness of the data:

- ◆ All fields within the PLD file were analyzed to ensure that they contain valid values.
- ◆ All PLD files were compared to the demographic file to verify referential integrity between files and ensure demographic information is captured on all members.
- ◆ Numerator and denominator data were used to calculate reporting unit measure rates. Those reporting unit rates were then compared to the validated measure rates contained within the NCQA IDSS file or the custom rate reporting template for accuracy. However, stratified reporting unit rates and statewide rates (i.e., rates calculated for demographic subgroups) were not formally audited or compared to validated rates within the NCQA IDSS file.

Based on the validation checks performed on the PLD files, HSAG determined that the following demographic variables contain complete and reasonable data to calculate stratified rates in the analyses, without any caveats:

- ◆ Age
- ◆ Gender

¹² HSAG provided supplemental file layouts and instructions to MCPs on November 20, 2015.

Conversely, HSAG identified completeness and reasonability concerns with the race/ethnicity and primary language demographic variable data. For example, eight MCPs reported more than 10 percent of members with the primary language variable missing, and an additional three MCPs reported 100 percent of members with the primary language variable missing from the PLD file. Further, HSAG identified that five MCPs reported more than 20 percent of members with the primary language variable coded as “Other.”

For race/ethnicity, 21 MCPs reported more than 10 percent of members with the race/ethnicity variable as “Unknown.” Further, HSAG identified that 12 MCPs reported more than 10 percent of members with the race/ethnicity variable as “Other.” Please refer to Appendix D of the *California Technical Report Disparities Focused Study Methodology Overview* for more information.

Rate Calculation

Administrative Measures

HSAG calculated rates for administrative measures (including Ambulatory Care) at the State level by summing the numerator and denominator values for each of the 53 reporting units to determine the statewide numerator and denominator for each of the subgroups. The statewide numerator was divided by the statewide denominator to produce the statewide stratified rates for all administrative measures. The statewide stratified rate is also referred to as the MCMC weighted average rate in this report. In the findings section, HSAG also displays the denominator and percentage of denominator for each subgroup. The percentage of denominator is calculated by dividing the denominator for the specific subgroup by the total denominator.

To calculate the county-level rate for each of the 31 counties/county groups, HSAG summed the numerator and denominator values for each of the HEDIS reporting units within the county/county group, as described above for the statewide analysis.¹³ HSAG divided the county/county group numerator by the county/county group denominator to produce the county-level stratified rates for all administrative measures.

Hybrid Measures

HSAG followed the DHCS-specified methodology steps described below to calculate stratified hybrid rates at the State and county levels:

1. Using data from the HEDIS reporting unit analysis, HSAG assigned a weight to each member in the hybrid sample as the inverse probability of that member being selected into the sample. HSAG calculated the inverse probability using the following formula:

$$\text{Weight} = \frac{\text{Eligible Population}}{\text{Sample Size}}$$

Note: HSAG obtained the total eligible population for each reporting unit from the NCQA IDSS files submitted by MCPs.

¹³ The county-level analysis was based on the counties served by the MCPs.

- To calculate the aggregated numerator and denominator values, HSAG multiplied the weight (as calculated in Step 1 above) by the member denominator and numerator values. HSAG then summed the weighted numerator and denominator values for each subgroup and reporting unit. Any subgroup containing fewer than 30 members, after aggregation, was designated as “N/A” within the figures in the findings section. HSAG divided the weighted numerator by the weighted denominator to determine the aggregated stratified rates. The statewide stratified rate is also referred to as the MCMC weighted average rate in this report. In the findings section, HSAG also displays the weighted denominator and percentage of weighted denominator for each subgroup. The percentage of the weighted denominator is calculated by dividing the weighted denominator for the specific subgroup by the total weighted denominator. Please note, the weighted denominator for each subgroup is rounded to the nearest integer; therefore, the total weighted denominator may not equal the sum of the subgroup weighted denominators.

Disparities Analysis

HSAG used the rates for administrative and hybrid measures stratified by demographic variables to identify areas of “disparity.” To identify these areas, HSAG compared each demographic subgroup to a reference group. For each measure and level of analysis (e.g., statewide versus county), the reference group was the demographic subgroup with the highest (or most favorable) rate. All rates for other subgroups were compared to the highest or most favorable rate (i.e., the reference group) in order to identify disparities. As a result, the reference group changed based on the measure and level of analysis.

Based on modification of the methodology used in AHRQ’s 2015 National Quality and Disparities Report, DHCS defined “disparity” as “a relative difference of greater than or equal to 10 percent when comparing a demographic subgroup to the reference group.”¹⁴ HSAG calculated relative difference using the following equation:

$$\text{Relative Difference} = \frac{[(\text{Interest Group Rate} - \text{Reference Group Rate})]}{\text{Reference Group Rate}}$$

The 10 percent threshold is used across all measures regardless of the distribution of the measure results; therefore, disparities with relative differences of less than 10 percent may still be meaningful. Conversely, some disparities with relative differences of greater than or equal to 10 percent may be within a standard deviation for that measure and therefore not as meaningful.

For disparities related to primary language, findings could be due to the primary language demographic category having the largest number of subgroups, which increases the likelihood of demographic subpopulations with small denominators, potentially resulting in extreme rates. Since the methodology used for this analysis compares the highest rate to the rate of interest, these extreme results could impact the identification of disparities.

¹⁴ 2015 National Healthcare Quality and Disparities Report and 5th Anniversary Update on the National Quality Strategy. Rockville, MD: Agency for Healthcare Research and Quality; Apr 2016. AHRQ Pub. No. 16-0015.

Cautions and Limitations

For each hybrid measure, the sample was pulled following NCQA protocol. As such, the sample was made to be representative of the entire eligible population as a whole, but not necessarily when assessing the sample by different demographic subgroups. As the sample for each hybrid measure for the reporting unit level will be small (typically, approximately 411 individuals per sample) in comparison to the statewide population, it is anticipated that some demographic subgroups may not be included in the sample for every measure, or will be represented by a very small number of individuals, resulting in the inability to produce reliable rates for these subgroups. Due to this caveat, the stratified rates produced for hybrid measures should be interpreted with caution.

As mentioned previously, some reporting units had high rates of members reported in the Unknown/Missing category for race/ethnicity or language values. Certain demographic subgroups may be more likely to be categorized as Unknown/Missing, so it is possible this missing information could have an impact on the rates reported. At the statewide level, HSAG found that the group with Unknown/Missing race/ethnicity data had neither the highest rate nor the lowest rate for any measure results; however, the impact of these results on the analysis is unclear. At the statewide level, beneficiaries with Unknown/Missing language data had the lowest rates for one measure in the Women's Health domain, *Prenatal and Postpartum Care—Postpartum Care* and one measure in the Care for Children and Adolescents domain, *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life*.

Lastly, for each unit of analysis, the group with the highest or most favorable rate was used as the reference group when identifying disparities. The reference group may change from measure to measure *and* from population to population; therefore, it may be difficult to make comparisons both within and across measures.

To provide a narrowed focus for this report, DHCS selected 12 EAS measures which cover a broad range of health issues that beneficiaries may encounter throughout their lives. This section of the report presents the rates for each measure at the statewide level by each demographic category (i.e., age, gender, race/ethnicity, and primary language), where applicable. Following the statewide-level analyses, HSAG presents the results for select demographic categories for each measure at the county level.

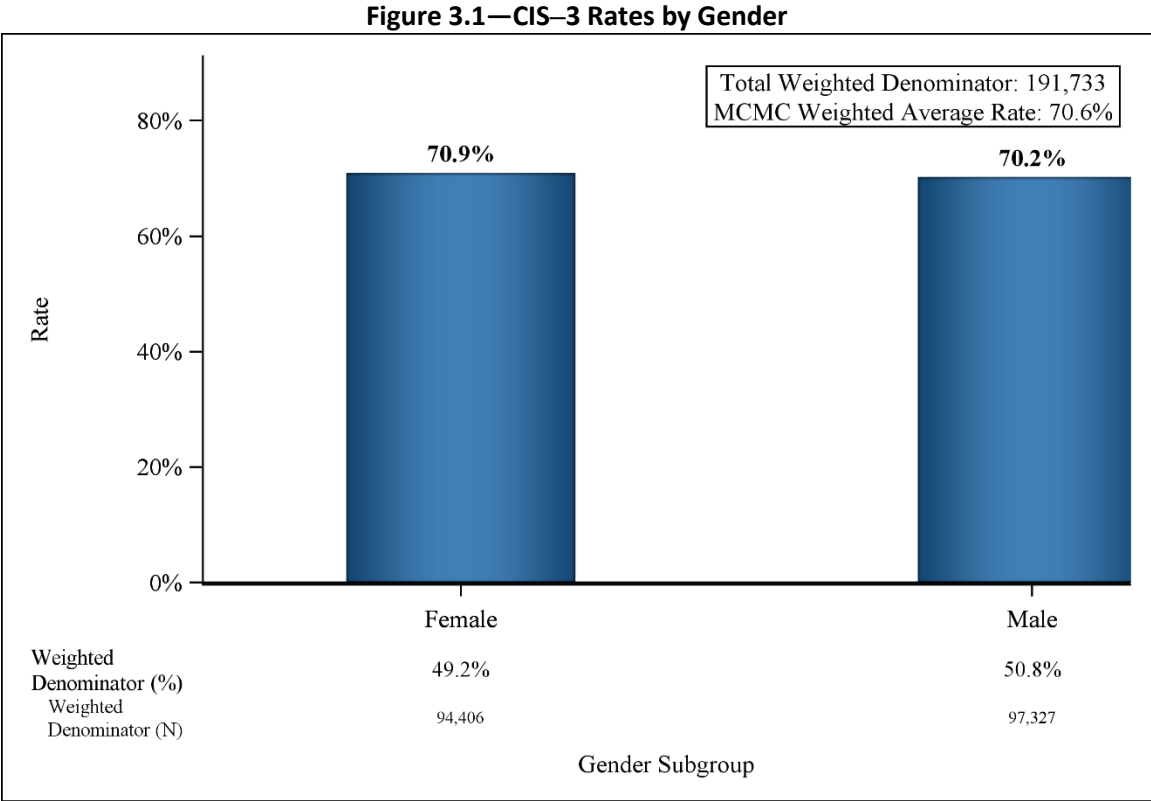
Statewide Performance

For the statewide level results, HSAG does not present figures for measures where age or gender are already defined (e.g., *Childhood Immunization Status—Combination 3* only includes two-year-olds). Additionally, HSAG did not adjust the statewide-level rates to account for differences in overall MCP performance and MCP population mix. Therefore, disparities identified in the statewide analysis could be due to the underlying geography for a population, based on MCPs serving those counties/county groups.

Care for Children and Adolescents

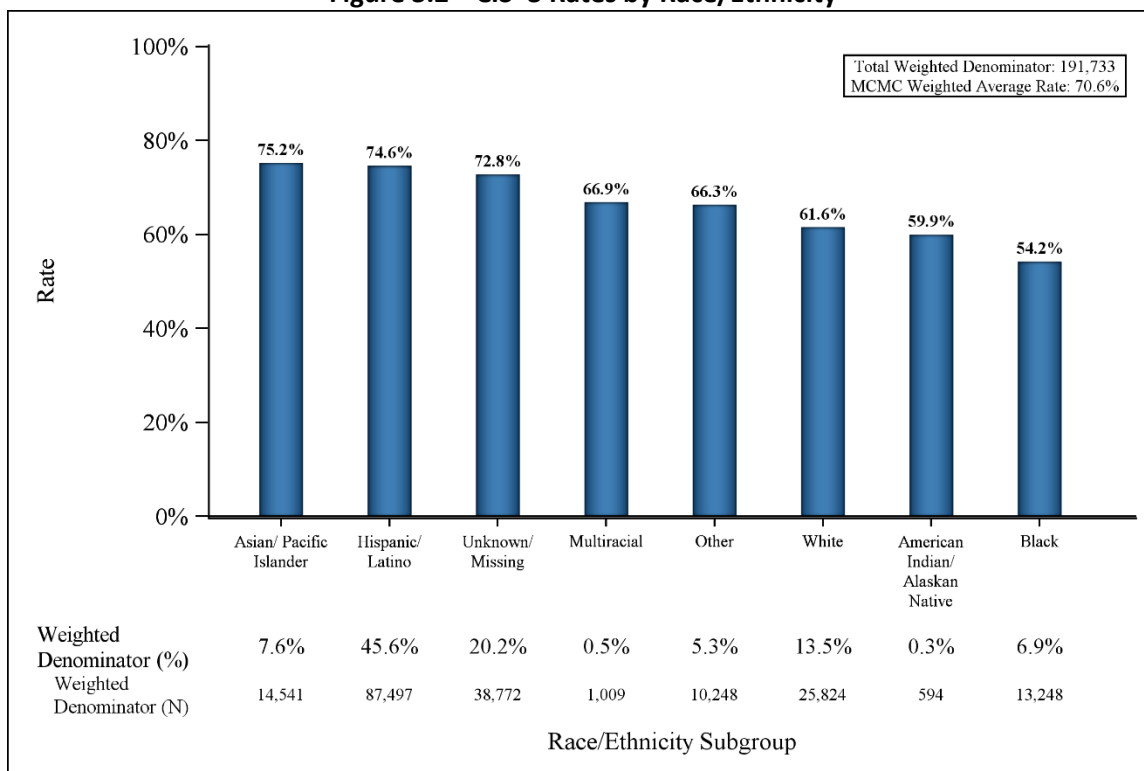
Childhood Immunization Status—Combination 3

Figure 3.1 through Figure 3.3 display the statewide rates for the *Childhood Immunization Status—Combination 3* (CIS-3) measure for each demographic category.



For the gender demographic category, Females had the highest rate of 70.9 percent (i.e., the reference group), while Males had a rate of 70.2 percent for the *Childhood Immunization Status—Combination 3* measure. A disparity (relative difference greater than or equal to 10 percent) did not exist for the gender demographic category.

Figure 3.2—CIS-3 Rates by Race/Ethnicity



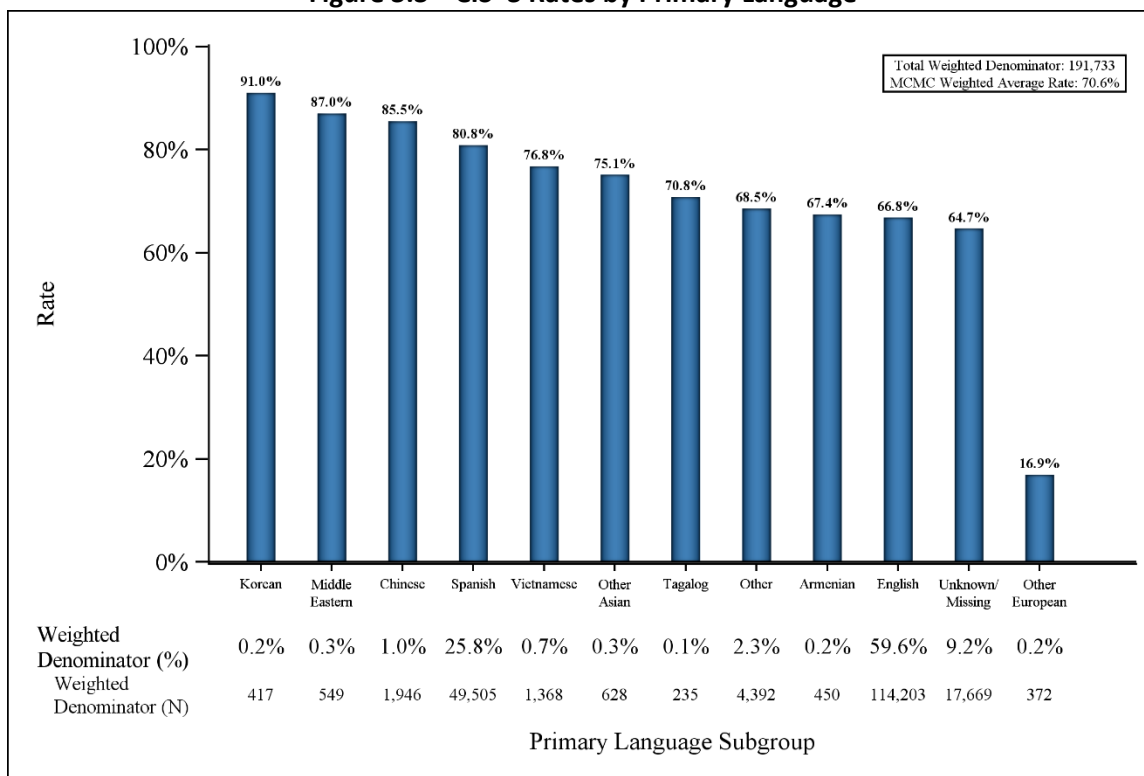
For the race/ethnicity demographic category, beneficiaries in the Asian/Pacific Islander subgroup had the highest rate of 75.2 percent (i.e., the reference group) and comprised 7.6 percent of the weighted denominator for the *Childhood Immunization Status—Combination 3* measure. Beneficiaries in the Hispanic/Latino subgroup had the second-highest rate (74.6 percent) and did not demonstrate a disparity when compared to the Asian/Pacific Islander subgroup.

Compared to the Asian/Pacific Islander subgroup, the race/ethnicity subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

- ◆ Multiracial (0.5 percent of the total weighted denominator)
- ◆ Other (5.3 percent of the total weighted denominator)
- ◆ White (13.5 percent of the total weighted denominator)
- ◆ American Indian/Alaskan Native (0.3 percent of the total weighted denominator)
- ◆ Black (6.9 percent of the total weighted denominator)

Blacks had the lowest rate (54.2 percent) and demonstrated a disparity with a relative difference of 27.9 percent.

Figure 3.3—CIS-3 Rates by Primary Language



For the primary language demographic category, Korean language speakers had the highest rate of 91.0 percent (i.e., the reference group) and comprised 0.2 percent of the weighted denominator for the *Childhood Immunization Status—Combination 3* measure. Due to small population sizes for several of the primary language subgroups, exercise caution when interpreting these results.

Compared to Korean language speakers, the primary language subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

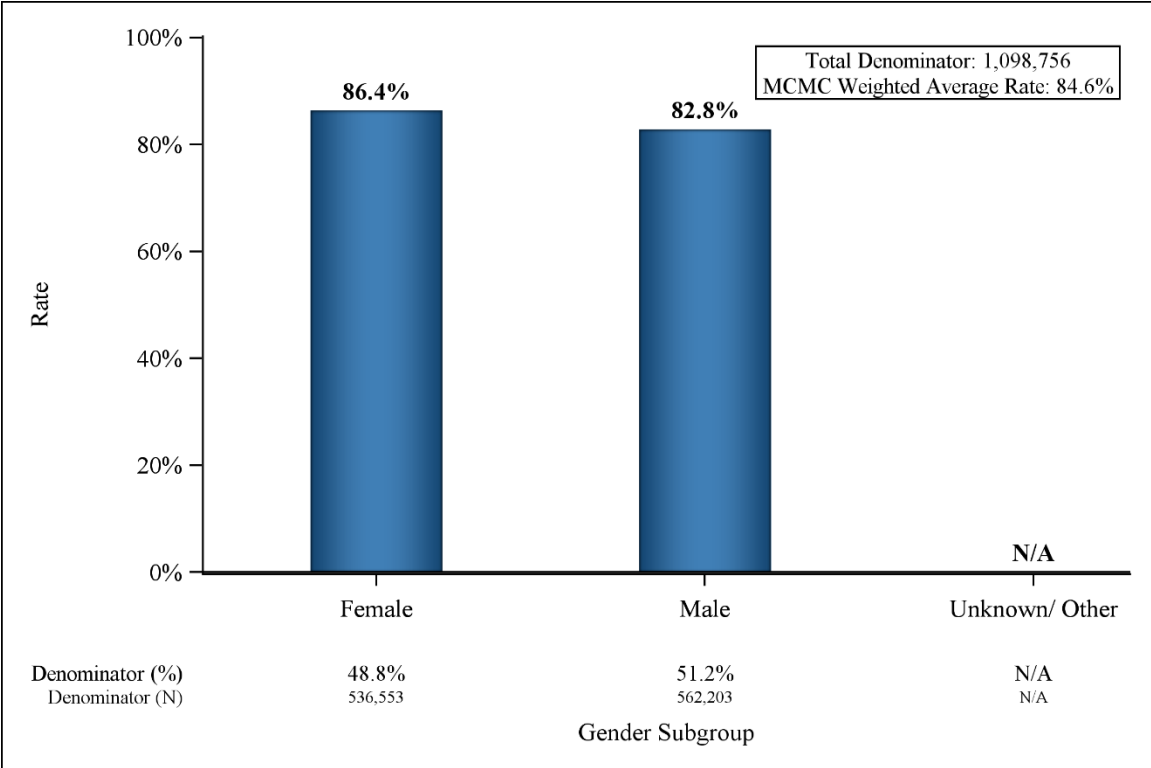
- ◆ Spanish (25.8 percent of the total weighted denominator)
- ◆ Vietnamese (0.7 percent of the total weighted denominator)
- ◆ Other Asian (0.3 percent of the total weighted denominator)
- ◆ Tagalog (0.1 percent of the total weighted denominator)
- ◆ Other (2.3 percent of the total weighted denominator)
- ◆ Armenian (0.2 percent of the total weighted denominator)
- ◆ English (59.6 percent of the total weighted denominator)
- ◆ Unknown/Missing (9.2 percent of the total weighted denominator)
- ◆ Other European (0.2 percent of the total weighted denominator)

Other European language speakers had the lowest rate (16.9 percent) and demonstrated a disparity with a relative difference of 81.4 percent.

Children and Adolescents’ Access to Primary Care Practitioners—12 to 19 Years

Figure 3.4 through Figure 3.6 display the statewide rates for the *Children and Adolescents’ Access to Primary Care Practitioners—12 to 19 Years* (CAP-1219) measure for each demographic category.

