

Chartbook on Healthcare for Asians and Native Hawaiians/Pacific Islanders



NATIONAL HEALTHCARE
QUALITY AND DISPARITIES
REPORT



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National Healthcare Quality and Disparities Report Chartbook on Healthcare for Asians and Native Hawaiians/Pacific Islanders

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HEALTHCARE FOR ASIANS AND NATIVE HAWAIIANS/PACIFIC ISLANDERS

The *National Healthcare Quality and Disparities Report* (QDR) is supported by a series of related chartbooks that:

- Present information on individual measures.
- Are posted on the web (<https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/index.html>).

Chartbooks cover different topics, such as:

- Access to care.
- Healthcare priority areas.
- Priority populations.

For a complete list and links to National Healthcare Quality & Disparities Report Chartbooks, go to <https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/index.html>.

QDR Healthcare Priority Areas

- Patient Safety: Making care safer by reducing harm caused in the delivery of care
- Patient- and Family-Centered Care: Ensuring that each person and family is engaged as partners in their care
- Care Coordination: Promoting effective communication and coordination of care
- Effective Treatment: Promoting the most effective prevention and treatment practices for the leading causes of mortality, starting with cardiovascular disease
- Healthy Living: Working with communities to promote wide use of best practices to enable healthy living
- Care Affordability: Making quality care more affordable for individuals, families, employers, and governments by developing and spreading new healthcare delivery models

Five of these priorities are covered in this chartbook. Care Coordination was addressed separately in the Chartbook on Care Coordination, available at <https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/carecoordination/index.html>.

Other Chartbooks About AHRQ's Priority Populations

AHRQ's priority populations are specified in the Healthcare Research and Quality Act of 1999 ([Public Law 106-129](#)). Existing chartbooks for priority populations include:

- Rural Healthcare.
- Healthcare for Blacks.
- Women's Healthcare.
- Hispanic Healthcare.

Goals of the Chartbook on Healthcare for Asians and Native Hawaiians/Pacific Islanders

This chartbook presents select demographics for Asians and Native Hawaiians/Pacific Islanders (NHPIs) and summarizes trends in healthcare and disparities by race. It is organized into three parts:

- Overview
- Demographics of the Asian and NHPI populations
- Summary of trends in healthcare for Asian and NHPI populations related to access to healthcare, quality of care, and patient experience of care

In referring to racial groups in this chartbook:

- Asian refers to Asians residing in the United States, whether they were born in the United States or foreign born (OMB, 1997).
- NHPI refers to people residing in the United States with origins in any of the original peoples of Hawaii, Guam, Samoa, or the Pacific Islands (OMB, 1997).

These terms are based on the U.S. Census definitions for defining racial groups. Prior to 1997, the U.S. Census Bureau recognized a single race called Asian or Pacific Islander and abbreviated API. Beginning in 1997, the Office of Management and Budget (OMB) and U.S. Census Bureau separated Asians from Native Hawaiians and Pacific Islanders into two separate racial groups.

In the QDR, a disparity is a statistically significant difference that is also a relative difference of at least 10 percent. Disparities are identified in this chartbook by comparing the Asian or NHPI group with the reference group, which in this chartbook is the White group. When the comparison group is defined as Hispanic or non-Hispanic, the reference group is non-Hispanic White. Otherwise, the reference group is White without respect to Hispanic ethnicity.

AHRQ identifies meaningful differences between groups based on two criteria:

- First, a statistical test of the absolute difference in rates must be significant at the $p < 0.05$ level in a two-tailed test.
- Second, the relative difference between the comparison group and the reference group must be at least 10 percent. For example, if the comparison group had a 22% rate and the reference group had a 20% rate, the relative difference would be $([22\% - 20\%]/20\%) * 100 = 10\%$. For further information on the QDR methodology, see National Healthcare Quality and Disparities Report introduction and methods. Rockville, MD: Agency for Healthcare Research and Quality; September 2019. AHRQ Publication No. 19-0070-EF. <https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqdr/2018qdr-intro-methods.pdf>.

KEY FINDINGS OF THE CHARTBOOK ON HEALTHCARE FOR ASIANS AND NHPIs

- Asian and NHPI populations continue to be among the higher performing groups on patient safety measures.
 - As more specific data from subpopulations of both groups become available, important differences in measure performance may emerge.
- Asian and NHPI populations experience disparities in several areas related to person- and family-centered care, access to care, experience with home healthcare, and language assistance.
- Asian and NHPI populations with HIV were less likely than Whites to know their serostatus.

Grouping all Asian adults into a single category ignores important differences that exist among subpopulations. For example, there is wide variation in income/poverty levels, educational attainment, and time since coming to the United States. The Resources slide at the end provides resources for improving culturally appropriate care.

PART 1: OVERVIEWS OF THE REPORT AND THE ASIAN AND NHPI POPULATIONS

Quality and Disparities Report

The QDR is an annual report to Congress mandated in the Healthcare Research and Quality Act of 1999 ([P.L. 106-129](#)). The QDR provides a comprehensive overview of the quality of healthcare received by the general U.S. population and disparities in care experienced by different racial, ethnic, and socioeconomic groups.