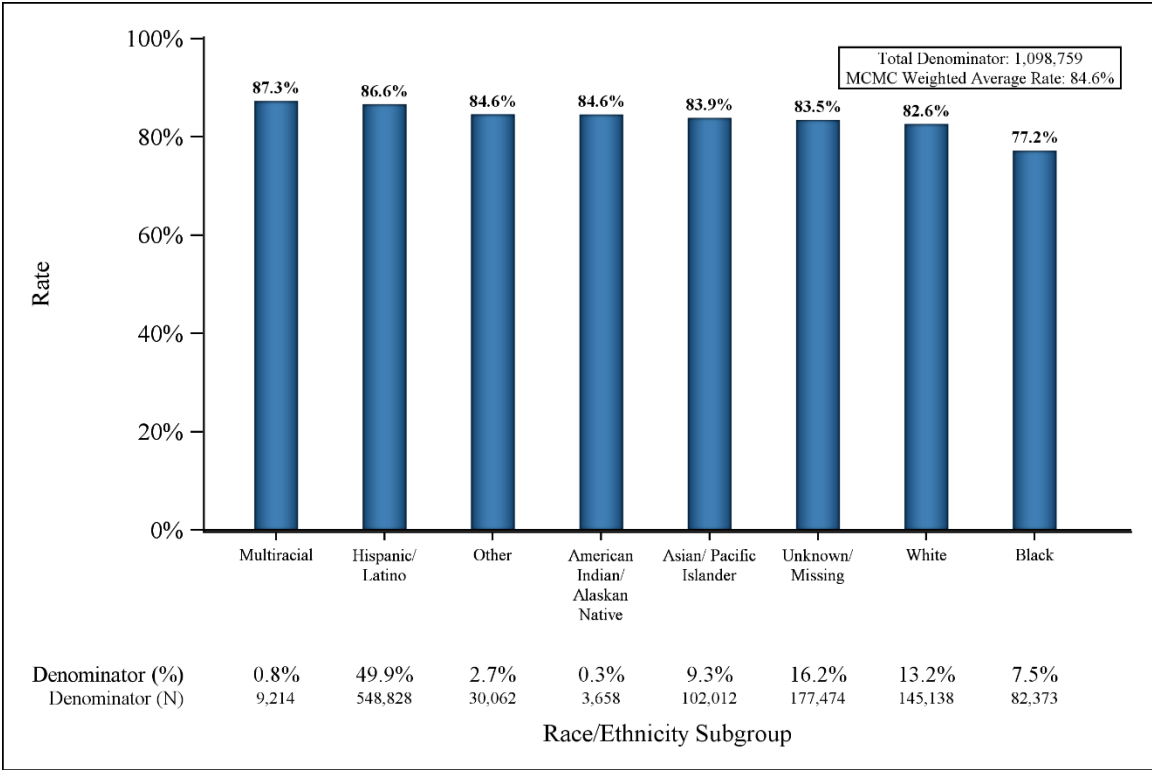
Figure 3.4—CAP-1219 Rates by Gender



N/A indicates the denominator was too small (i.e., less than 30) to report a rate.

For the gender demographic category, Females had the highest rate of 86.4 percent (i.e., the reference group), while Males had a rate of 82.8 percent for the *Children and Adolescents’ Access to Primary Care Practitioners—12 to 19 Years* measure. A disparity (relative difference greater than or equal to 10 percent) did not exist for the gender demographic category.

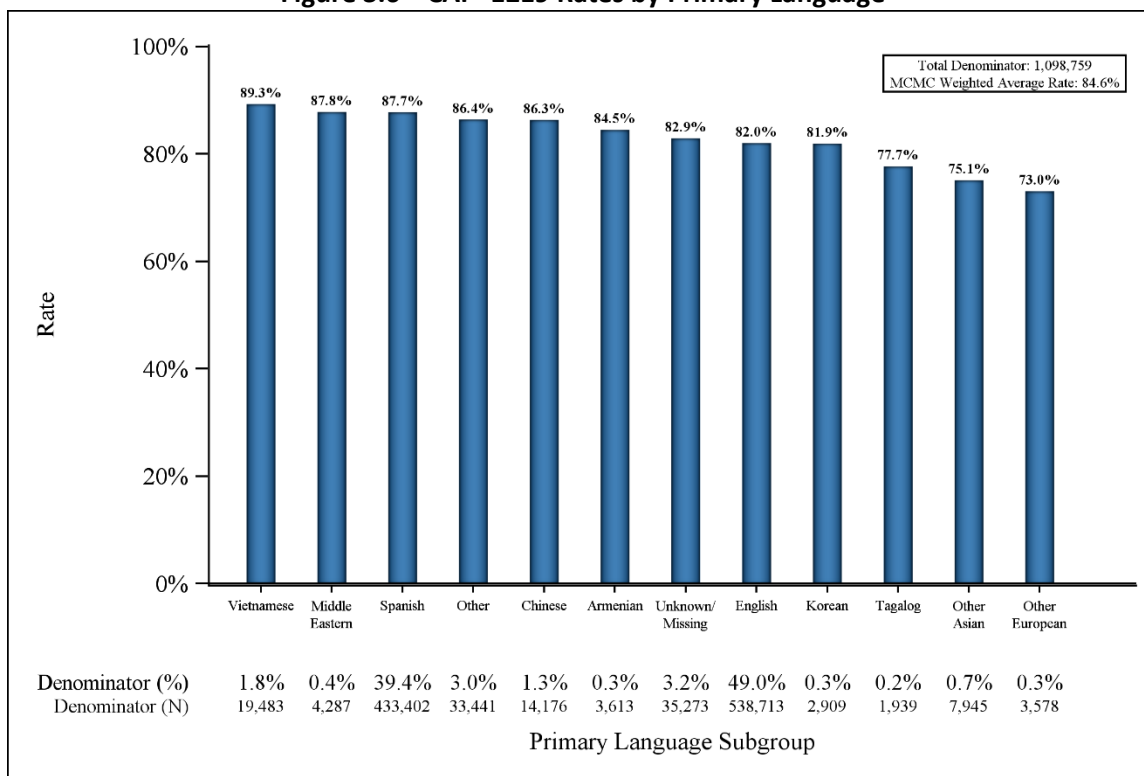
Figure 3.5—CAP-1219 Rates by Race/Ethnicity



For the race/ethnicity demographic category, beneficiaries in the Multiracial subgroup had the highest rate of 87.3 percent (i.e., the reference group) and comprised 0.8 percent of the denominator for the *Children and Adolescents’ Access to Primary Care Practitioners—12 to 19 Years* measure. Beneficiaries in the Hispanic/Latino subgroup had the second-highest rate (86.6 percent) and did not demonstrate a disparity when compared to the Multiracial subgroup.

Compared to the Multiracial subgroup, only the Black subgroup (7.5 percent of the total denominator) demonstrated a disparity with a relative difference greater than or equal to 10 percent. Black beneficiaries had the lowest rate (77.2 percent) and demonstrated a disparity with a relative difference of 11.6 percent.

Figure 3.6—CAP-1219 Rates by Primary Language



For the primary language demographic category, Vietnamese language speakers had the highest rate of 89.3 percent (i.e., the reference group) and comprised 1.8 percent of the denominator for the *Children and Adolescents' Access to Primary Care Practitioners—12 to 19 Years* measure.

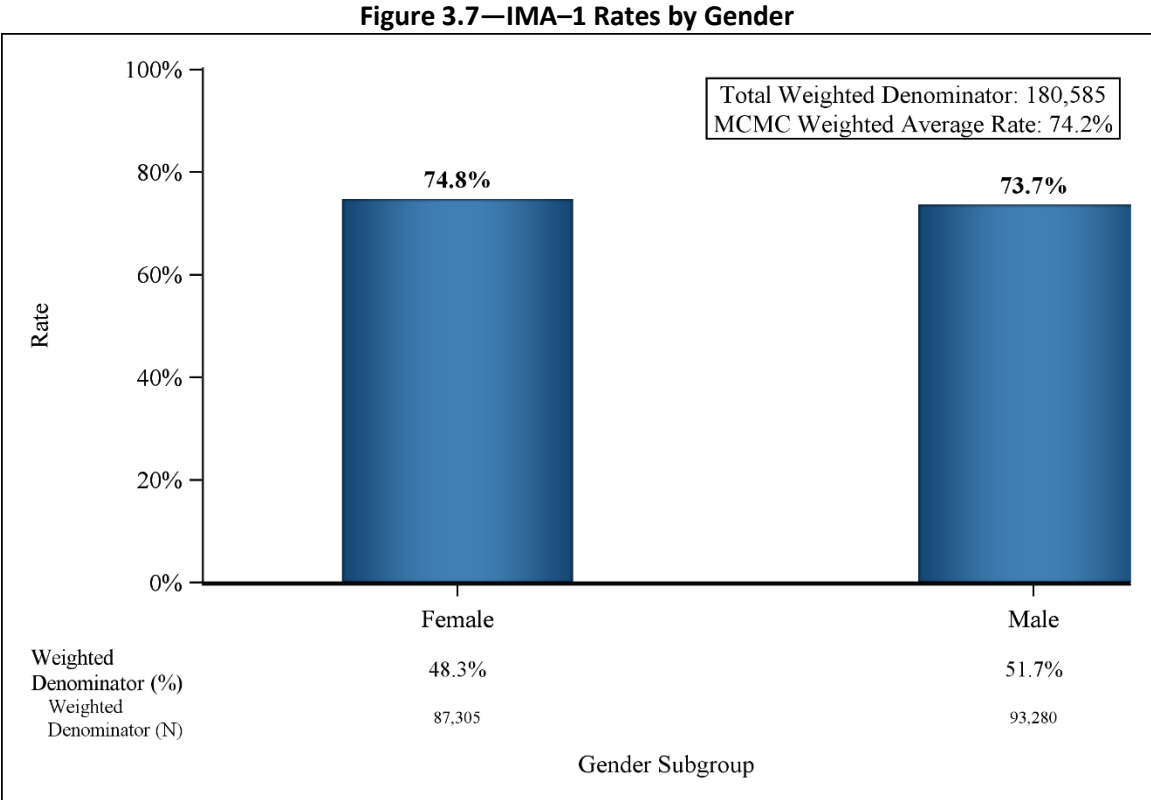
Compared to Vietnamese language speakers, the primary language subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

- ◆ Tagalog (0.2 percent of the total denominator)
- ◆ Other Asian (0.7 percent of the total denominator)
- ◆ Other European (0.3 percent of the total denominator)

Other European language speakers had the lowest rate (73.0 percent) and demonstrated a disparity with a relative difference of 18.2 percent.

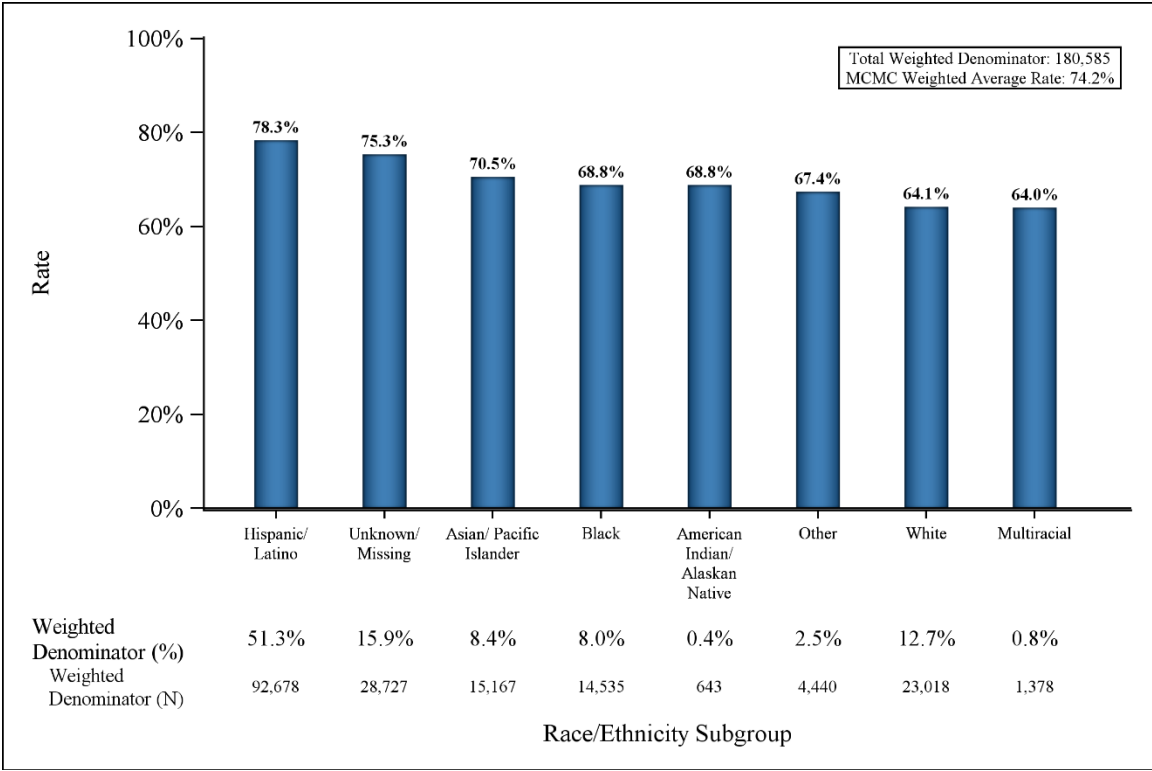
Immunizations for Adolescents—Combination 1

Figure 3.7 through Figure 3.9 display the statewide rates for the *Immunizations for Adolescents—Combination 1* (IMA-1) measure for each demographic category.



For the gender demographic category, Females had the highest rate of 74.8 percent (i.e., the reference group), while Males had a rate of 73.7 percent for the *Immunizations for Adolescents—Combination 1* measure. A disparity (relative difference greater than or equal to 10 percent) did not exist for the gender demographic category.

Figure 3.8—IMA-1 Rates by Race/Ethnicity



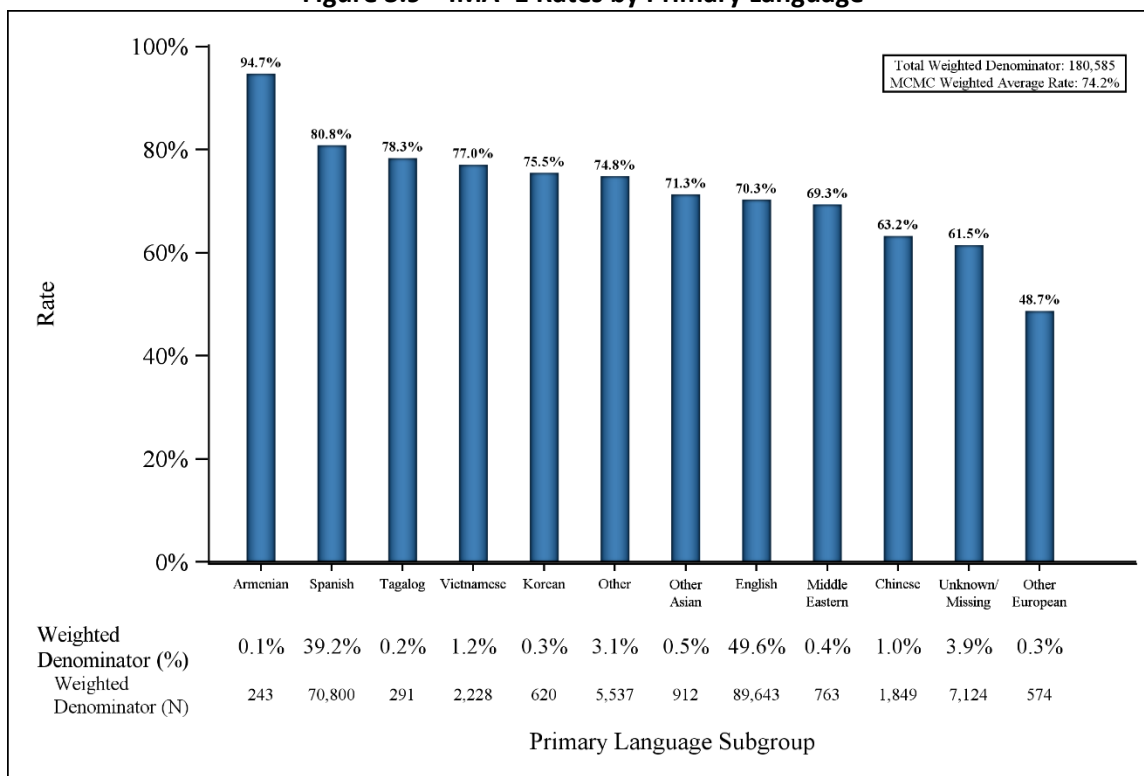
For the race/ethnicity demographic category, beneficiaries in the Hispanic/Latino subgroup had the highest rate of 78.3 percent (i.e., the reference group) and comprised 51.3 percent of the weighted denominator for the *Immunizations for Adolescents—Combination 1* measure.

Compared to the Hispanic/Latino subgroup, the race/ethnicity subgroups displayed below demonstrated disparities, with relative differences greater than or equal to 10 percent:

- ◆ Asian/Pacific Islander (8.4 percent of the total weighted denominator)
- ◆ Black (8.0 percent of the total weighted denominator)
- ◆ American Indian/Alaskan Native (0.4 percent of the total weighted denominator)
- ◆ Other (2.5 percent of the total weighted denominator)
- ◆ White (12.7 percent of the total weighted denominator)
- ◆ Multiracial (0.8 percent of the total weighted denominator)

The Multiracial subgroup had the lowest rate (64.0 percent) and demonstrated a disparity with a relative difference of 18.3 percent.

Figure 3.9—IMA–1 Rates by Primary Language



For the primary language demographic category, Armenian language speakers had the highest rate of 94.7 percent (i.e., the reference group) and comprised 0.1 percent of the weighted denominator for the *Immunizations for Adolescents—Combination 1* measure. Spanish language speakers had the second-highest rate (80.8 percent) and comprised of 39.2 percent of the weighted denominator. Due to small population sizes for several of the primary language subgroups, exercise caution when interpreting these results.

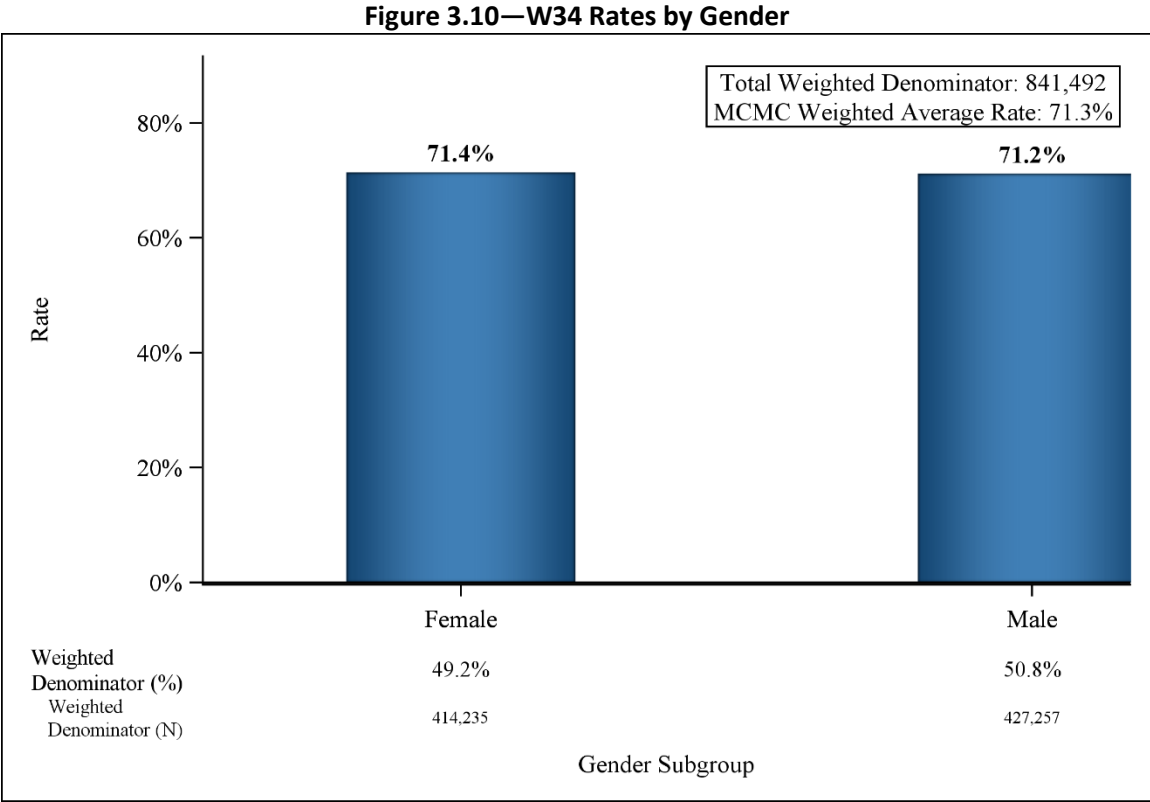
Compared to Armenian language speakers, the primary language subgroups displayed below demonstrated disparities, with relative differences greater than or equal to 10 percent:

- ◆ Spanish (39.2 percent of the total weighted denominator)
- ◆ Tagalog (0.2 percent of the total weighted denominator)
- ◆ Vietnamese (1.2 percent of the total weighted denominator)
- ◆ Korean (0.3 percent of the total weighted denominator)
- ◆ Other (3.1 percent of the total weighted denominator)
- ◆ Other Asian (0.5 percent of the total weighted denominator)
- ◆ English (49.6 percent of the total weighted denominator)
- ◆ Middle Eastern (0.4 percent of the total weighted denominator)
- ◆ Chinese (1.0 percent of the total weighted denominator)
- ◆ Unknown/Missing (3.9 percent of the total weighted denominator)
- ◆ Other European (0.3 percent of the total weighted denominator)

Other European language speakers had the lowest rate (48.7 percent) and demonstrated a disparity with a relative difference of 48.6 percent.

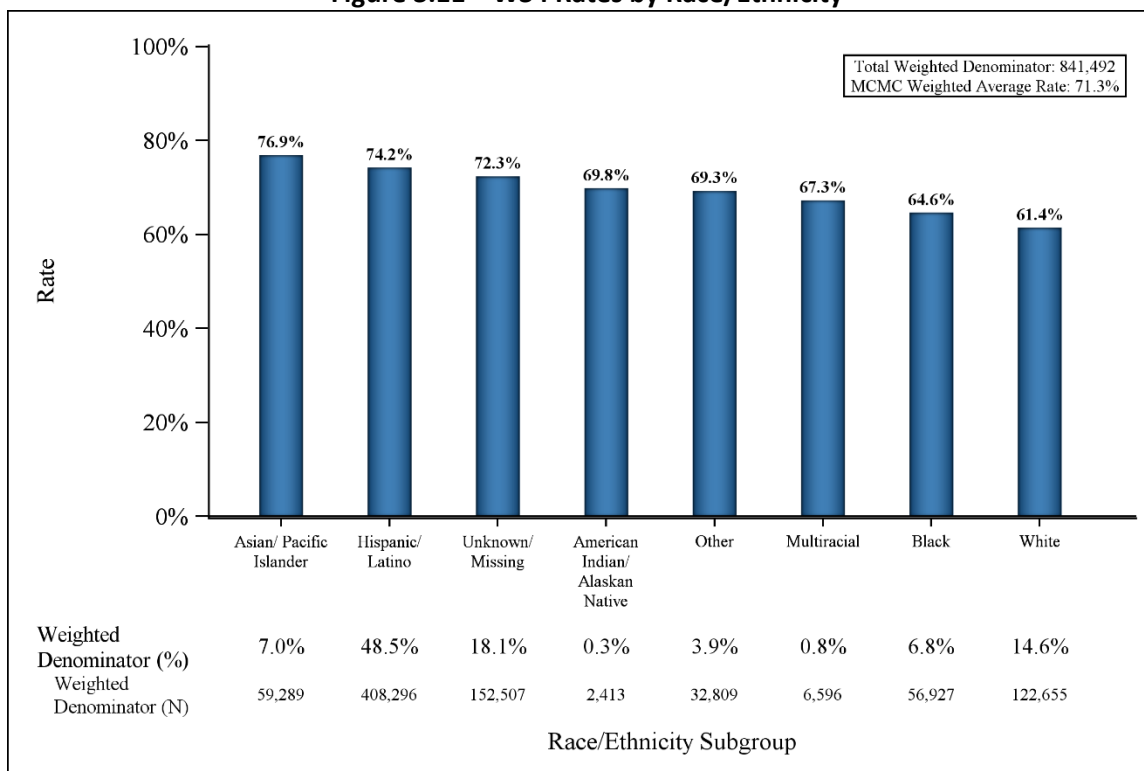
Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

Figure 3.10 through Figure 3.12 display the statewide rates for the *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* (W34) measure for each demographic category.



For the gender demographic category, Females had the highest rate of 71.4 percent (i.e., the reference group), while Males had a rate of 71.2 percent for the *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* measure. A disparity (relative difference greater than or equal to 10 percent) did not exist for the gender demographic category.

Figure 3.11—W34 Rates by Race/Ethnicity



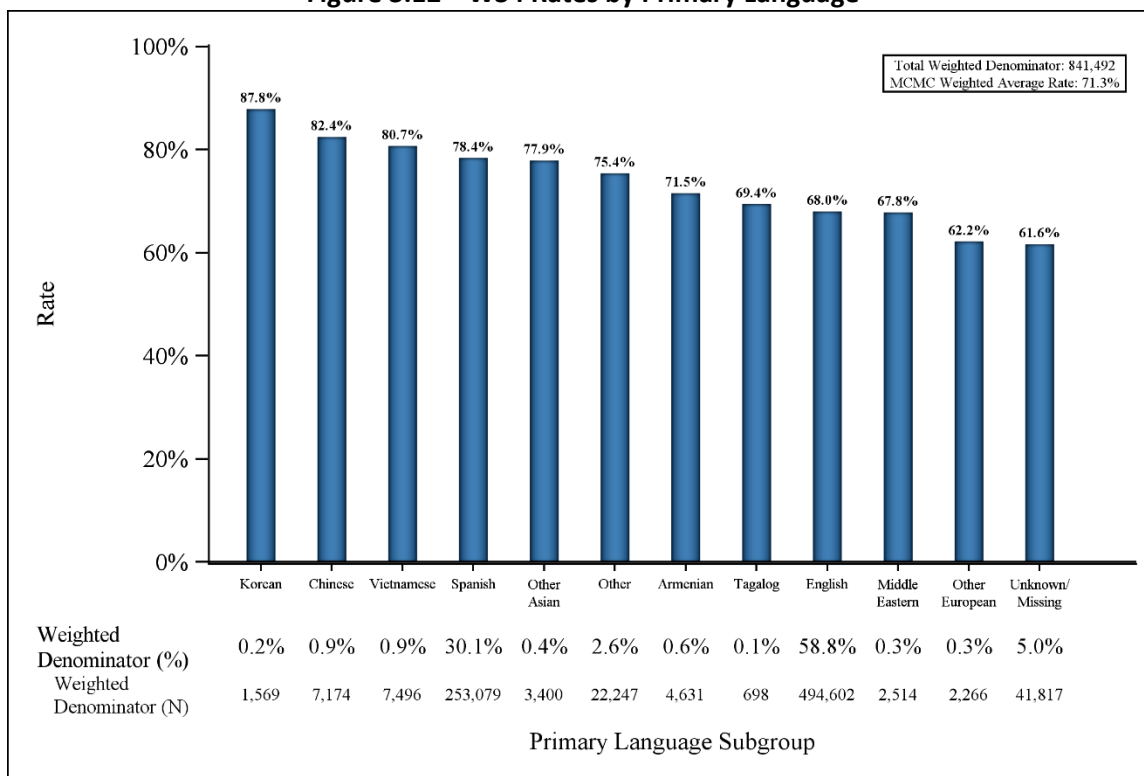
For the race/ethnicity demographic category, beneficiaries in the Asian/Pacific Islander subgroup had the highest rate of 76.9 percent (i.e., the reference group) and comprised 7.0 percent of the weighted denominator for the *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* measure. Beneficiaries in the Hispanic/Latino subgroup had the second-highest rate (74.2 percent) and did not demonstrate a disparity when compared to the Asian/Pacific Islander subgroup.

Compared to the Asian/Pacific Islander subgroup, the race/ethnicity subgroups displayed below demonstrated disparities, with relative differences greater than or equal to 10 percent:

- ◆ Multiracial (0.8 percent of the total weighted denominator)
- ◆ Black (6.8 percent of the total weighted denominator)
- ◆ White (14.6 percent of the total weighted denominator)

Whites had the lowest rate (61.4 percent) and demonstrated a disparity with a relative difference of 20.1 percent.

Figure 3.12—W34 Rates by Primary Language



For the primary language demographic category, Korean language speakers had the highest rate of 87.8 percent (i.e., the reference group) and comprised 0.2 percent of the weighted denominator for the *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* measure.

Compared to Korean language speakers, the primary language subgroups displayed below demonstrated disparities, with relative differences greater than or equal to 10 percent:

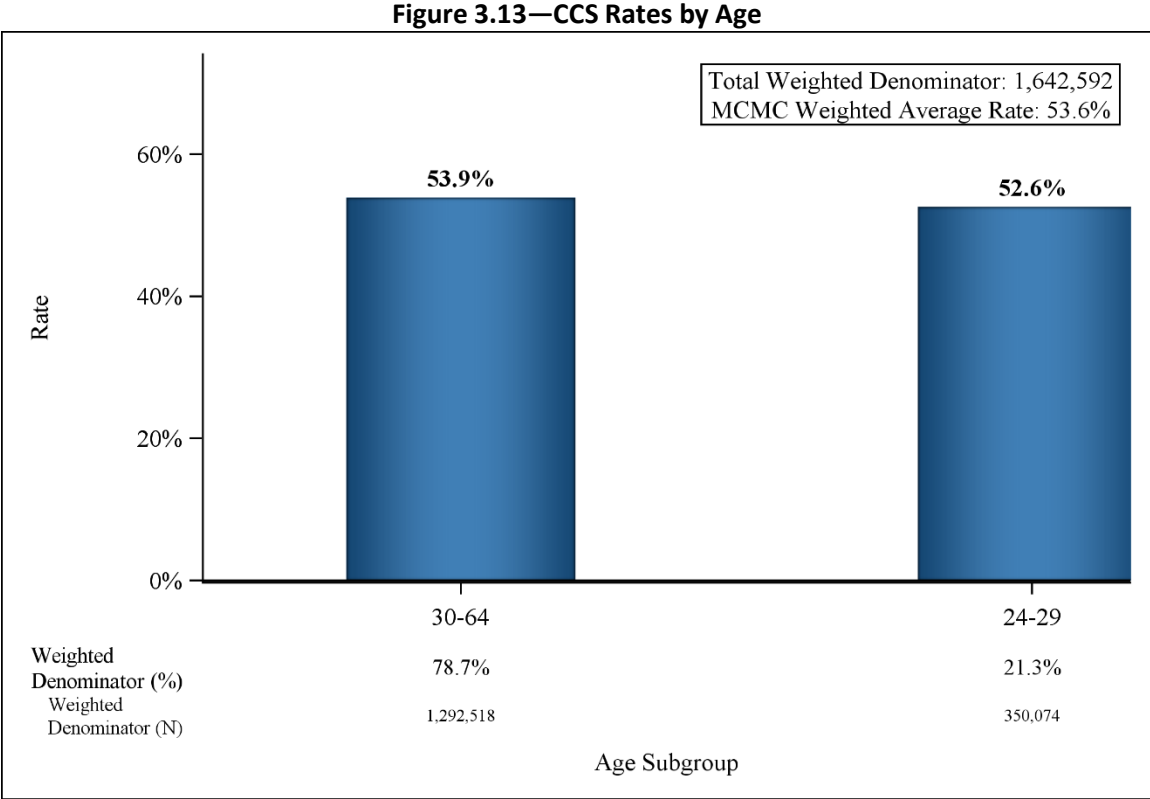
- ◆ Spanish (30.1 percent of the total weighted denominator)
- ◆ Other Asian (0.4 percent of the total weighted denominator)
- ◆ Other (2.6 percent of the total weighted denominator)
- ◆ Armenian (0.6 percent of the total weighted denominator)
- ◆ Tagalog (0.1 percent of the total weighted denominator)
- ◆ English (58.8 percent of the total weighted denominator)
- ◆ Middle Eastern (0.3 percent of the total weighted denominator)
- ◆ Other European (0.3 percent of the total weighted denominator)
- ◆ Unknown/Missing (5.0 percent of the total weighted denominator)

The Unknown/Missing language subgroup had the lowest rate (61.6 percent) and demonstrated a disparity with a relative difference of 29.8 percent.

Women’s Health

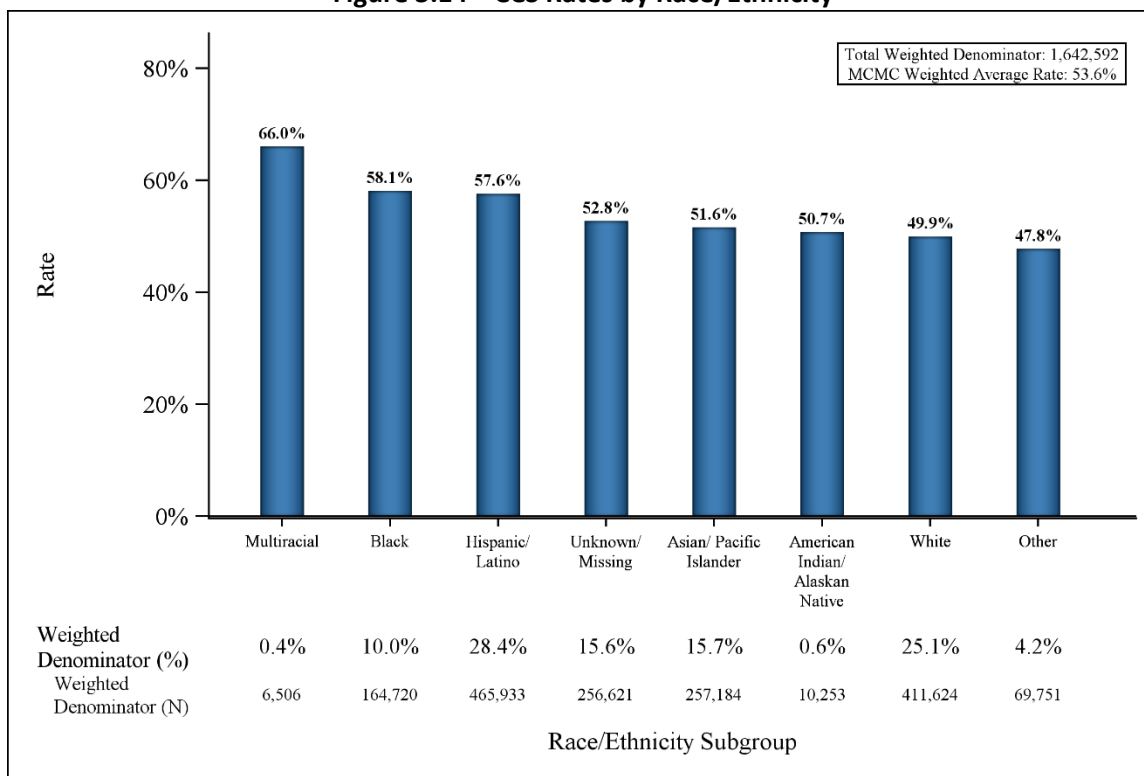
Cervical Cancer Screening

Figure 3.13 through Figure 3.15 display the statewide rates for the *Cervical Cancer Screening (CCS)* measure for each demographic category.



For the age demographic category, beneficiaries in the 30 to 64 age subgroup had the highest rate of 53.9 percent (i.e., the reference group) and accounted for 78.7 percent of the total weighted denominator for the *Cervical Cancer Screening* measure. A disparity (relative difference greater than or equal to 10 percent) did not exist for the age demographic category.

Figure 3.14—CCS Rates by Race/Ethnicity



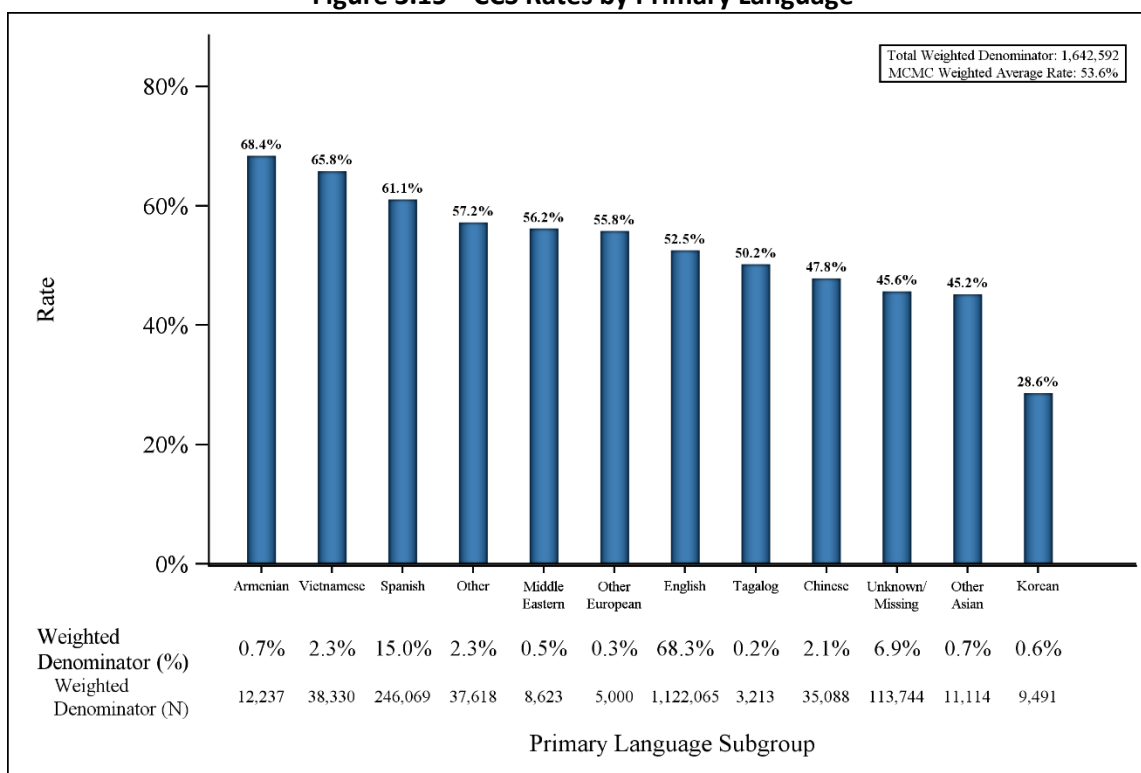
For the race/ethnicity demographic category, beneficiaries in the Multiracial subgroup had the highest rate of 66.0 percent (i.e., the reference group) and comprised 0.4 percent of the weighted denominator for the *Cervical Cancer Screening* measure. Beneficiaries in the Black subgroup had the second-highest rate (58.1 percent) and comprised 10.0 percent of the weighted denominator.

Compared to the Multiracial subgroup, the race/ethnicity subgroups displayed below demonstrated disparities, with relative differences greater than or equal to 10 percent:

- ◆ Black (10.0 percent of the total weighted denominator)
- ◆ Hispanic/Latino (28.4 percent of the total weighted denominator)
- ◆ Unknown/Missing (15.6 percent of the total weighted denominator)
- ◆ Asian/Pacific Islander (15.7 percent of the total weighted denominator)
- ◆ American Indian/Alaskan Native (0.6 percent of the total weighted denominator)
- ◆ White (25.1 percent of the total weighted denominator)
- ◆ Other (4.2 percent of the total weighted denominator)

The Other race/ethnicity subgroup had the lowest rate (47.8 percent) and demonstrated a disparity with a relative difference of 27.6 percent.

Figure 3.15—CCS Rates by Primary Language



For the primary language demographic category, Armenian language speakers had the highest rate of 68.4 percent (i.e., the reference group) and comprised 0.7 percent of the weighted denominator for the *Cervical Cancer Screening* measure. Vietnamese language speakers had the second-highest rate (65.8 percent) and did not demonstrate a disparity when compared to Armenian language speakers.

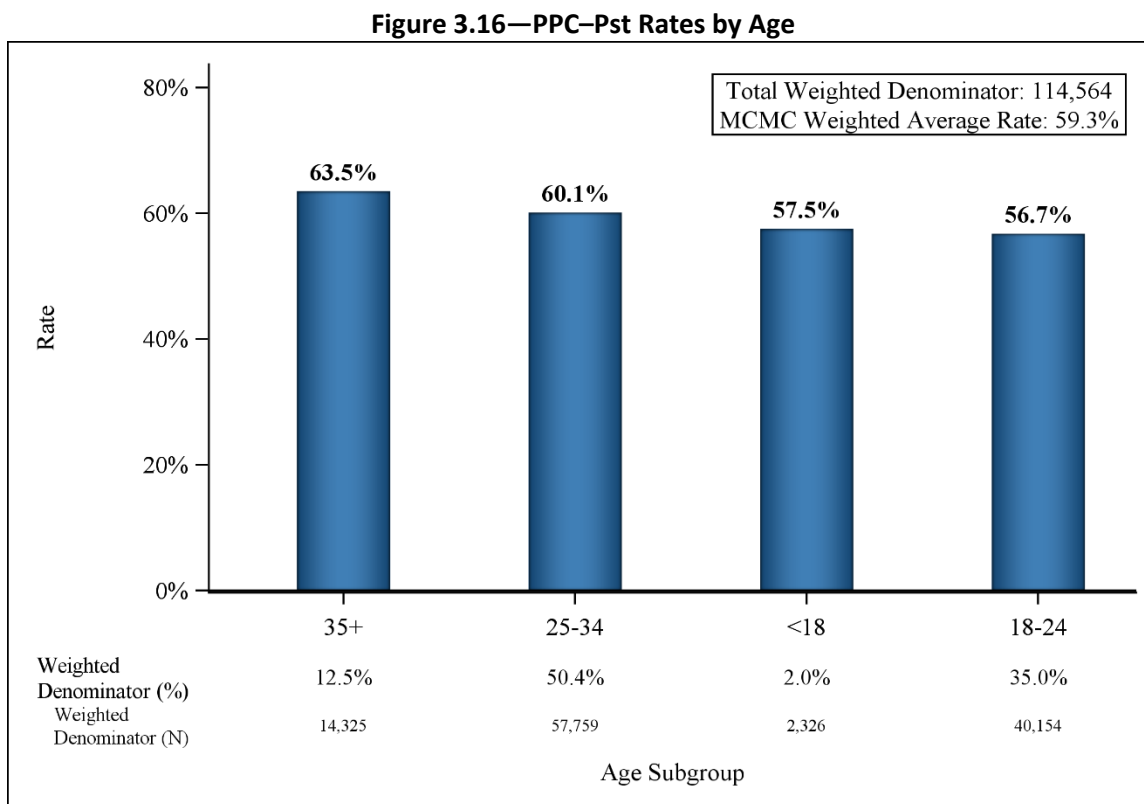
Compared to Armenian language speakers, the primary language subgroups displayed below demonstrated disparities, with relative differences greater than or equal to 10 percent:

- ◆ Spanish (15.0 percent of the total weighted denominator)
- ◆ Other (2.3 percent of the total weighted denominator)
- ◆ Middle Eastern (0.5 percent of the total weighted denominator)
- ◆ Other European (0.3 percent of the total weighted denominator)
- ◆ English (68.3 percent of the total weighted denominator)
- ◆ Tagalog (0.2 percent of the total weighted denominator)
- ◆ Chinese (2.1 percent of the total weighted denominator)
- ◆ Unknown/Missing (6.9 percent of the total weighted denominator)
- ◆ Other Asian (0.7 percent of the total weighted denominator)
- ◆ Korean (0.6 percent of the total weighted denominator)

Korean language speakers had the lowest rate (28.6 percent) and demonstrated a disparity with a relative difference of 58.2 percent.

Prenatal and Postpartum Care—Postpartum Care

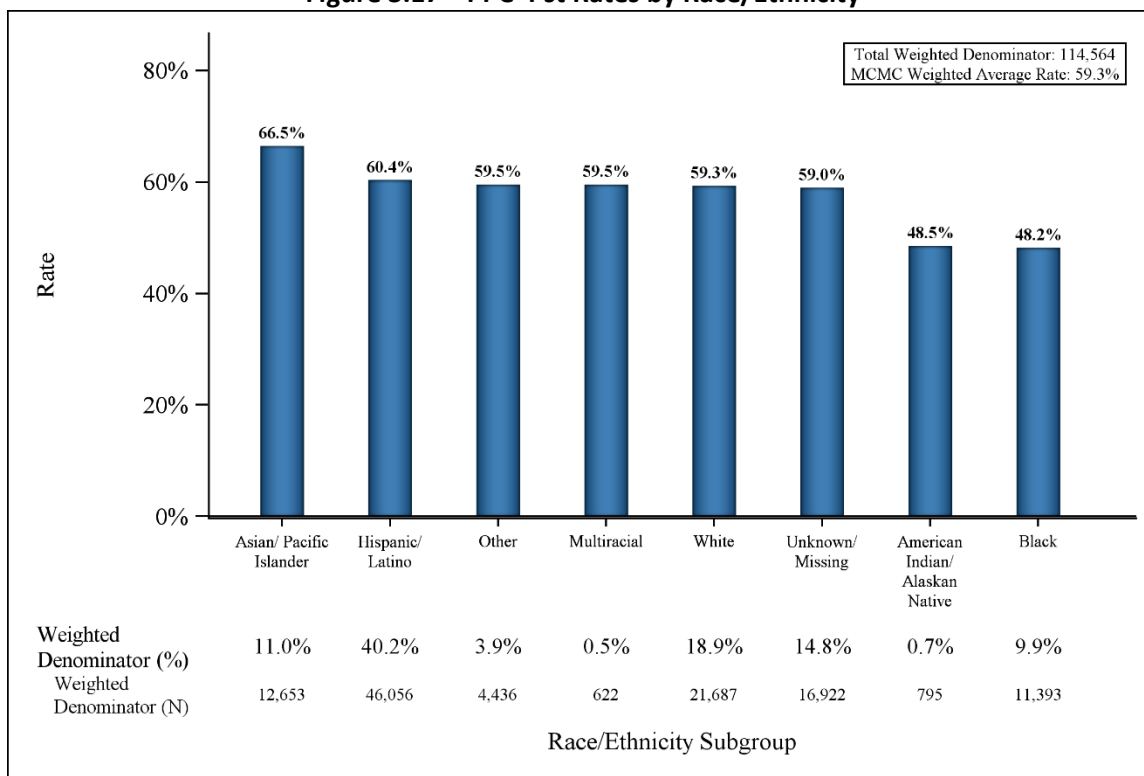
Figure 3.16 through Figure 3.18 display the statewide rates for the *Prenatal and Postpartum Care—Postpartum Care* (PPC–Pst) measure for each demographic category.



For the age demographic category, beneficiaries in the 35 and older subgroup had the highest rate of 63.5 percent (i.e., the reference group) and accounted for 12.5 percent of the total weighted denominator for the *Prenatal and Postpartum Care—Postpartum Care* measure.

Compared to the 35 and older subgroup, only the 18 to 24 years of age subgroup demonstrated a disparity with a relative difference greater than or equal to 10 percent. Beneficiaries in the 18 to 24 years of age subgroup had the lowest rate (56.7 percent), and showed a disparity with a relative difference of 10.6 percent.

Figure 3.17—PPC—Pst Rates by Race/Ethnicity



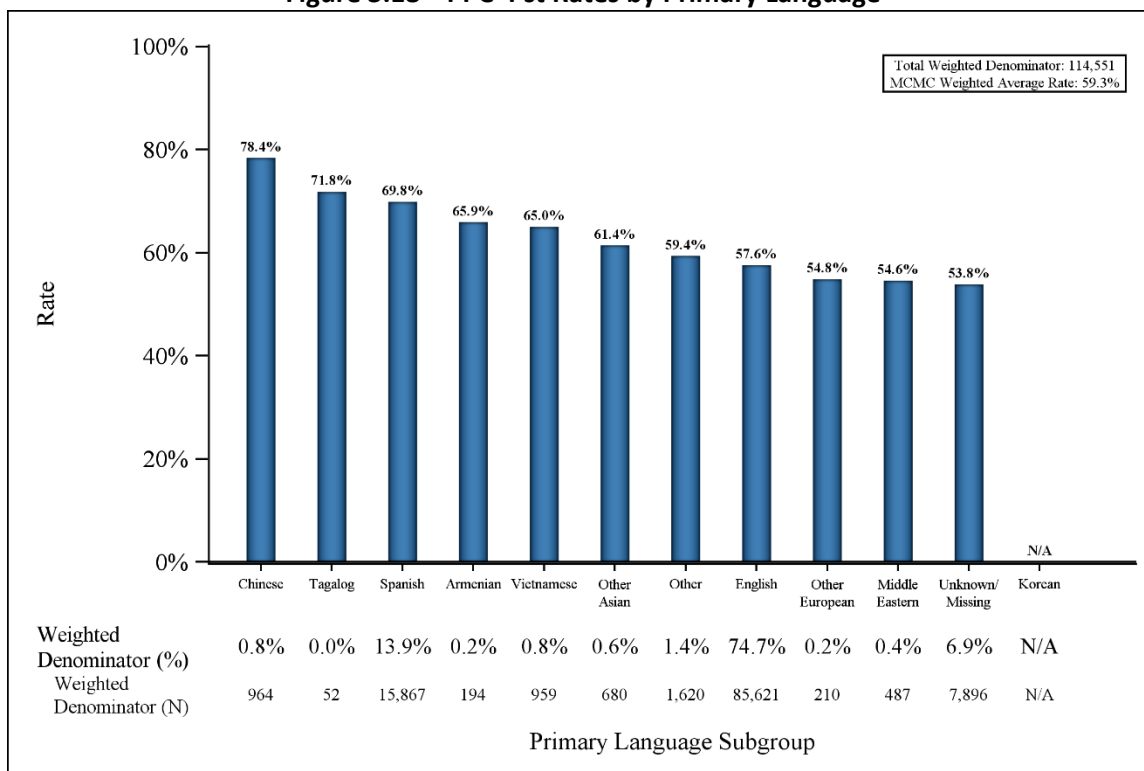
For the race/ethnicity demographic category, beneficiaries in the Asian/Pacific Islander subgroup had the highest rate of 66.5 percent (i.e., the reference group) and comprised 11.0 percent of the weighted denominator for the *Prenatal and Postpartum Care—Postpartum Care* measure. Beneficiaries in the Hispanic/Latino subgroup had the second-highest rate (60.4 percent) and comprised 40.2 percent of the weighted denominator.

Compared to the Asian/Pacific Islander subgroup, the race/ethnicity subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

- ◆ Other (3.9 percent of the total weighted denominator)
- ◆ Multiracial (0.5 percent of the total weighted denominator)
- ◆ White (18.9 percent of the total weighted denominator)
- ◆ Unknown/Missing (14.8 percent of the total weighted denominator)
- ◆ American Indian/Alaskan Native (0.7 percent of the total weighted denominator)
- ◆ Black (9.9 percent of the total weighted denominator)

Black beneficiaries had the lowest rate (48.2 percent) and demonstrated a disparity with a relative difference of 27.5 percent.

Figure 3.18—PPC—Pst Rates by Primary Language



N/A indicates the denominator was too small (i.e., less than 30) to report a rate.

For the primary language demographic category, Chinese language speakers had the highest rate of 78.4 percent (i.e., the reference group) and comprised 0.8 percent of the weighted denominator for the *Prenatal and Postpartum Care—Postpartum Care* measure. Due to small population sizes for several of the primary language subgroups, exercise caution when interpreting these results.

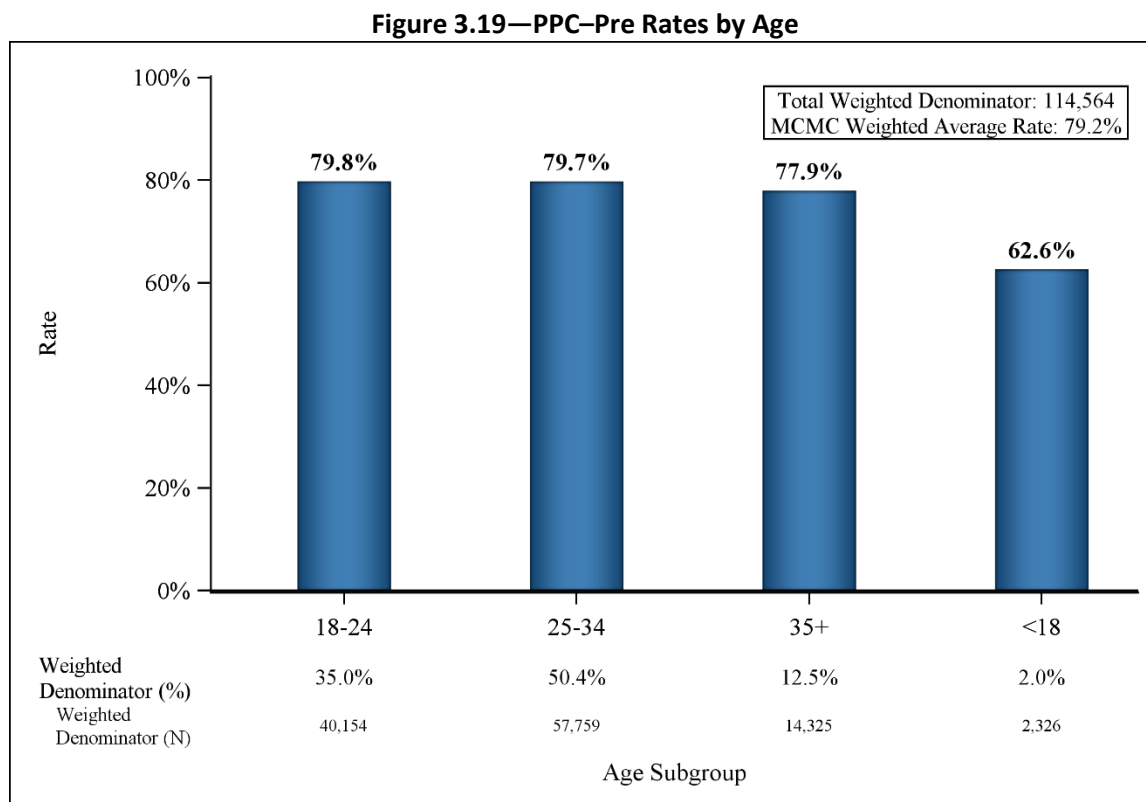
Compared to Chinese language speakers, the primary language subgroups displayed below demonstrated disparities, with relative differences greater than or equal to 10 percent:

- ◆ Spanish (13.9 percent of the total weighted denominator)
- ◆ Armenian (0.2 percent of the total weighted denominator)
- ◆ Vietnamese (0.8 percent of the total weighted denominator)
- ◆ Other Asian (0.6 percent of the total weighted denominator)
- ◆ Other (1.4 percent of the total weighted denominator)
- ◆ English (74.7 percent of the total weighted denominator)
- ◆ Other European (0.2 percent of the total weighted denominator)
- ◆ Middle Eastern (0.4 percent of the total weighted denominator)
- ◆ Unknown/Missing (6.9 percent of the total weighted denominator)

The Unknown/Missing language subgroup had the lowest rate (53.8 percent) and demonstrated a disparity with a relative difference of 31.3 percent.

Prenatal and Postpartum Care—Timeliness of Prenatal Care

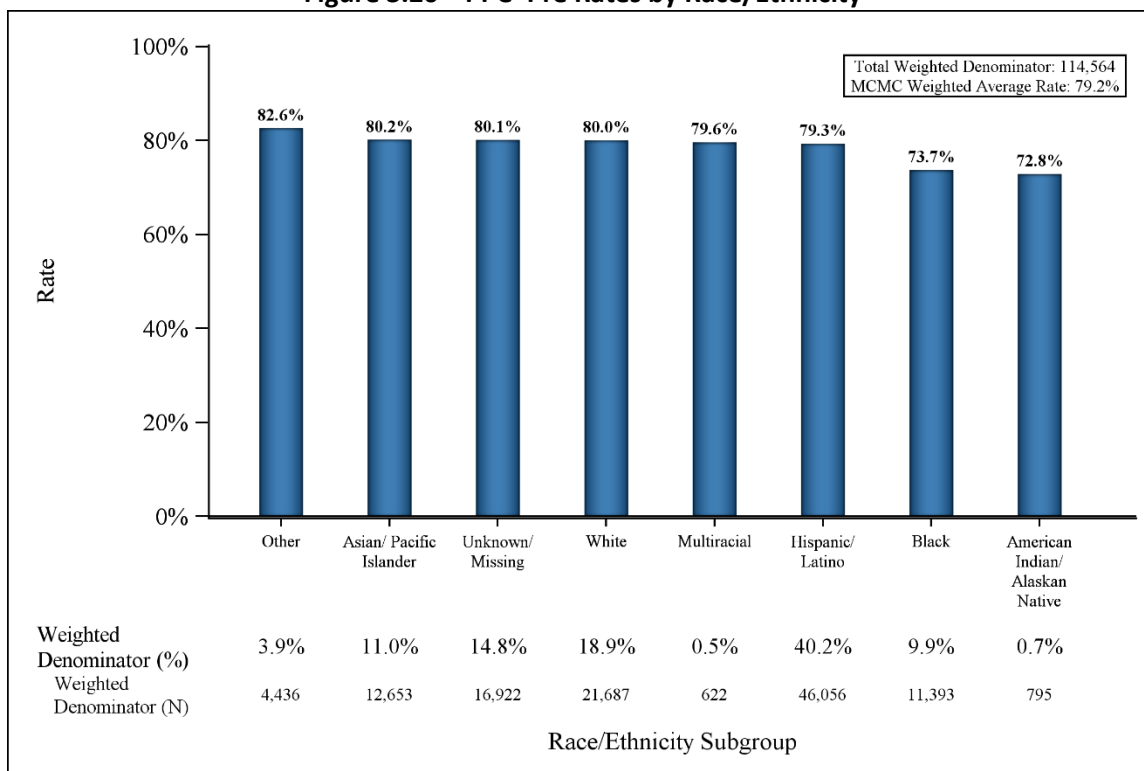
Figure 3.19 through Figure 3.21 display the statewide rates for the *Prenatal and Postpartum Care—Timeliness of Prenatal Care* (PPC-Pre) measure for each demographic category.



For the age demographic category, beneficiaries in the 18 to 24 subgroup had the highest rate of 79.8 percent (i.e., the reference group) and accounted for 35.0 percent of the total weighted denominator for the *Prenatal and Postpartum Care—Timeliness of Prenatal Care* measure.

Compared to the 18 to 24 age subgroup, only the younger than 18 years of age subgroup demonstrated a disparity with a relative difference greater than or equal to 10 percent. Beneficiaries in the younger than 18 years of age subgroup had the lowest rate (62.6 percent) and showed a disparity with a relative difference of 21.5 percent.

Figure 3.20—PPC—Pre Rates by Race/Ethnicity



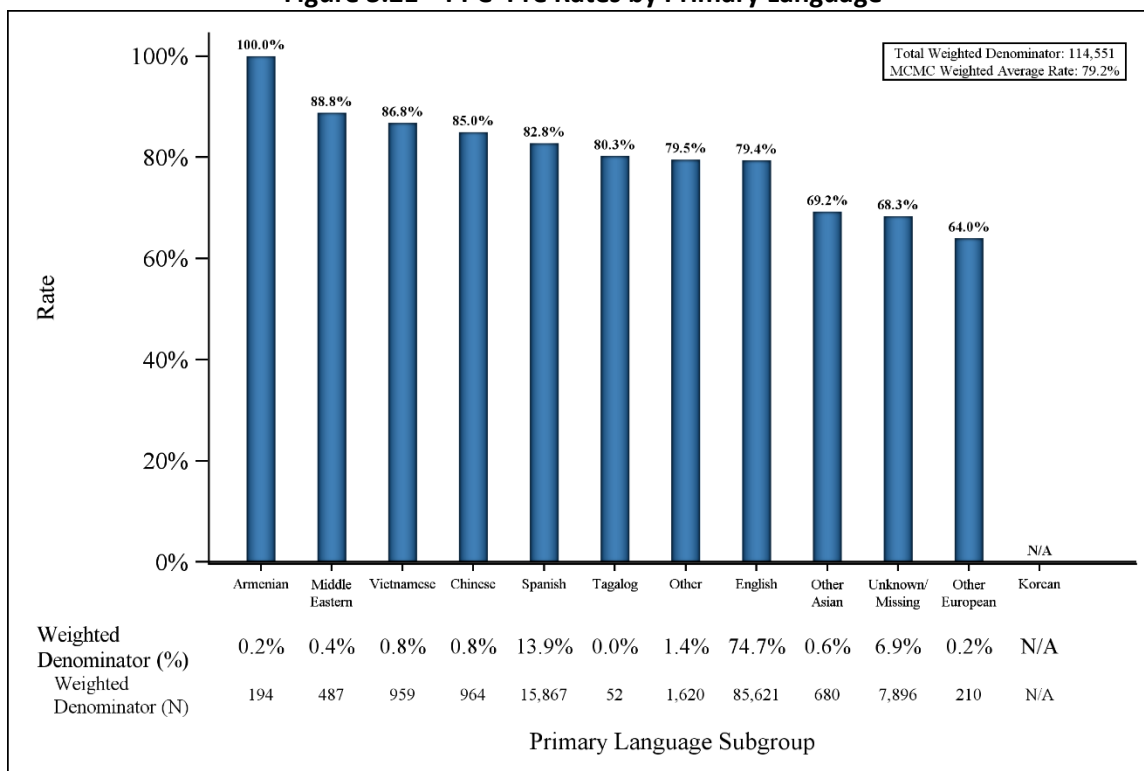
For the race/ethnicity demographic category, beneficiaries in the Other subgroup had the highest rate of 82.6 percent (i.e., the reference group) and comprised 3.9 percent of the weighted denominator for the *Prenatal and Postpartum Care—Timeliness of Prenatal Care* measure. Beneficiaries in the Asian/Pacific Islander subgroup had the second-highest rate (80.2 percent) and did not demonstrate a disparity when compared the Other race/ethnicity subgroup.

Compared to the Other subgroup, the race/ethnicity subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

- ◆ Black (9.9 percent of the total weighted denominator)
- ◆ American Indian/Alaskan Native (0.7 percent of the total weighted denominator)

American Indians/Alaskan Natives had the lowest rate (72.8 percent) and demonstrated a disparity with a relative difference of 11.9 percent.

Figure 3.21—PPC—Pre Rates by Primary Language



N/A indicates the denominator was too small (i.e., less than 30) to report a rate.

For the primary language demographic category, Armenian language speakers had the highest rate of 100.0 percent (i.e., the reference group) and comprised 0.2 percent of the weighted denominator for the *Prenatal and Postpartum Care—Timeliness of Prenatal Care* measure. Due to small population sizes for several of the primary language subgroups, exercise caution when interpreting these results.

Compared to Armenian language speakers, the primary language subgroups displayed below demonstrated disparities, with relative differences greater than or equal to 10 percent:

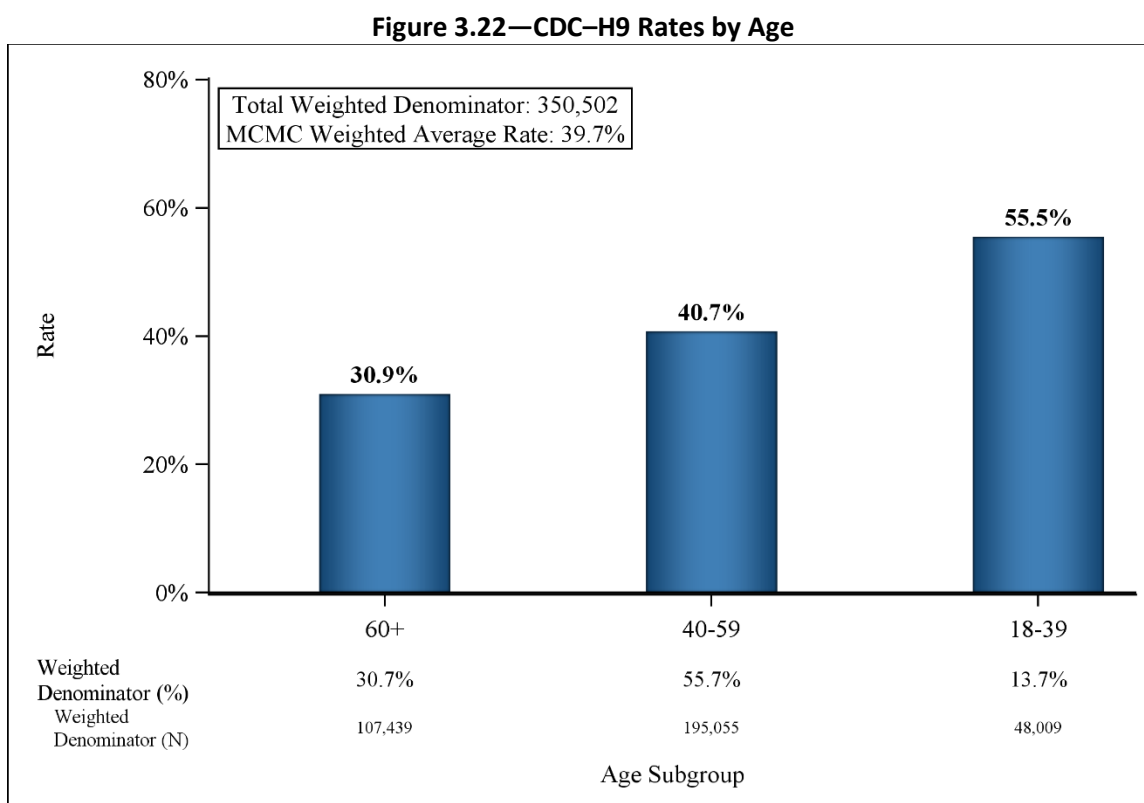
- ◆ Middle Eastern (0.4 percent of the total weighted denominator)
- ◆ Vietnamese (0.8 percent of the total weighted denominator)
- ◆ Chinese (0.8 percent of the total weighted denominator)
- ◆ Spanish (13.9 percent of the total weighted denominator)
- ◆ Tagalog (0.0 percent of the total weighted denominator)
- ◆ Other (1.4 percent of the total weighted denominator)
- ◆ English (74.7 percent of the total weighted denominator)
- ◆ Other Asian (0.6 percent of the total weighted denominator)
- ◆ Unknown/Missing (6.9 percent of the total weighted denominator)
- ◆ Other European (0.2 percent of the total weighted denominator)

Other European speakers had the lowest rate (64.0 percent) and demonstrated a disparity with a relative difference of 36.0 percent.

Care for Chronic Conditions

Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)

Figure 3.22 through Figure 3.25 display the statewide rates for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* (CDC–H9) measure for each demographic category. For this measure, a lower rate indicates more favorable performance, and a higher rate indicates less favorable performance.



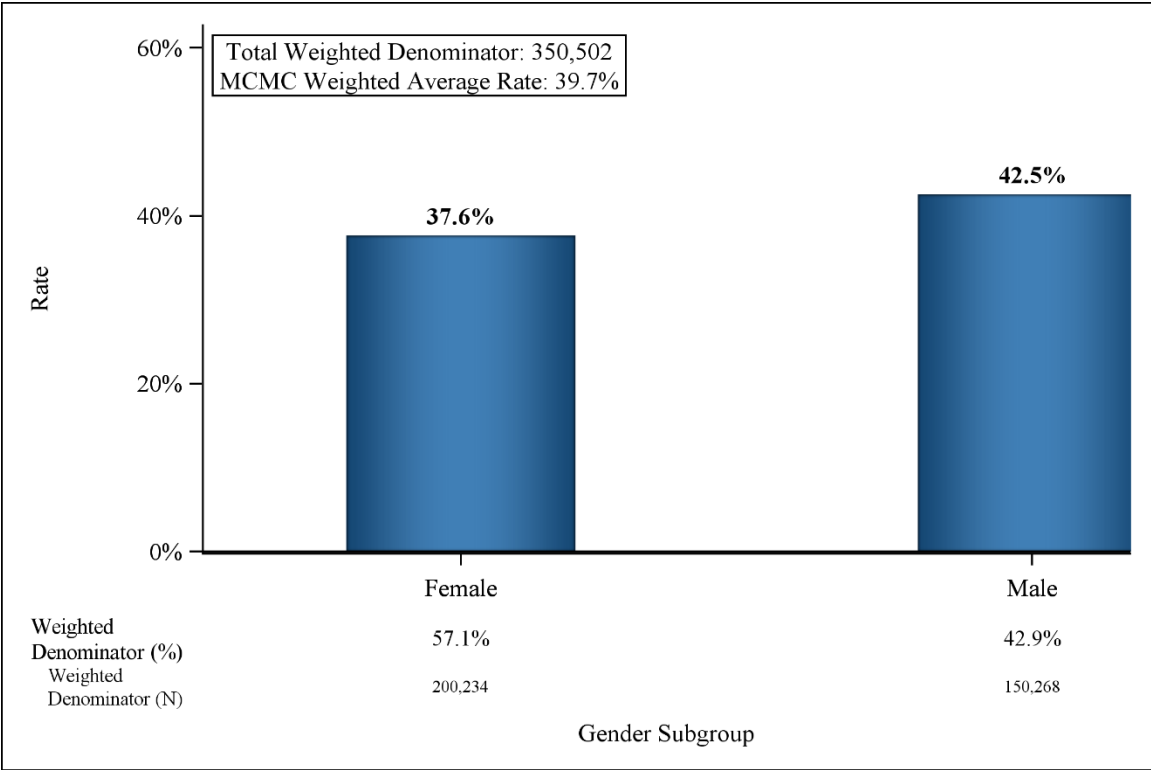
For the age demographic category, beneficiaries in the 60 and older subgroup had the lowest (most favorable) rate of 30.9 percent (i.e., the reference group) and accounted for 30.7 percent of the total weighted denominator for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure.

Compared to the 60 and older subgroup, the age subgroups displayed below demonstrated a disparity with a relative difference greater than or equal to 10 percent:

- ◆ Beneficiaries ages 40 to 59 (55.7 percent of the total weighted denominator)
- ◆ Beneficiaries ages 18 to 39 (13.7 percent of the total weighted denominator)

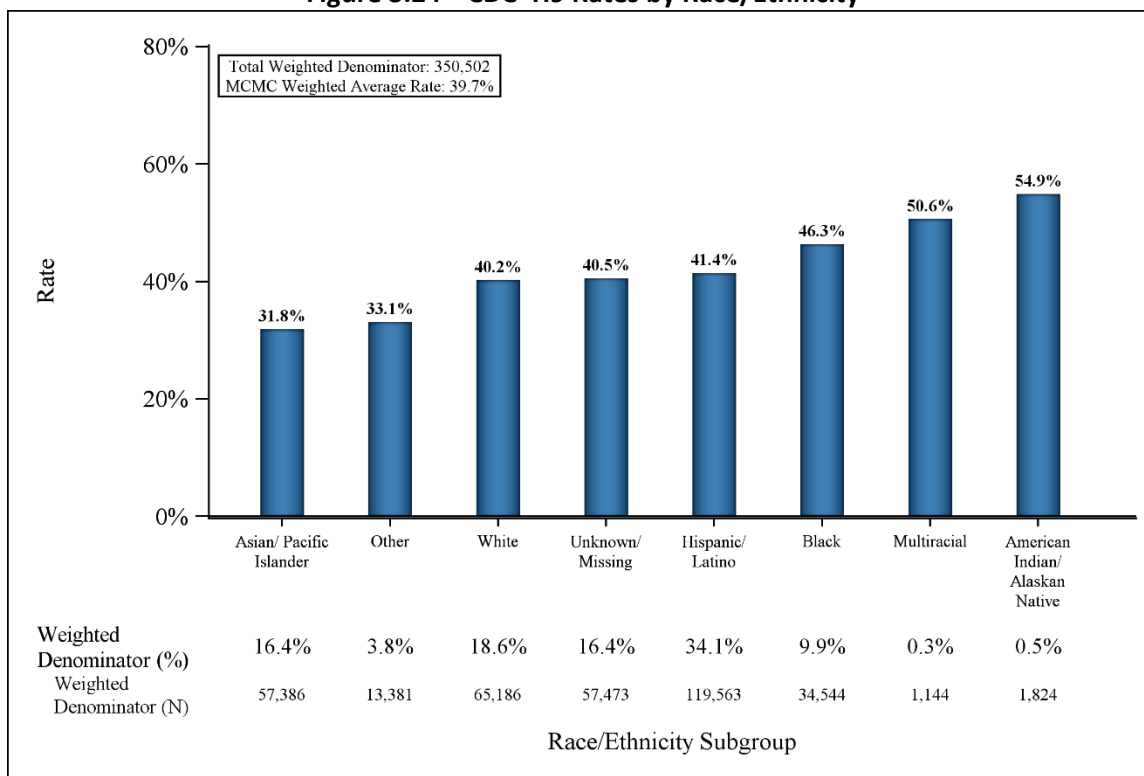
Beneficiaries in the 18 to 39 age subgroup had the highest (least favorable) rate (55.5 percent) and showed a disparity with a relative difference of 79.3 percent.

Figure 3.23—CDC—H9 Rates by Gender



For the gender demographic category, Females had the lowest (most favorable) rate of 37.6 percent (i.e., the reference group), while Males had a rate of 42.5 percent for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure. Compared to Females, Males demonstrated a disparity with a relative difference of 13.0 percent.

Figure 3.24—CDC—H9 Rates by Race/Ethnicity



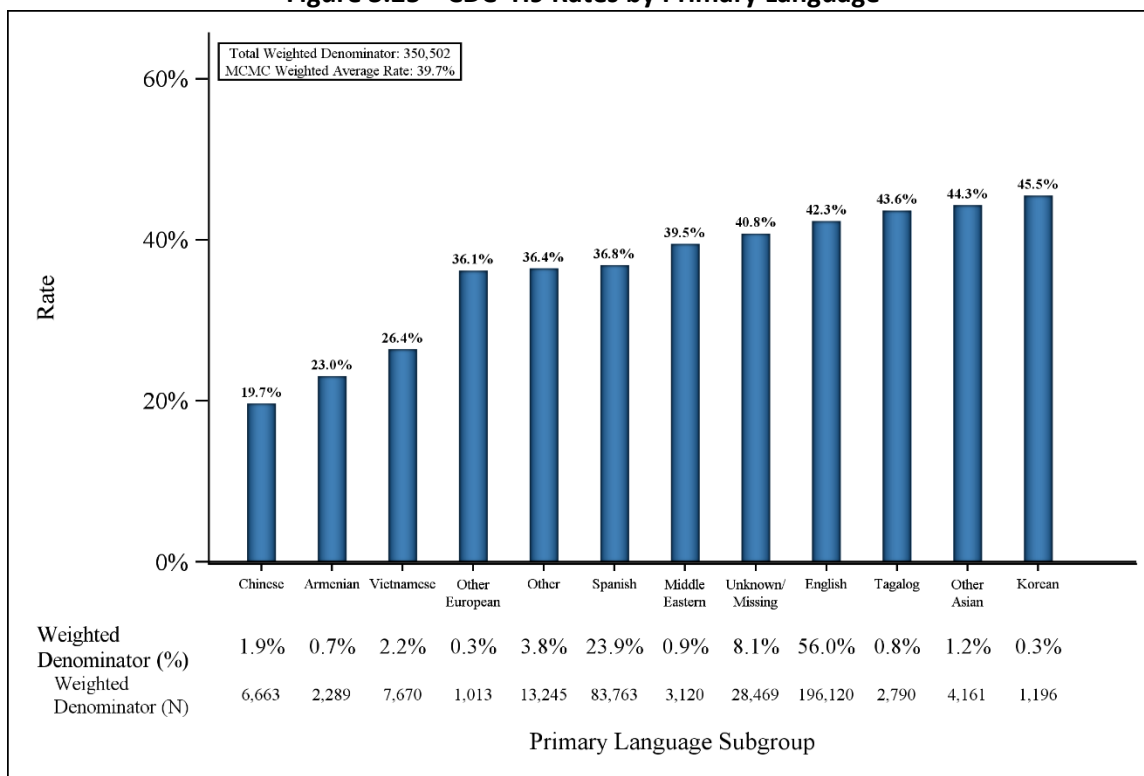
For the race/ethnicity demographic category, beneficiaries in the Asian/Pacific Islander subgroup had the lowest (most favorable) rate of 31.8 percent (i.e., the reference group) and comprised 16.4 percent of the weighted denominator for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure.

Compared to the Asian/Pacific Islander subgroup, the race/ethnicity subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

- ◆ White (18.6 percent of the total weighted denominator)
- ◆ Unknown/Missing (16.4 percent of the total weighted denominator)
- ◆ Hispanic/Latino (34.1 percent of the total weighted denominator)
- ◆ Black (9.9 percent of the total weighted denominator)
- ◆ Multiracial (0.3 percent of the total weighted denominator)
- ◆ American Indian/Alaskan Native (0.5 percent of the total weighted denominator)

American Indians/Alaskan Natives had the highest (least favorable) rate (54.9 percent) and demonstrated a disparity with a relative difference of 72.3 percent.

Figure 3.25—CDC—H9 Rates by Primary Language



For the primary language demographic category, Chinese language speakers had the lowest (most favorable) rate of 19.7 percent (i.e., the reference group) and comprised 1.9 percent of the weighted denominator for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure.

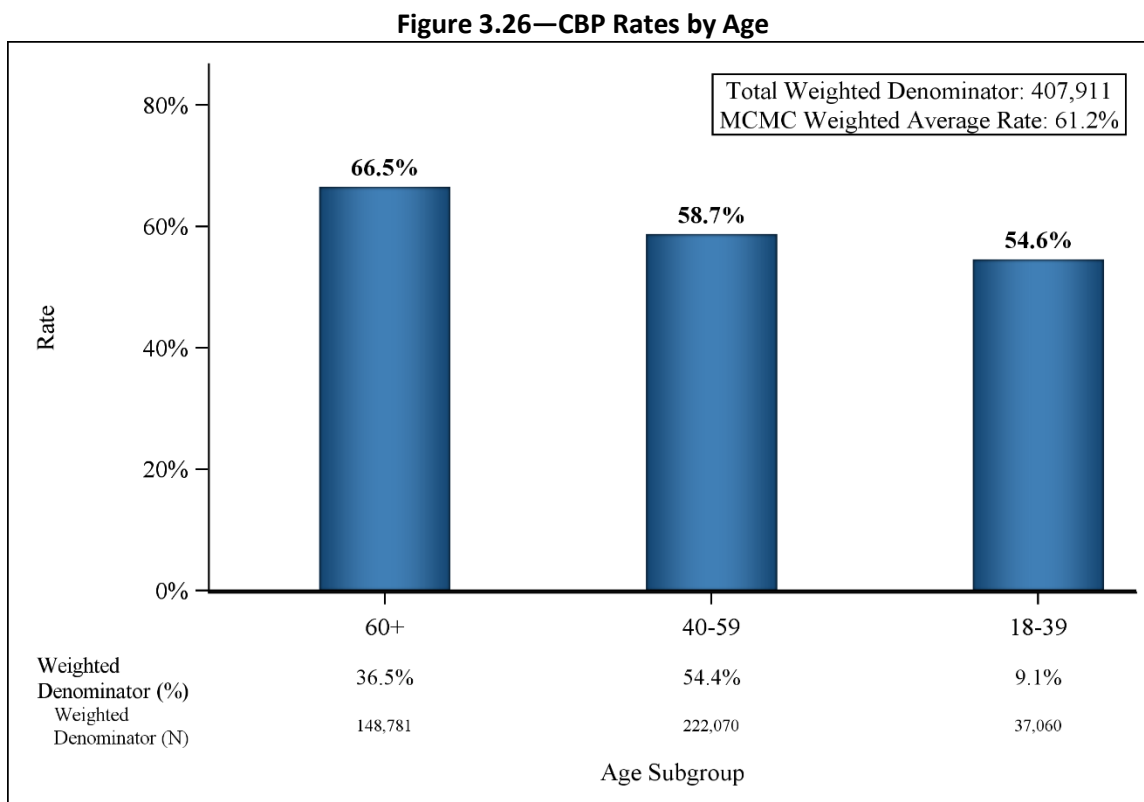
Compared to Chinese language speakers, the primary language subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

- ◆ Armenian (0.7 percent of the total weighted denominator)
- ◆ Vietnamese (2.2 percent of the total weighted denominator)
- ◆ Other European (0.3 percent of the total weighted denominator)
- ◆ Other (3.8 percent of the total weighted denominator)
- ◆ Spanish (23.9 percent of the total weighted denominator)
- ◆ Middle Eastern (0.9 percent of the total weighted denominator)
- ◆ Unknown/Missing (8.1 percent of the total weighted denominator)
- ◆ English (56.0 percent of the total weighted denominator)
- ◆ Tagalog (0.8 percent of the total weighted denominator)
- ◆ Other Asian (1.2 percent of the total weighted denominator)
- ◆ Korean (0.3 percent of the total weighted denominator)

Korean language speakers had the highest (least favorable) rate (45.5 percent) and demonstrated a disparity with a relative difference of 131.3 percent.

Controlling High Blood Pressure

Figure 3.26 through Figure 3.29 display the statewide rates for the *Controlling High Blood Pressure* (CBP) measure for each demographic category.



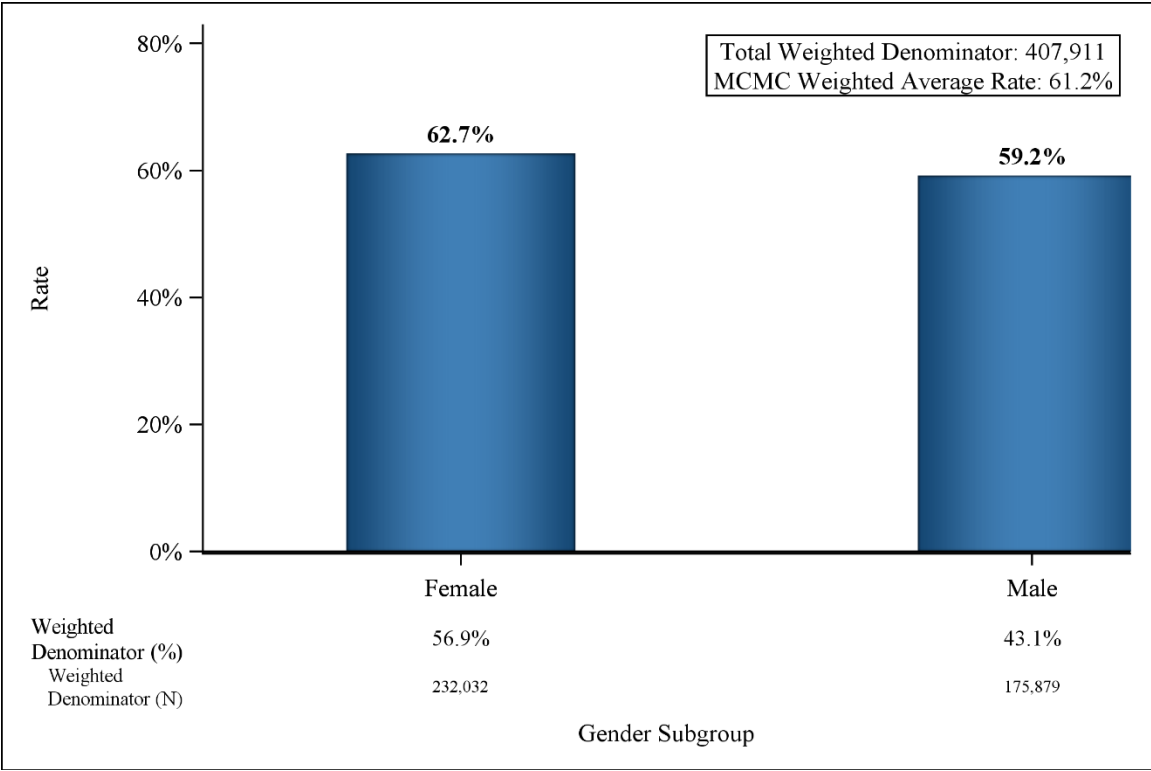
For the age demographic category, beneficiaries in the 60 and older subgroup had the highest rate of 66.5 percent (i.e., the reference group) and accounted for 36.5 percent of the total weighted denominator for the *Controlling High Blood Pressure* measure.

Compared to the 60 and older subgroup, the age subgroups displayed below demonstrated a disparity with relative differences greater than or equal to 10 percent:

- ◆ Beneficiaries ages 40 to 59 (54.4 percent of the total weighted denominator)
- ◆ Beneficiaries ages 18 to 39 (9.1 percent of the total weighted denominator)

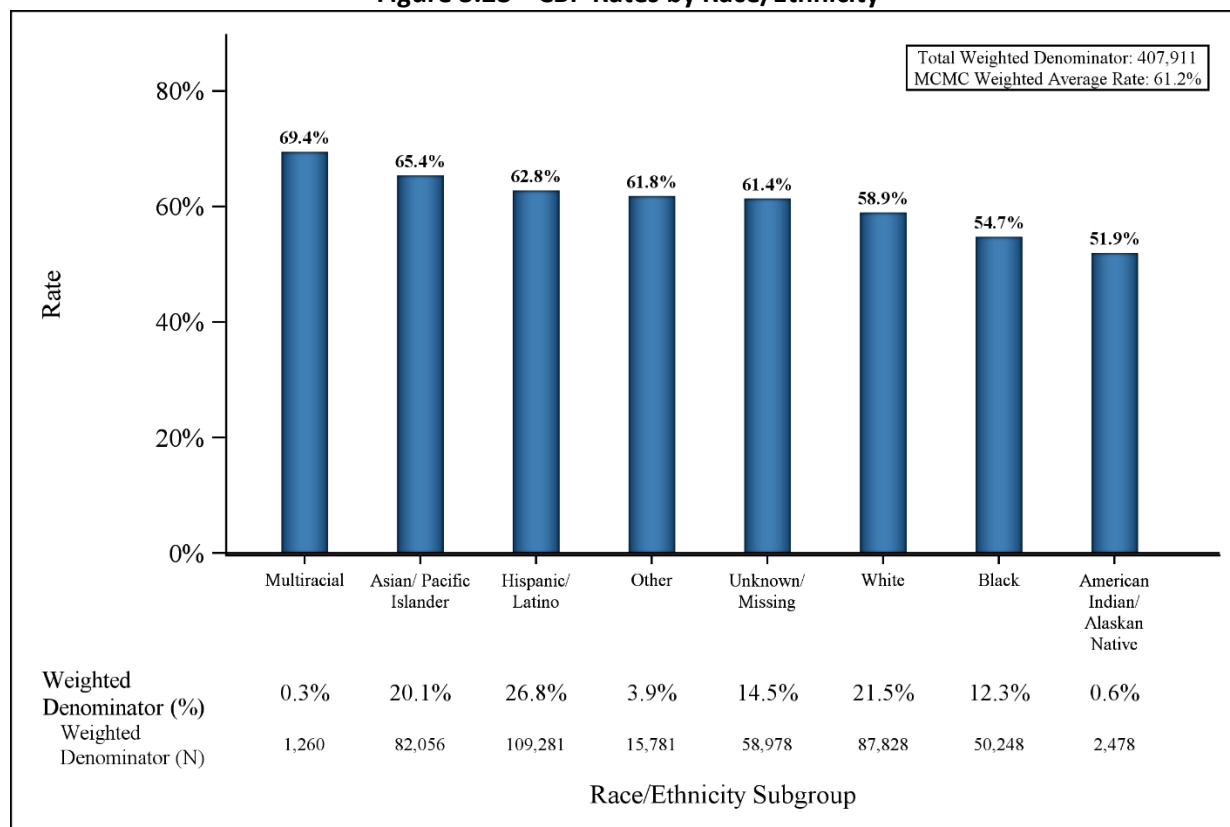
Beneficiaries in the 18 to 39 age subgroup had the lowest rate (54.6 percent) and showed a disparity with a relative difference of 18.0 percent.

Figure 3.27—CBP Rates by Gender



For the gender demographic category, Females had the highest rate of 62.7 percent (i.e., the reference group), while Males had a rate of 59.2 percent for the *Controlling High Blood Pressure* measure. A disparity (relative difference greater than or equal to 10 percent) did not exist for the gender demographic category.

Figure 3.28—CBP Rates by Race/Ethnicity



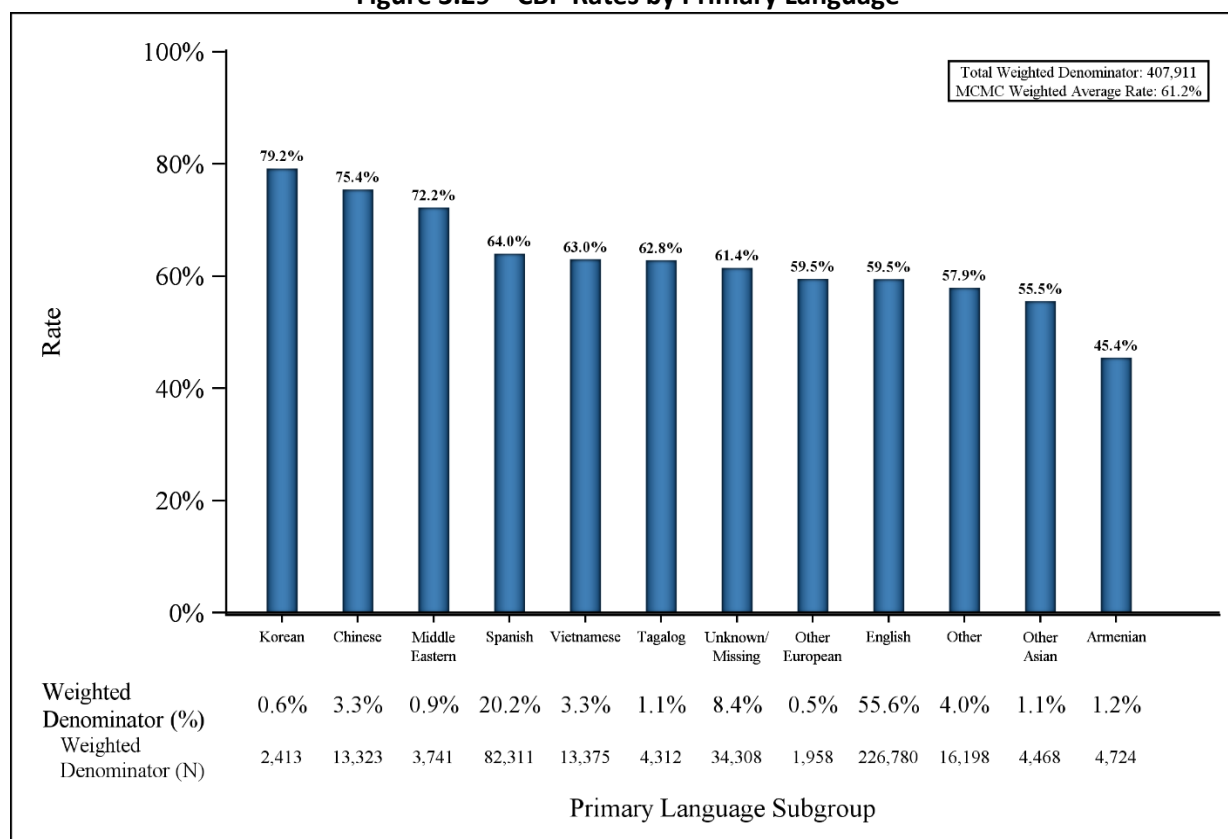
For the race/ethnicity demographic category, beneficiaries in the Multiracial subgroup had the highest rate of 69.4 percent (i.e., the reference group) and comprised 0.3 percent of the weighted denominator for the *Controlling High Blood Pressure* measure. Beneficiaries in the Asian/Pacific Islander subgroup had the second-highest rate (65.4 percent) and did not demonstrate a disparity when compared to the Multiracial subgroup.

Compared to the Multiracial subgroup, the race/ethnicity subgroups displayed below demonstrated disparities, with relative differences greater than or equal to 10 percent:

- ◆ Other (3.9 percent of the total weighted denominator)
- ◆ Unknown/Missing (14.5 percent of the total weighted denominator)
- ◆ White (21.5 percent of the total weighted denominator)
- ◆ Black (12.3 percent of the total weighted denominator)
- ◆ American Indian/Alaskan Native (0.6 percent of the total weighted denominator)

American Indians/Alaskan Natives had the lowest rate (51.9 percent) and demonstrated a disparity with a relative difference of 25.2 percent.

Figure 3.29—CBP Rates by Primary Language



For the primary language demographic category, Korean language speakers had the highest rate of 79.2 percent (i.e., the reference group) and comprised 0.6 percent of the weighted denominator for the *Controlling High Blood Pressure* measure. Chinese language speakers had the second-highest rate (75.4 percent) and did not demonstrate a disparity when compared to Korean language speakers.

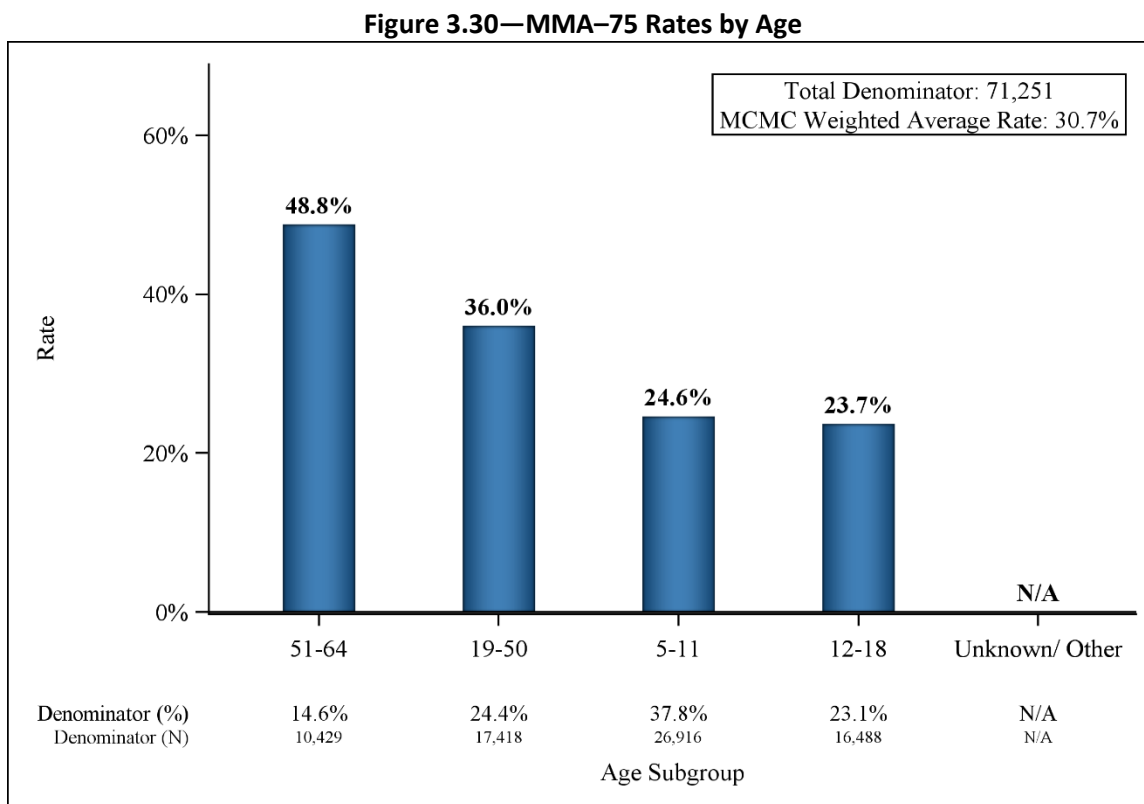
Compared to Korean language speakers, the primary language subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

- ◆ Spanish (20.2 percent of the total weighted denominator)
- ◆ Vietnamese (3.3 percent of the total weighted denominator)
- ◆ Tagalog (1.1 percent of the total weighted denominator)
- ◆ Unknown/Missing (8.4 percent of the total weighted denominator)
- ◆ Other European (0.5 percent of the total weighted denominator)
- ◆ English (55.6 percent of the total weighted denominator)
- ◆ Other (4.0 percent of the total weighted denominator)
- ◆ Other Asian (1.1 percent of the total weighted denominator)
- ◆ Armenian (1.2 percent of the total weighted denominator)

Armenian language speakers had the lowest rate (45.4 percent) and demonstrated a disparity with a relative difference of 42.6 percent.

Medication Management for People With Asthma—Medication Compliance 75% Total

Figure 3.30 through Figure 3.33 display the statewide rates for the *Medication Management for People With Asthma—Medication Compliance 75% Total* (MMA-75) measure for each demographic category.



N/A indicates the denominator was too small (i.e., less than 30) to report a rate.

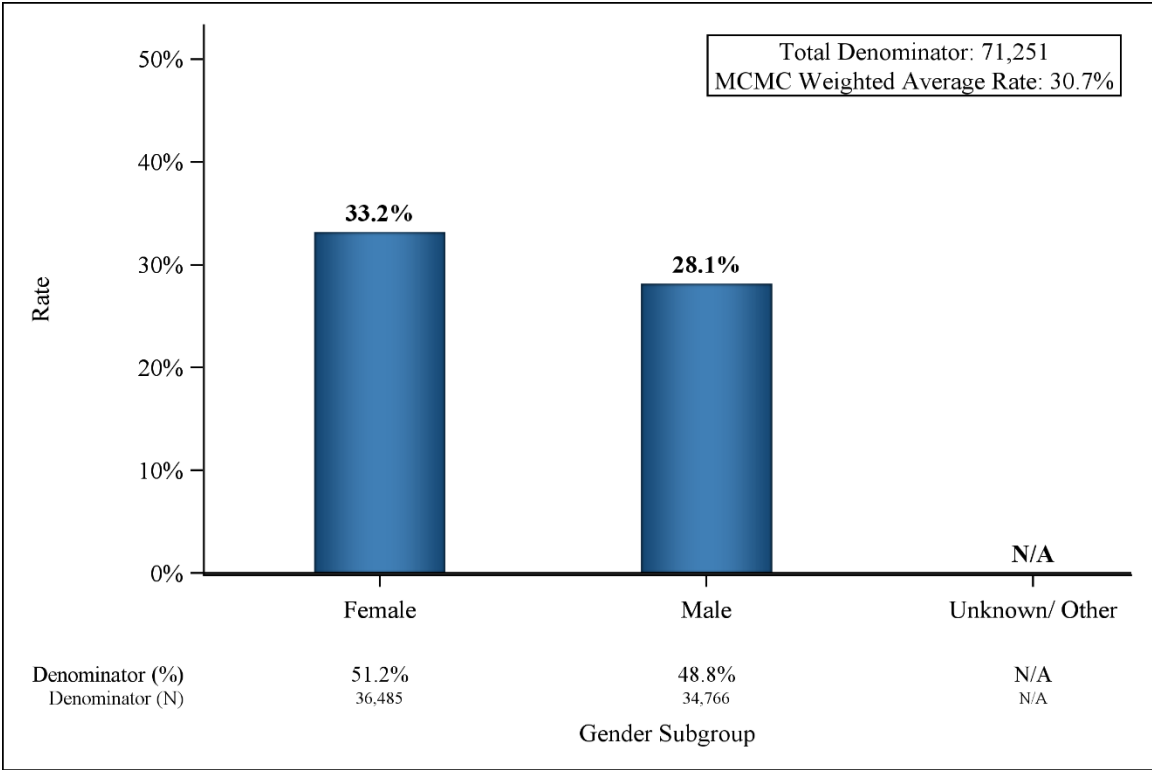
For the age demographic category, beneficiaries in the 51 to 64 subgroup had the highest rate of 48.8 percent (i.e., the reference group) and accounted for 14.6 percent of the denominator for the *Medication Management for People With Asthma—Medication Compliance 75% Total* measure.

Compared to the 51 to 64 subgroup, the age subgroups displayed below demonstrated a disparity with a relative difference greater than or equal to 10 percent:

- ◆ Beneficiaries ages 19 to 50 (24.4 percent of the total denominator)
- ◆ Beneficiaries ages 5 to 11 (37.8 percent of the total denominator)
- ◆ Beneficiaries ages 12 to 18 (23.1 percent of the total denominator)

Beneficiaries in the 12 to 18 age subgroup had the lowest rate (23.7 percent) and showed a disparity with a relative difference of 51.5 percent.

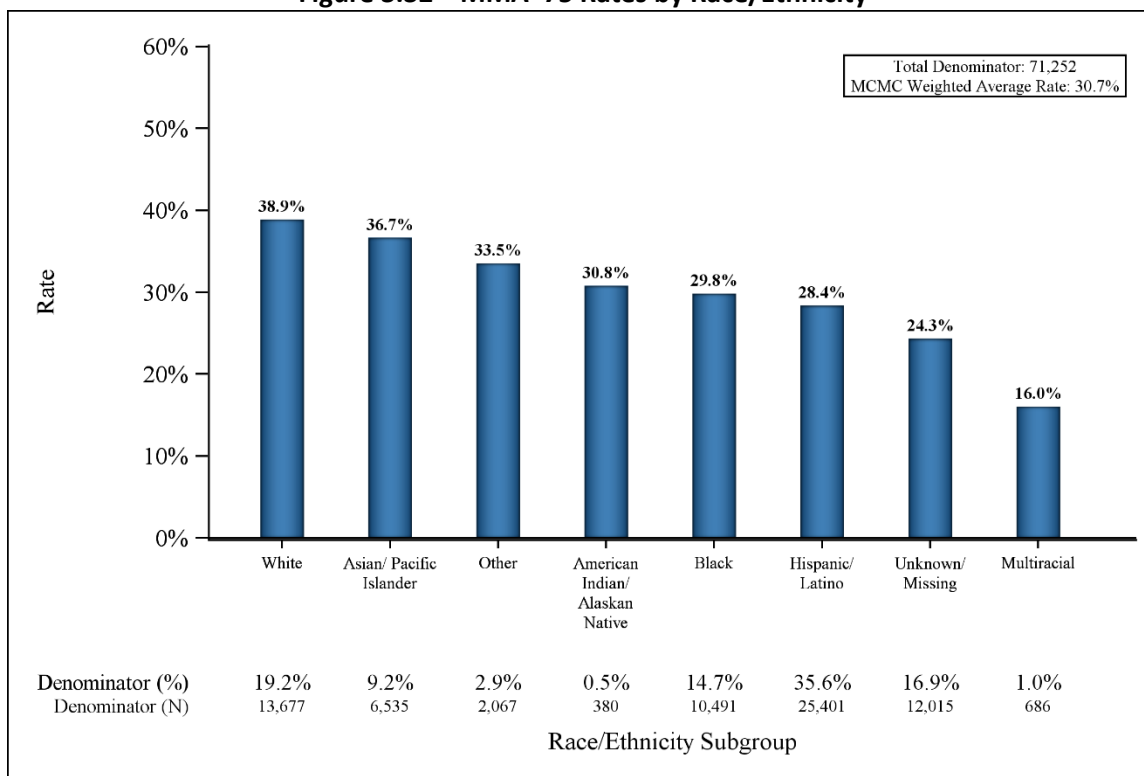
Figure 3.31—MMA-75 Rates by Gender



N/A indicates the denominator was too small (i.e., less than 30) to report a rate.

For the gender demographic category, Females had the highest rate of 33.2 percent (i.e., the reference group), while Males had a rate of 28.1 percent for the *Medication Management for People With Asthma—Medication Compliance 75% Total* measure. Compared to Females, Males demonstrated a disparity for this measure with a relative difference of 15.1 percent.

Figure 3.32—MMA–75 Rates by Race/Ethnicity



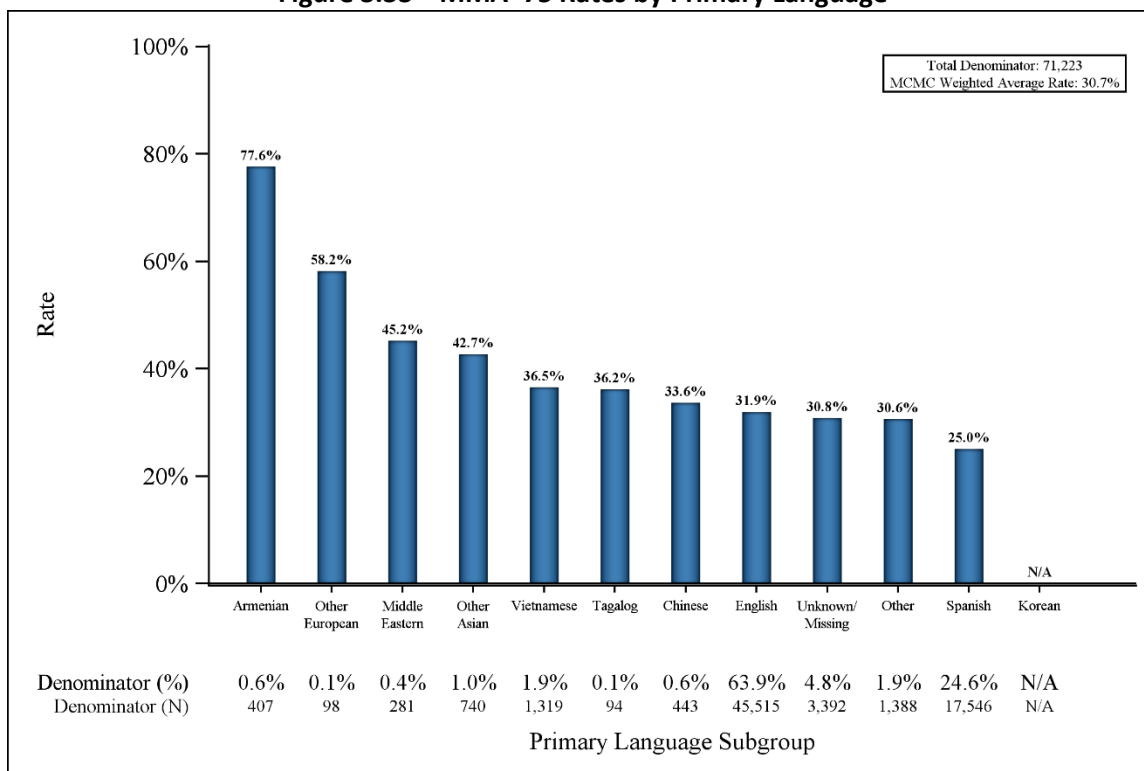
For the race/ethnicity demographic category, beneficiaries in the White subgroup had the highest rate of 38.9 percent (i.e., the reference group) and comprised 19.2 percent of the denominator for the *Medication Management for People With Asthma—Medication Compliance 75% Total* measure. Due to small population sizes for some of the race/ethnicity subgroups, exercise caution when interpreting these results.

Compared to the White subgroup, the race/ethnicity subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

- ◆ Other (2.9 percent of the total denominator)
- ◆ American Indian/Alaskan Native (0.5 percent of the total denominator)
- ◆ Black (14.7 percent of the total denominator)
- ◆ Hispanic/Latino (35.6 percent of the total denominator)
- ◆ Unknown/Missing (16.9 percent of the total denominator)
- ◆ Multiracial (1.0 percent of the total denominator)

The Multiracial subgroup had the lowest rate (16.0 percent) and demonstrated a disparity with a relative difference of 58.8 percent.

Figure 3.33—MMA-75 Rates by Primary Language



N/A indicates the denominator was too small (i.e., less than 30) to report a rate.

For the primary language demographic category, Armenian language speakers had the highest rate of 77.6 percent (i.e., the reference group) and comprised 0.6 percent of the denominator for the *Medication Management for People With Asthma—Medication Compliance 75% Total* measure. Due to small population sizes for several of the primary language subgroups, exercise caution when interpreting these results.

Compared to Armenian language speakers, the primary language subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

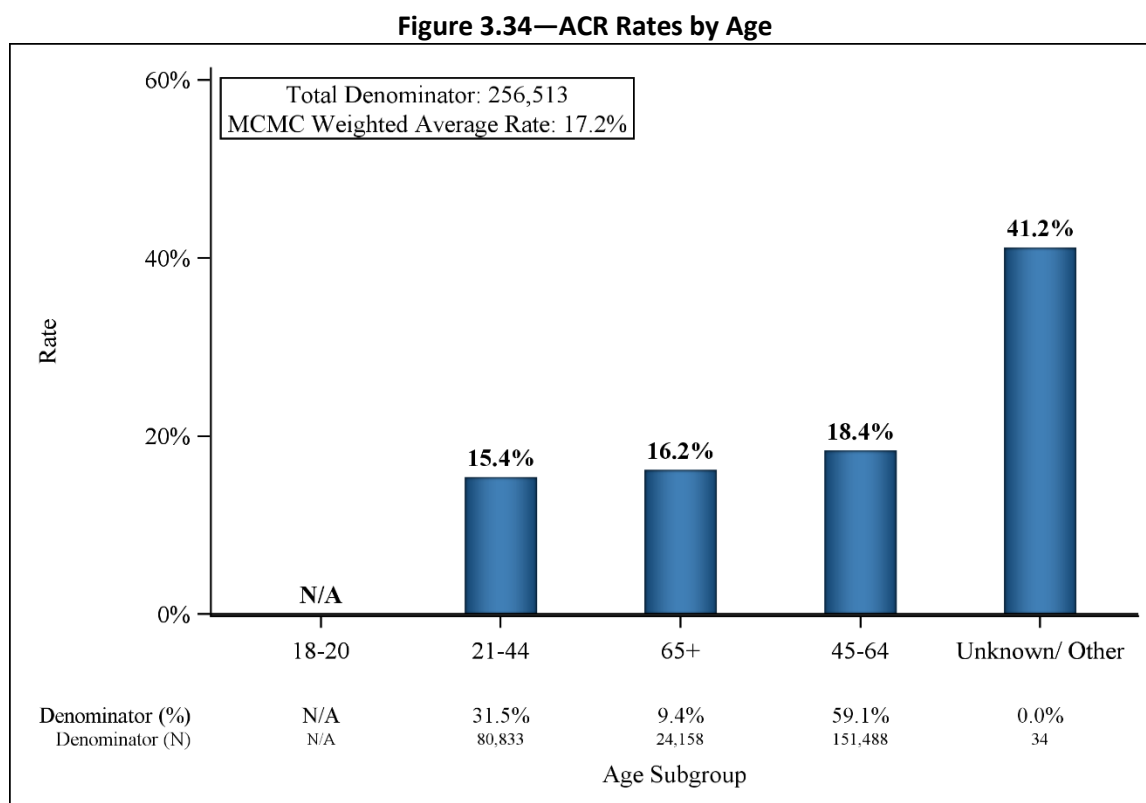
- ◆ Other European (0.1 percent of the total denominator)
- ◆ Middle Eastern (0.4 percent of the total denominator)
- ◆ Other Asian (1.0 percent of the total denominator)
- ◆ Vietnamese (1.9 percent of the total denominator)
- ◆ Tagalog (0.1 percent of the total denominator)
- ◆ Chinese (0.6 percent of the total denominator)
- ◆ English (63.9 percent of the total denominator)
- ◆ Unknown/Missing (4.8 percent of the total denominator)
- ◆ Other (1.9 percent of the total denominator)
- ◆ Spanish (24.6 percent of the total denominator)

Spanish language speakers had the lowest rate (25.0 percent) and demonstrated a disparity with a relative difference of 67.8 percent.

Appropriate Treatment and Utilization

All-Cause Readmissions

Figure 3.34 through Figure 3.37 display the statewide rates for the *All-Cause Readmissions* (ACR) measure for each demographic category. For the *All-Cause Readmissions* measure, a lower rate indicates more favorable performance, and a higher rate indicates less favorable performance.



N/A indicates the denominator was too small (i.e., less than 30) to report a rate.

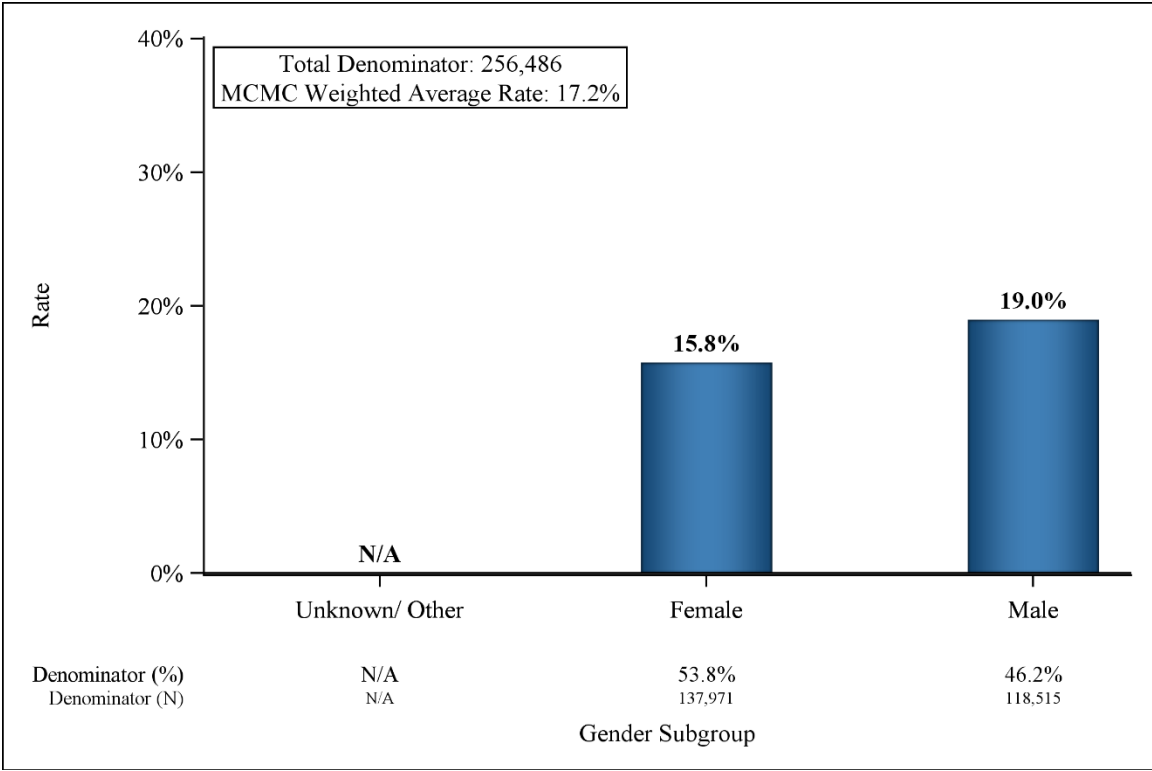
For the age demographic category, beneficiaries in the 21 to 44 subgroup had the lowest (most favorable) rate of 15.4 percent (i.e., the reference group) and accounted for 31.5 percent of the denominator for the *All-Cause Readmissions* measure.

Compared to the 21 to 44 subgroup, the age subgroups displayed below demonstrated a disparity with a relative difference greater than or equal to 10 percent:

- ◆ Beneficiaries ages 45 to 64 (59.1 percent of the total denominator)
- ◆ Unknown/Other (0.0 percent of the total denominator)

Beneficiaries in the Unknown/Other age subgroup had the highest (least favorable) rate (41.2 percent) and showed a disparity with a relative difference of 167.6 percent; however, this result should be interpreted with caution due to small sample size.

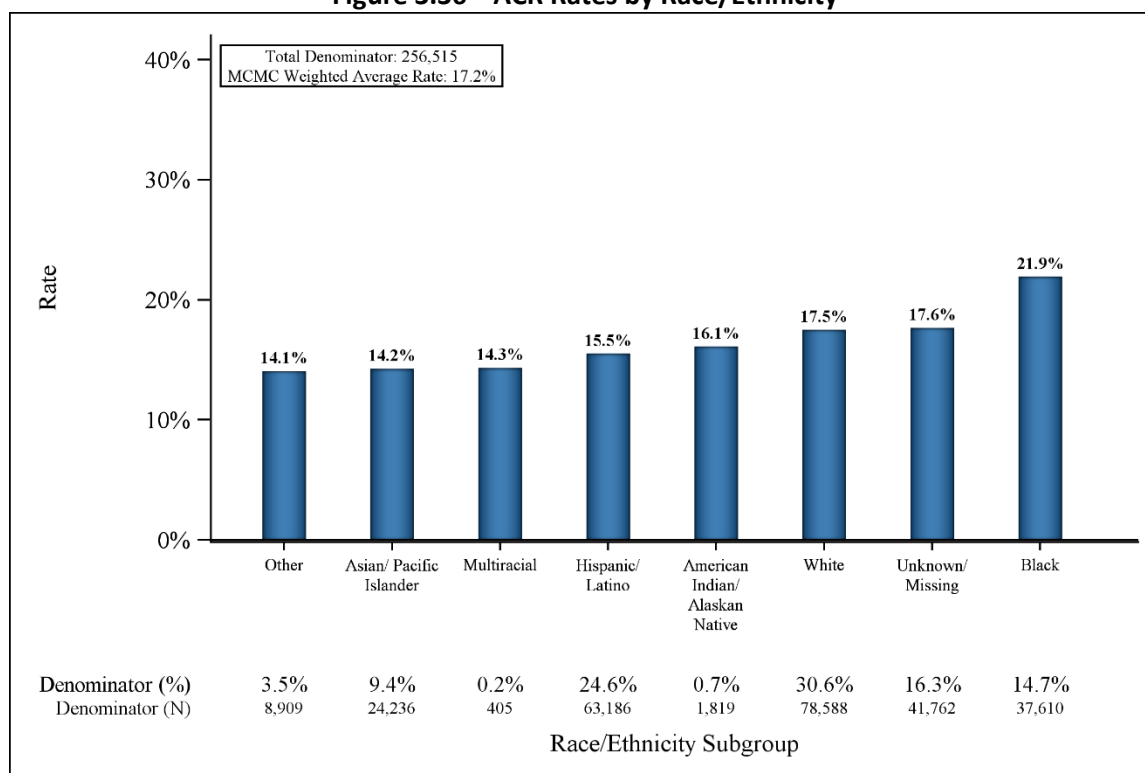
Figure 3.35—ACR Rates by Gender



N/A indicates the denominator was too small (i.e., less than 30) to report a rate.

For the gender demographic category, Females had the lowest (most favorable) rate of 15.8 percent (i.e., the reference group), while Males had a rate of 19.0 percent for the *All-Cause Readmissions* measure. Compared to Females, Males demonstrated a disparity with a relative difference of 20.3 percent.

Figure 3.36—ACR Rates by Race/Ethnicity



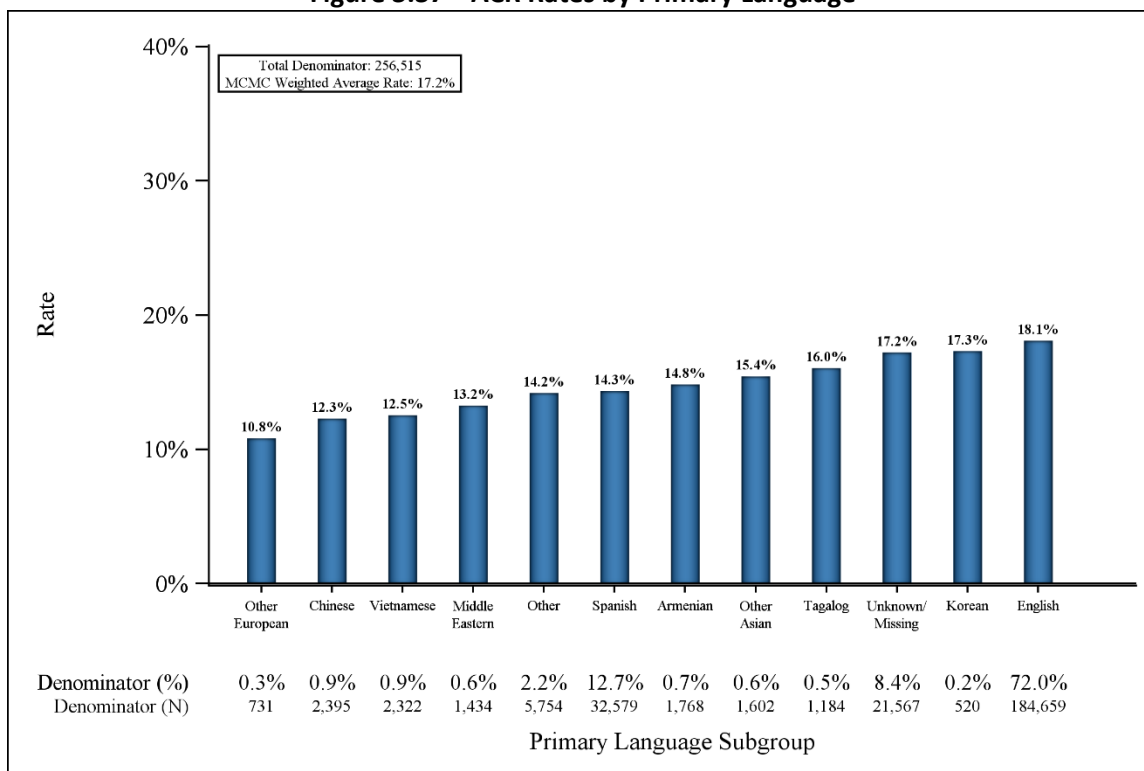
For the race/ethnicity demographic category, beneficiaries in the Other subgroup had the lowest (most favorable) rate of 14.1 percent (i.e., the reference group) and comprised 3.5 percent of the denominator for the *All-Cause Readmissions* measure. Beneficiaries in the Asian/Pacific Islander subgroup had the second-lowest (i.e., more favorable) rate (14.2 percent) and did not demonstrate a disparity when compared to the Other subgroup.

Compared to the Other subgroup, the race/ethnicity subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

- ◆ Hispanic/Latino (24.6 percent of the total denominator)
- ◆ American Indian/Alaskan Native (0.7 percent of the total denominator)
- ◆ White (30.6 percent of the total denominator)
- ◆ Unknown/Missing (16.3 percent of the total denominator)
- ◆ Black (14.7 percent of the total denominator)

Blacks had the highest (least favorable) rate (21.9 percent) and demonstrated a disparity with a relative difference of 56.0 percent.

Figure 3.37—ACR Rates by Primary Language



For the primary language demographic category, Other European language speakers had the lowest (most favorable) rate of 10.8 percent (i.e., the reference group) and comprised 0.3 percent of the denominator for the *All-Cause Readmissions* measure.

Compared to Other European language speakers, the primary language subgroups displayed below demonstrated disparities with relative differences greater than or equal to 10 percent:

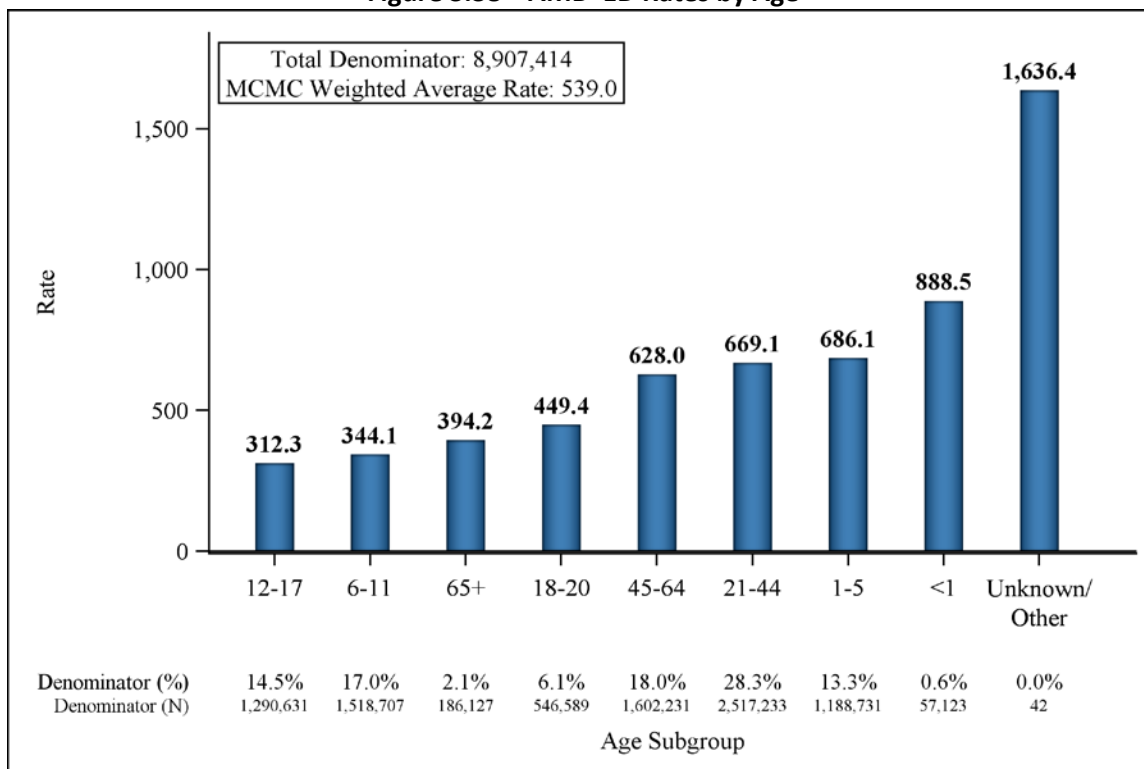
- ◆ Chinese (0.9 percent of the total denominator)
- ◆ Vietnamese (0.9 percent of the total denominator)
- ◆ Middle Eastern (0.6 percent of the total denominator)
- ◆ Other (2.2 percent of the total denominator)
- ◆ Spanish (12.7 percent of the total denominator)
- ◆ Armenian (0.7 percent of the total denominator)
- ◆ Other Asian (0.6 percent of the total denominator)
- ◆ Tagalog (0.5 percent of the total denominator)
- ◆ Unknown/Missing (8.4 percent of the total denominator)
- ◆ Korean (0.2 percent of the total weighted denominator)
- ◆ English (72.0 percent of the total weighted denominator)

English language speakers had the highest (least favorable) rate (18.1 percent) and demonstrated a disparity with a relative difference of 67.3 percent.

Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members

Figure 3.38 through Figure 3.41 display the statewide rates for the *Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members* (AMB–ED) measure for each demographic category. The *Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members* measure is a utilization measure, which measures the volume of services used; higher or lower rates do not necessarily indicate better or worse performance.

Figure 3.38—AMB–ED Rates by Age



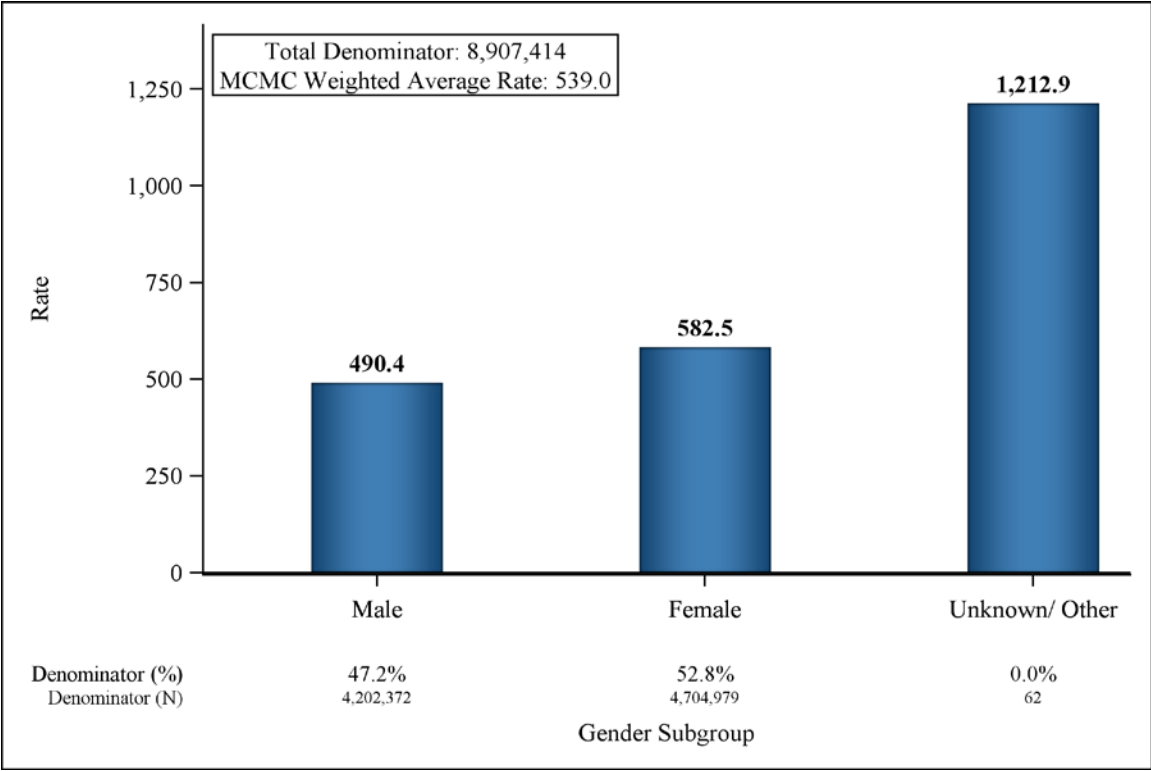
For the age demographic category, the following subgroups demonstrated the lowest rates:

- ◆ Beneficiaries ages 12 to 17 (14.5 percent of the total denominator)
- ◆ Beneficiaries ages 6 to 11 (17.0 percent of the total denominator)
- ◆ Beneficiaries ages 65 and older (2.1 percent of the total denominator)

The following subgroups demonstrated the highest rates:

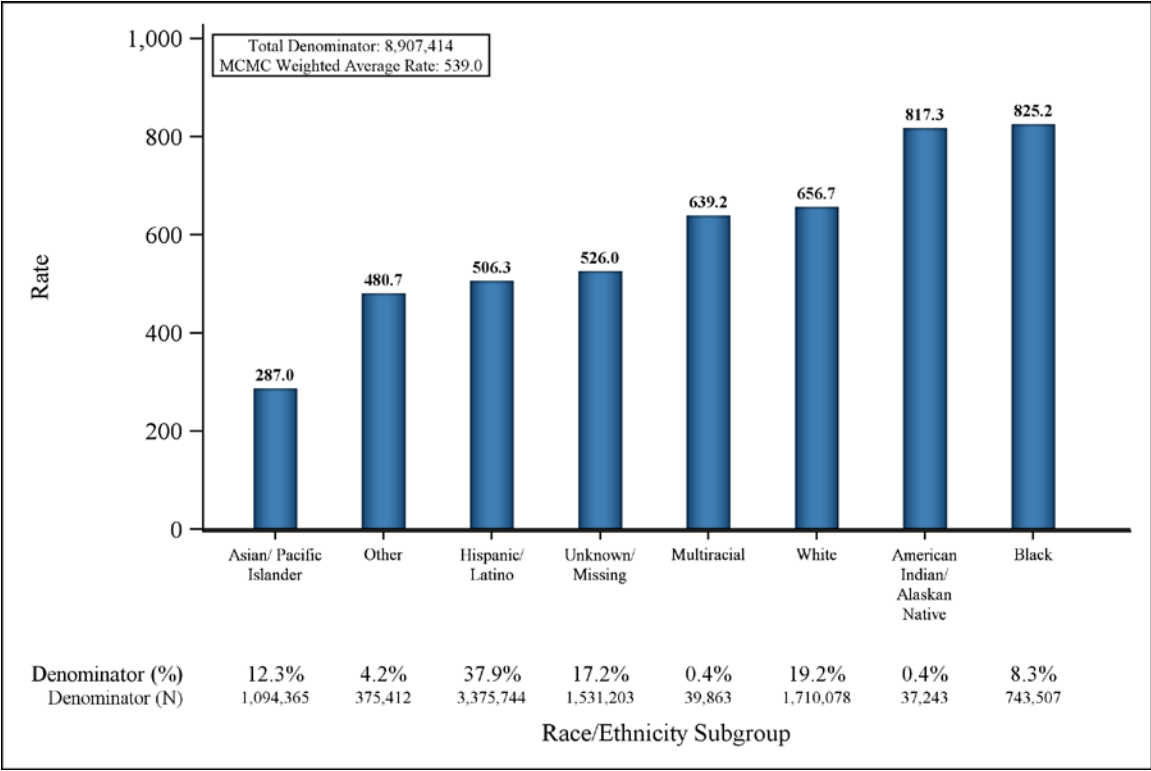
- ◆ Beneficiaries of Unknown/Other age (0.0 percent of the total denominator)
- ◆ Beneficiaries younger than 1 (0.6 percent of the total denominator)
- ◆ Beneficiaries ages 1 to 5 (13.3 percent of the total denominator)

Figure 3.39—AMB–ED Rates by Gender



For the gender demographic category, Males had the lowest rate with 490.4 visits per 1,000 members and Females had a rate of 582.5 visits per 1,000 members. Unknown/Other had the highest rate with 1,212.9 visits per 1,000 members.

Figure 3.40—AMB–ED Rates by Race/Ethnicity



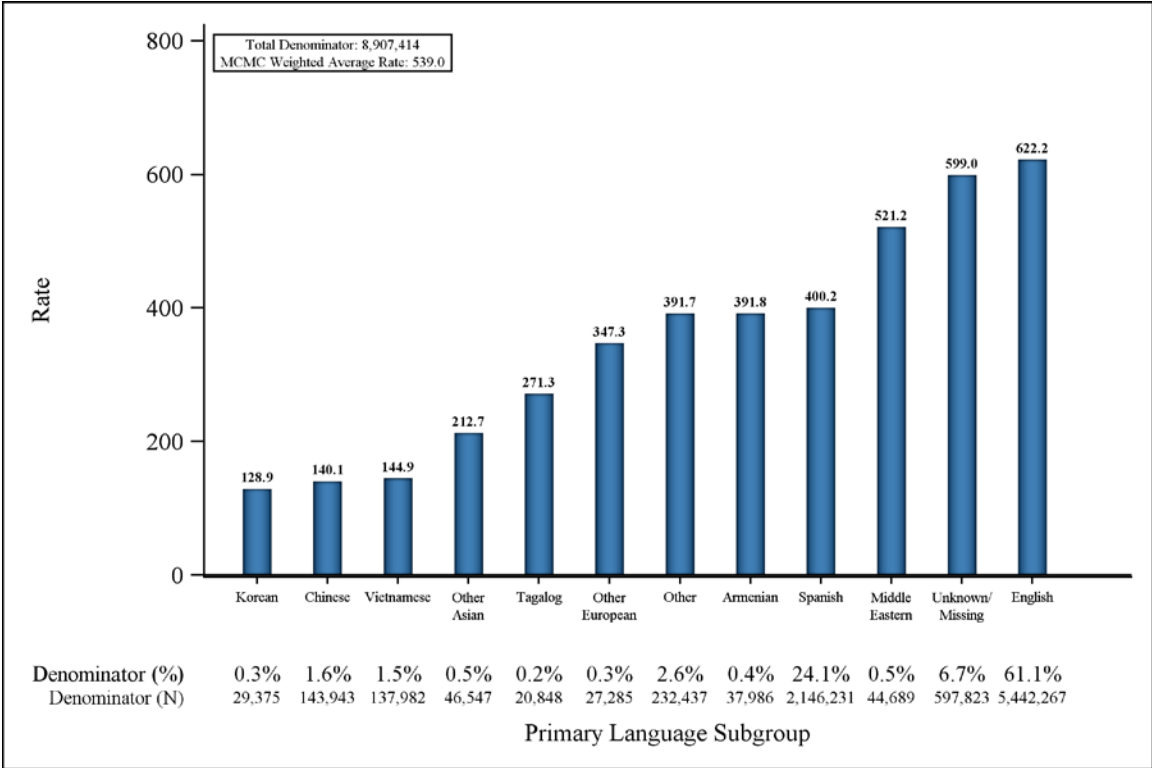
For the race/ethnicity demographic category, the following subgroups demonstrated the lowest rates:

- ◆ Asian/Pacific Islander (12.3 percent of the total denominator)
- ◆ Other (4.2 percent of the total denominator)
- ◆ Hispanic/Latino (37.9 percent of the total denominator)

Conversely, the following subgroups demonstrated the highest rates:

- ◆ Black (8.3 percent of the total denominator)
- ◆ American Indian/Alaskan Native (0.4 percent of the denominator)
- ◆ White (19.2 percent of the total denominator)

Figure 3.41—AMB–ED Rates by Primary Language



For the primary language demographic category, the following subgroups demonstrated the lowest rates:

- ◆ Korean (0.3 percent of the total denominator)
- ◆ Chinese (1.6 percent of the total denominator)
- ◆ Vietnamese (1.5 percent of the total denominator)

Conversely, the following subgroups demonstrated the highest rates:

- ◆ English (61.1 percent of the total denominator)
- ◆ Unknown/Missing (6.7 percent of the total denominator)
- ◆ Middle Eastern (0.5 percent of the total denominator)

County Performance

HSAG examined select demographics for each measure at the county or county group level. The county-level analyses compare select demographic subgroups to the reference group (i.e., subgroup with the highest or most favorable rate) for each county. Counties with denominators less than 30 were removed from the analyses. Please refer to Table 2.4 for a list of counties/county groups included in the analyses.

Note that HSAG does not include county-level graphs in accordance with privacy laws.

Care for Children and Adolescents

Childhood Immunization Status—Combination 3

For the *Childhood Immunization Status—Combination 3* (CIS-3) measure, HSAG compared American Indians/Alaskan Natives and Blacks for the racial/ethnic demographic category and Other European language speakers for the language demographic category to the respective reference group in each county.

CIS-3 Ethnicity: American Indian/Alaskan Native

Only six of the 31 counties/county groups (19 percent) reported rates for American Indians/Alaskan Natives. Three counties demonstrated disparities, with relative differences ranging from 31.7 percent to 58.8 percent. One county group, Northeast, showed a relative difference of less than 10 percent. The remaining two counties/county groups, Los Angeles County and Riverside/San Bernardino county group, demonstrated success stories, with American Indians/Alaskan Natives demonstrating the highest rates.

CIS-3 Ethnicity: Black

Twenty of the 31 counties/county groups (65 percent) reported rates for Blacks for the *Childhood Immunization Status—Combination 3* measure. Seventeen of these 20 counties/county groups (85 percent) demonstrated disparities, with relative differences ranging from 10.4 percent to 55.3 percent. Although Black beneficiaries did not have the highest rate for any county/county group, three counties/county groups, Amador/El Dorado/Placer/Sacramento, Southeast, and Stanislaus, demonstrated relative differences of less than 10 percent when the rates for Blacks were compared to the reference groups in those counties/county groups. For the counties/county groups with rates reported for Blacks, an opportunity exists to explore why Black beneficiaries have lower immunization rates.

CIS-3 Language: Other European

Only Sacramento County reported a rate for Other European language speakers for the *Childhood Immunization Status—Combination 3* measure. In this county, Other European language speakers had a rate of 6.0 percent, demonstrating a disparity when compared to Chinese language speakers (the highest

rate in the county), who had a rate of 94.3 percent. However, due to small population sizes, exercise caution when interpreting this result.

Children and Adolescents' Access to Primary Care Practitioners—12 to 19 Years

For the *Children and Adolescents' Access to Primary Care Practitioners—12 to 19 Years* (CAP-1219) measure, HSAG compared Blacks to the reference group in each county for the racial/ethnic demographic category.

CAP-1219 Race/Ethnicity: Black

Thirty of the 31 counties/county groups (97 percent) reported rates for Blacks for the *Children and Adolescents' Access to Primary Care Practitioners—12 to 19 Years* measure. Eleven of those 30 counties (37 percent) demonstrated disparities with relative differences ranging from 10.5 percent to 18.4 percent. The remaining 19 counties/county groups (63 percent) showed relative difference of less than 10 percent.

Immunizations for Adolescents—Combination 1

For the *Immunizations for Adolescents—Combination 1* (IMA-1) measure, HSAG compared American Indians/Alaskan Natives and Whites for the racial/ethnic demographic category and Other European language speakers for the language demographic category to the respective reference group in each county.

IMA-1 Race/Ethnicity: American Indian/Alaskan Native

Eight of the 31 counties/county groups (26 percent) reported rates for American Indians/Alaskan Natives for the *Immunizations for Adolescents—Combination 1* measure. Five of these eight counties/county groups (63 percent) demonstrated disparities, with relative differences ranging from 21.3 percent to 42.5 percent. The three remaining counties/county groups, Los Angeles County, Region 1, and Northwest, demonstrated success stories, with American Indians/Alaskan Natives showing the highest rates.

IMA-1 Race/Ethnicity: White

Twenty-nine of the 31 counties/county groups (94 percent) reported rates for Whites for the *Immunizations for Adolescents—Combination 1* measure. Twenty-three of the 29 counties/county groups (79 percent), demonstrated disparities, with relative differences ranging from 10.8 percent to 53.6 percent. Five counties/county groups, Alameda, Northeast, San Diego, San Mateo, and Southeast, showed relative differences of less than 10 percent. The remaining county group, Riverside/San Bernardino, demonstrated a success story, with Whites demonstrating the highest rate for this measure. For the counties/county groups that reported rates for Whites, an opportunity exists to explore why White beneficiaries have lower immunization rates.

IMA–1 Language: Other European

Only three of the 31 counties/county groups (10 percent) reported a rate for Other European language speakers. Two of the counties/county groups (67 percent), Southeast and Sacramento, demonstrated disparities, with relative differences of 76.7 percent and 87.2 percent, respectively. In Los Angeles County, Other European language speakers had the highest rate, 100.0 percent, demonstrating a success story. However, due to small population sizes, exercise caution when interpreting this result.

Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life

For the *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* (W34) measure, HSAG compared Whites to the reference group for the racial/ethnic demographic category in each county.

W34 Race/Ethnicity: White

All 31 counties/county groups reported rates for Whites for the *Well-Child Visits in the Third, Fourth, Fifth, and Sixth Years of Life* measure. Twenty-seven of these counties/county groups (87 percent) demonstrated disparities, with relative differences ranging from 14.2 percent to 50.7 percent. Two counties/county groups, Kings and Northwest, showed relative differences of less than 10 percent. The remaining two counties, Imperial County and San Benito County, demonstrated success stories with Whites having the highest rates for this measure.

Women's Health

Cervical Cancer Screening

For the *Cervical Cancer Screening* (CCS) measure, HSAG compared American Indians/Alaskan Natives and Whites for the racial/ethnic demographic category and Korean language speakers for the language demographic category to the respective reference group in each county.

CCS Race/Ethnicity: American Indian/Alaskan Native

Twenty-eight of 31 counties/county groups (90 percent) reported rates for American Indians/Alaskan Natives for the *Cervical Cancer Screening* measure. Thirteen of the 28 counties/county groups (46 percent), demonstrated disparities for American Indians/Alaskan Natives, with relative differences ranging from 14.3 percent to 100.0 percent. Seven counties/county groups showed relative differences of less than 10 percent. The remaining eight counties/county groups demonstrated success stories, with American Indians/Alaskan Natives having the highest rates.

CCS Race/Ethnicity: White

All 31 counties/county groups reported rates for Whites for the *Cervical Cancer Screening* measure. Twenty-eight of the 31 counties/county groups (90 percent) demonstrated disparities, with relative differences ranging from 10.5 percent to 53.3 percent. Two counties/county groups, Amador\El Dorado\Placer\Sacramento and Los Angeles County, showed relative differences of less than 10 percent. The remaining county, Imperial County, demonstrated a success story with Whites having the highest rate. For the counties/county groups with rates reported for Whites, an opportunity exists to explore why White beneficiaries have lower cervical cancer screening rates.

CCS Language: Korean

Fourteen of the 31 counties/county groups (45 percent) reported rates for Korean language speakers for the *Cervical Cancer Screening* measure. Ten of the 14 counties/county groups (71 percent) demonstrated disparities for Korean language speakers, with relative differences ranging from 29.7 percent to 100.0 percent. The remaining four counties/county groups—Alameda, Southwest, San Francisco, and San Mateo—demonstrated success stories with Korean language speakers showing the highest rates. However, due to small population sizes, exercise caution when interpreting this result.

Prenatal and Postpartum Care—Postpartum Care

For the *Prenatal and Postpartum Care—Postpartum Care* (PPC–Pst) measure, HSAG compared American Indians/Alaskan Natives and Blacks for the racial/ethnic demographic category and Middle Eastern language speakers for the language demographic category to the respective reference group in each county.

PPC–Pst Race/Ethnicity: American Indian/Alaskan Native

Ten of the 31 counties/county groups (32 percent) reported rates for American Indians/Alaskan Natives for the *Prenatal and Postpartum Care—Postpartum Care* measure. Seven of the 10 counties/county groups (70 percent) demonstrated disparities, with relative differences ranging from 21.3 percent to 100.0 percent. Two counties/county groups, Northeast and San Joaquin, showed relative differences of less than 10 percent. The remaining county, Orange County, demonstrated a success story, with American Indians/Alaskan Natives having the highest rate.

PPC–Pst Race/Ethnicity: Black

Twenty-three of the 31 counties/county groups (74 percent) reported rates for Blacks for the *Prenatal and Postpartum Care—Postpartum Care* measure. Twenty of the 23 counties/county groups (87 percent) demonstrated disparities, with relative differences ranging from 12.8 percent to 42.8 percent. Although Blacks did not have the highest rate for any county/county group, three counties/county groups—Kings, Region 2, and Southwest—showed relative differences of less than 10 percent when the rates for Blacks were compared to the reference group in those counties/county groups. For the counties/county groups that reported rates for this subgroup, an opportunity exists to explore why Black beneficiaries have lower postpartum care rates.

PPC–Pst Language: Middle Eastern

Five of the 31 counties/county groups (16 percent) reported rates for Middle Eastern language speakers for the *Prenatal and Postpartum Care—Postpartum Care* measure. Four of these counties/county groups demonstrated disparities, with relative differences ranging from 20.0 percent to 100.0 percent. The remaining county, San Diego County, demonstrated a success story with Middle Eastern language speakers having the highest rate.

Prenatal and Postpartum Care—Timeliness of Prenatal Care

For the *Prenatal and Postpartum Care—Timeliness of Prenatal Care* (PPC–Pre) measure, HSAG compared Blacks for the racial/ethnic demographic category, Other European language speakers for the language demographic category, and beneficiaries younger than 18 years of age for the age demographic category to the respective reference groups in each county.

PPC–Pre Race/Ethnicity: Black

Twenty-three of the 31 counties/county groups (74 percent) reported rates for Black beneficiaries for the *Prenatal and Postpartum Care—Timeliness of Prenatal Care* measure. Fifteen of the 23 counties/county groups (65 percent) demonstrated disparities, with relative differences ranging from 12.9 percent to 60.0 percent. Four counties/county groups showed relative differences of less than 10 percent. The remaining four counties/county groups—Kings, Monterey/Santa Cruz, Southwest, and San Diego—demonstrated success stories, with Black beneficiaries having the highest rates.

PPC–Pre Language: Other European

Only Sacramento County reported a rate for Other European language speakers for the *Prenatal and Postpartum Care—Timeliness of Prenatal Care* measure. In this county, Other European language speakers had a rate of 64.5 percent, demonstrating a disparity when compared to Spanish language speakers (the highest rate in the county), who had a rate of 95.8 percent. However, due to small population sizes, exercise caution when interpreting this result.

PPC–Pre Age: <18

Sixteen of the 31 counties/county groups (52 percent) reported rates for women younger than 18 years of age for the *Prenatal and Postpartum Care—Timeliness of Prenatal Care* measure. Eleven of the sixteen counties/county groups (69 percent) demonstrated disparities, with relative differences ranging from 14.5 percent to 63.5 percent. Three counties/county groups—Alameda, Southeast, and Tulare—demonstrated relative differences of less than 10 percent. The remaining two counties/county groups, Region 1 and San Joaquin, showed success stories, with women younger than 18 years of age had the highest rates.

Care for Chronic Conditions

Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)

For the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* (CDC–H9) measure, HSAG compared American Indians/Alaskan Natives and Blacks for the racial/ethnic demographic category, Korean language speakers for the language demographic category, beneficiaries ages 18 to 39 for the age demographic category, and Males for the gender demographic category to the respective reference groups in each county.

CDC–H9 Race/Ethnicity: American Indian/Alaskan Native

Sixteen of the 31 counties/county groups (52 percent) reported rates for American Indians/Alaskan Natives for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure. Twelve of the 16 counties/county groups (75 percent) demonstrated disparities, with relative differences ranging from 19.3 percent to 707.0 percent. One county group, Southwest, showed a relative difference of less than 10 percent. Three counties/county groups—Fresno, Riverside/San Bernardino, and Region 1—demonstrated success stories, with American Indians/Alaskan Natives demonstrating the lowest (most favorable) rates.

CDC–H9 Race/Ethnicity: Black

Twenty-seven of the 31 counties/county groups (87 percent) reported rates for Blacks for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure. Twenty-four of these 27 counties/county groups (89 percent) demonstrated disparities, with relative differences ranging from 13.8 percent to 361.5 percent. Two counties, Madera County and San Diego County, showed relative differences of less than 10 percent. The remaining county, Tulare County, demonstrated a success story, with Black beneficiaries showing the lowest (most favorable) rate.

CDC–H9 Language: Korean

Five of the 31 counties/county groups (16 percent) reported rates for Korean language speakers for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure. In all five counties/county groups, Korean language speakers demonstrated disparities, with relative differences ranging from 90.7 percent to 133.3 percent. For the counties/county groups with rates reported for Korean language speakers, an opportunity exists to explore why Korean beneficiaries have higher (least favorable) rates.

CDC–H9 Age: 18–39

All 31 counties/county groups reported rates for the 18 to 39 age group for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure. Thirty of these 31 counties/county groups (97 percent) demonstrated disparities, with relative differences ranging from 19.6 percent to 236.9 percent. Only one county, Merced County, showed a relative difference of less than 10 percent. For all counties, an opportunity exists to explore why beneficiaries in the 18 to 39 age group have higher (least favorable) rates.

CDC–H9 Gender: Male

All 31 counties/county groups reported rates for Males for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure. Eleven of the 31 counties/county groups (35 percent) demonstrated disparities, with relative differences ranging from 11.6 percent to 69.8 percent. Fifteen counties/county groups (48 percent) showed relative differences of less than 10 percent. The remaining five counties—Madera, San Benito, San Joaquin, San Luis Obispo, and Tulare—demonstrated success stories, with Males showing lower (most favorable) rates.

Controlling High Blood Pressure

For the *Controlling High Blood Pressure* (CBP) measure, HSAG compared American Indians/Alaskan Natives and Blacks for the racial/ethnic demographic category and Armenian language speakers for the language demographic category to the respective reference groups in each county.

CBP Race/Ethnicity: American Indian/Alaskan Native

Nineteen of the 31 counties/county groups (61 percent) reported rates for the American Indians/Alaskan Natives for the *Controlling High Blood Pressure* measure. Fifteen of the 19 counties/county groups (79 percent) demonstrated disparities, with relative differences ranging from 14.9 percent to 100.0 percent. The remaining four counties—Kern, Orange, Santa Barbara, and Tulare—demonstrated success stories, with American Indians/Alaskan Natives demonstrating the highest rates.

CBP Race/Ethnicity: Black

Twenty-eight of the 31 counties/county groups (90 percent) reported rates for Blacks for the *Controlling High Blood Pressure* measure. Twenty-four of the 28 counties/county groups (86 percent) demonstrated disparities, with relative differences ranging from 14.3 percent to 64.3 percent. Three counties, Contra Costa, Merced, and San Joaquin, showed relative differences of less than 10 percent. The remaining county group, Southwest, demonstrated a success story, with Blacks demonstrating the highest rate.

CBP Language: Armenian

Only three of the 31 counties/county groups (10 percent) reported rates for Armenian language speakers for the *Controlling High Blood Pressure* measure. All three counties/county groups demonstrated disparities, with relative differences ranging from 50.5 percent to 100.0 percent. For the counties/county groups with rates reported for Armenian language speakers, an opportunity exists to explore why Armenian language speakers have lower rates. However, due to small population sizes, exercise caution when interpreting this result.

Medication Management for People With Asthma—Medication Compliance 75% Total

For the *Medication Management for People With Asthma—Medication Compliance 75% Total* (MMA–75) measure, HSAG compared Hispanics/Latinos for the racial/ethnic demographic category, Spanish language speakers for the language demographic category, and beneficiaries ages 12 to 18 for the age demographic category to the respective reference groups in each county.

MMA–75 Race/Ethnicity: Hispanic/Latino

All 31 counties/county groups reported rates for Hispanics/Latinos for the *Medication Management for People With Asthma—Medication Compliance 75% Total* measure. Twenty-nine of 31 counties/county groups (94 percent) demonstrated disparities, with relative differences ranging from 19.1 percent to 60.6 percent. The remaining two counties, Imperial County and San Benito County, demonstrated success stories, with Hispanics/Latinos demonstrating the highest rates.

MMA–75 Language: Spanish

Twenty-seven of the 31 counties/county groups (87 percent) reported rates for Spanish language speakers for the *Medication Management for People With Asthma—Medication Compliance 75% Total* measure. Twenty-six of the 27 counties/county groups (96 percent) demonstrated disparities, with relative differences ranging from 10.8 percent to 77.2 percent. The remaining county, Merced County, showed a relative difference of less than 10 percent. For the counties/county groups that reported rates for Spanish language speakers, an opportunity exists to explore why Spanish-speaking beneficiaries have lower rates and widespread disparities.

MMA—75 Age: 12–18

Thirty of the 31 counties/county groups (97 percent) reported rates for the 12 to 18 age group for the *Medication Management for People With Asthma—Medication Compliance 75% Total* measure. All 30 counties/county groups demonstrated disparities, with relative differences ranging from 23.6 percent to 74.1 percent. For the counties/county groups with rates reported for the 12 to 18 age group, an opportunity exists to explore why this age group has lower rates and widespread disparities.

Appropriate Treatment and Utilization

All-Cause Readmissions

For the *All-Cause Readmissions* (ACR) measure, HSAG compared Blacks to the reference group for the racial/ethnic demographic category in each county.

ACR Race/Ethnicity: Black

Twenty-eight of 31 counties/county groups (90 percent) reported rates for Blacks for the *All-Cause Readmissions* measure. Twenty-four of these 28 counties/county groups (86 percent) demonstrated disparities, with relative differences ranging from 21.3 percent to 317.6 percent. The remaining four county groups—Amador\El Dorado\Placer\Sacramento, Monterey\Santa Cruz, Southwest, and Northeast—demonstrated success stories, with Black beneficiaries had lower (most favorable) rates.

Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members

For the *Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members* (AMB–ED) measure, HSAG compared the highest and lowest utilizers for the racial/ethnic demographic category and the language demographic category. For the racial/ethnic demographic category, HSAG compared Asians/Pacific Islanders as the lowest utilizers and Blacks as the highest utilizers in each county. For the language demographic category, HSAG compared Korean language speakers as the lowest utilizers and English language speakers as the highest utilizers in each county. In addition, HSAG compared the younger than 1 age group for the age demographic category to the respective reference group (i.e., the subgroup with the lowest rate) for each county. For the gender demographic category, Females were compared to Males.

AMB–ED Race/Ethnicity: Asian/Pacific Islander and Black

All 31 counties/county groups reported rates for Asians/Pacific Islanders for the *Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members* measure, and 30 of the 31 counties (97 percent) reported rates for Blacks. In all 30 counties/county groups where rates for both Asian/Pacific Islander and Blacks were reported, disparities existed when rates for Asians/Pacific Islanders were compared to the rates for Blacks, with relative differences ranging from 12.7 percent to 82.4 percent. The largest disparities for Blacks existed within Alameda County and San Francisco County when comparing those rates to rates for Asians/Pacific Islanders. In every county/county group with reported rates for Blacks except for two, Blacks demonstrated the highest or second-highest ED utilization rate. For the counties/county groups with rates reported for Blacks, an opportunity exists to explore why Black beneficiaries have higher ED utilization rates.

AMB–ED Language: Korean and English

All 31 counties/county groups (100 percent) reported rates for English speakers for the *Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members* measure, and 19 of the 31 counties/county groups (61 percent) reported rates for Korean speakers. All 19 of the counties/county groups for which rates were reported for both English speakers and Korean speakers demonstrated that English language speakers had the highest ED utilization rates when compared to the rates for Korean language speakers. All 19 of these counties/county groups demonstrated disparities when English language speakers were compared to Korean language speakers, with relative differences ranging from 48.9 percent to 93.6 percent.

AMB–ED Age: < 1 Year of Age

All 31 counties/county groups reported rates for the younger than 1 age group for the *Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members* measure. All 31 counties/county groups (100.0 percent) demonstrated disparities when the rates for the younger than 1 age group were compared to the reference group (lowest rate) in each county/county group, with relative differences ranging from 70.5 percent to 306.0 percent.

AMB–ED Gender: Female

All 31 counties/county groups reported rates for Females and Males for the *Ambulatory Care—Emergency Department (ED) Visits per 1,000 Members* measure. Twenty-nine of the 31 counties/county groups (93.5 percent) demonstrated disparities when Females were compared to Males in those counties/county groups, with relative differences ranging from 11.0 percent to 24.5 percent. Therefore, widespread disparity existed for Females who showed higher rates of ED utilization. One county, San Mateo County, showed a relative difference of less than 10 percent. San Francisco County also reported a gender disparity; however, in this county Males had higher utilization rates than Females.

Comparison of National Evidence on Health Care Disparities

For comparison and informational purposes, HSAG reviewed the Centers for Medicare & Medicaid Services' (CMS') *Racial and Ethnic Disparities by Gender in Health Care in Medicare Advantage* (2017) report and New York's *2015 Health Care Disparities in New York State* report. Although these reports analyze different populations and demographic categories and utilize different methodologies for identifying disparities, both reports analyzed HEDIS measures and some results were consistent with statewide disparity analysis results of Medi-Cal's managed care population.

When compared to CMS' Medicare disparity report, the disparity analysis of the Medi-Cal managed care population showed similarities in racial/ethnic disparities. For example, CMS' report indicated that Blacks had the highest (i.e., least favorable) rate and Asian/Pacific Islanders had the lowest (i.e., most favorable) rate for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure. This finding is consistent with California's statewide results except for two additional races/ethnicities (Multiracial and American Indian/Alaskan Native), which had higher (i.e., less favorable) rates than Blacks. AHRQ's report provides evidence that Hispanics/Latinos and Blacks show persistent disparities for quality measures compared to Whites, while Asians/Pacific Islanders receive similar or better care than Whites.¹⁵ For the Medi-Cal managed care disparity analysis, Asians showed more favorable rates on numerous EAS measures, while Whites, Hispanics/Latinos, and Blacks showed less favorable rates at the statewide level.

As does New York's Medicaid managed care disparity report, California's managed care disparity analysis provides evidence that disparities exist for the race/ethnicity demographic category for outcomes-based, adult health measures such as the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure. Specifically, New York's report indicated that Asians/Pacific Islanders and Hispanic/Latinos showed more favorable rates compared to Whites for the Managing Diabetes domain. At the statewide level, the Medi-Cal managed care analysis also follows this trend for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure, as Asians/Pacific Islanders had the lowest (i.e., more favorable) rate and Whites had the third lowest (i.e., more favorable) rate. Also, New York's report indicated that Blacks had less favorable rates compared to Whites in the Managing Diabetes domain. Again, this is consistent with California's statewide results, which demonstrate that Blacks had higher (i.e., less favorable) rates than Whites for the *Comprehensive Diabetes Care—HbA1c Poor Control (> 9.0 Percent)* measure.¹⁶

New York's Medicaid managed care disparity report also assessed some of the same HEDIS measures which HSAG analyzed in this report for the Child Preventive Care and Preventive Care for Women domains. Both New York's disparity report and the Medi-Cal managed care analysis highlighted racial/ethnic disparities for the Child Preventive Care domain, which included the *Childhood Immunization Status—Combination 3* and *Well Child Visits in the Third, Fourth, Fifth, and Sixth Years*

¹⁵ CMS Office of Minority Health and RAND Corporation. *Racial and Ethnic Disparities by Gender in HealthCare in Medicare Advantage*. Baltimore, MD. 2017.

¹⁶ New York State Department of Health. *2015 Health Care Disparities in New York State*. Available at: https://www.health.ny.gov/health_care/managed_care/reports/docs/demographic_variation_2015.pdf. Accessed on: Sept 25, 2017.

of Life measures. For example, in the Medi-Cal managed care disparity analysis, Hispanics/Latinos showed more favorable rates than Whites for these two childhood quality measures, which is consistent with New York's findings. Regarding women's health measures, some differences existed in the findings between the California and New York reports. For example, Black beneficiaries in Medi-Cal managed care had lower rates than Whites for *Prenatal and Postpartum Care—Postpartum Care* and *Timelines of Prenatal Care* and higher rates than Whites for *Cervical Cancer Screening*. In New York's report, Blacks had similar or better outcomes when compared to Whites in the Preventive Care for Women domain, which included the same three measures as the Women's Health domain in this report, but also included three additional women's measures. Although the Preventive Care for Women domain in the New York report contained additional measures that HSAG did not analyze, it is still important to consider why Black beneficiaries in Medi-Cal managed care have less favorable rates than do Whites for women's health measures.

This report presents evidence of health care disparities based on EAS quality measures among Medi-Cal managed care beneficiaries, primarily regarding age, race/ethnicity, and primary language. At the statewide level, disparities were demonstrated for younger beneficiaries (e.g., women younger than age 29 and beneficiaries in the 18 to 39 age group), especially for measures within the Women's Health and Care for Chronic Conditions domains. For the race/ethnicity demographic category, Blacks and American Indians/Alaskan Natives demonstrated disparities across several measures and domains. For the primary language demographic category, disparities were demonstrated for Other European, English, and Unknown/Missing language speakers across several measures and domains. However, caution must be exercised given data completeness issues and small sample sizes for some subgroups, especially the primary language subgroups, at the statewide and county levels. Having more complete demographic data will allow DHCS to examine these disparities more accurately over time. In addition, DHCS may consider pursuing a more rigorous method for identifying disparities as the HEDIS hybrid sampling methodology was not designed to allow for demographic comparisons. In addition, a more rigorous methodology may allow DHCS to identify disparities to support targeted interventions and tracking over time.

Appendix A. County/County Group Map

Figure A.1 displays a map of the California counties/county groups that HSAG assessed for the disparities analysis.

Figure A.1—California County/County Group Map