The purpose of the reports is to assess the performance of our healthcare system and to identify areas of strength and weaknesses along themes including access to Care, quality of Care, and QDR priorities.

The report is based on more than 260 measures of quality and disparities covering a broad array of healthcare services and settings. Clinical quality measure data are generally available through 2016; more recent data are used as available. The report is produced with the help of an Interagency Work Group led by AHRQ and submitted on behalf of the Secretary of Health and Human Services.

Chartbook Content

This chartbook organizes QDR measures by access to care and quality of care priorities. The QDR Introduction and Methods contains information about methods used in the chartbook and is available at <https://www.ahrq.gov/sites/default/files/wysiwyg/research/findings/nhqdr/2018qdr-intro-methods.pdf>. A data query tool available at <http://nhqrnet.ahrq.gov/inhqdr/data/query> provides access to all data tables.

Key Metrics Used in the Chartbook

- Trends assess the rate of change over time (typically 2002-2016) for a population.
- Disparities assess whether measure estimates for two populations differ at the most recent time point.
- Change in Disparities assesses whether the rates of change over time for two populations differ.

Trends are based on regression analysis for measures with at least 4 time points. Change in disparities is also based on regression analysis.

Data Collection Standards for Race, 2011

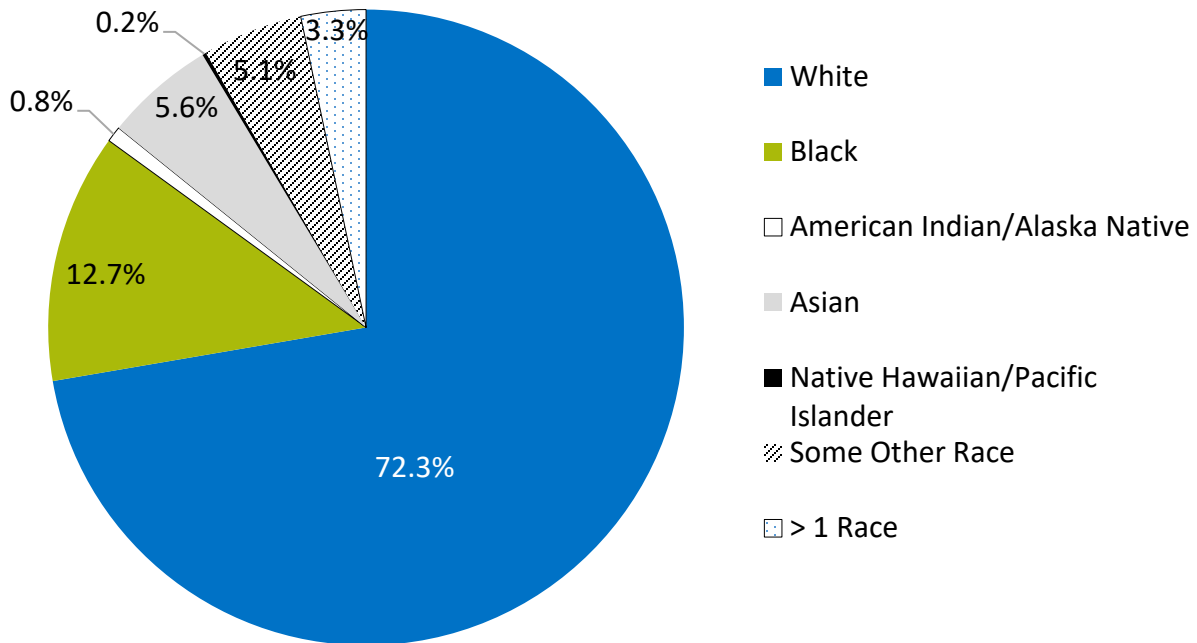
The Office of Management and Budget (OMB) standard permits selection of one or more among 14 racial categories:

- The first three (White, Black or African American, American Indian or Alaska Native) are not subdivided.
- Asian has 7 subcategories:
 - Asian Indian
 - Chinese
 - Filipino
 - Japanese
 - Korean
 - Vietnamese
 - Other Asian
- Native Hawaiian and Pacific Islander has 4 subcategories:
 - Native Hawaiian
 - Guamanian or Chamorro
 - Samoan
 - Other Pacific Islander

In the American Community Survey (ACS), a person is counted as Asian alone if he or she identifies with at least one of the Asian subpopulations listed but does not identify with any other major race category, such as White. People who identify as both Asian and White are counted as Asian in combination with another race. The same is true for people identifying with at least one NHPI subpopulation.

In the 2017 ACS, 15.8% of people identifying as Asian also identified with another race, and 56.8% of people identifying as NHPI also identified with another race. Data are available in the 2017 ACS 1 Year Estimates – U.S. Census Bureau (<https://data.census.gov/cedsci/>).

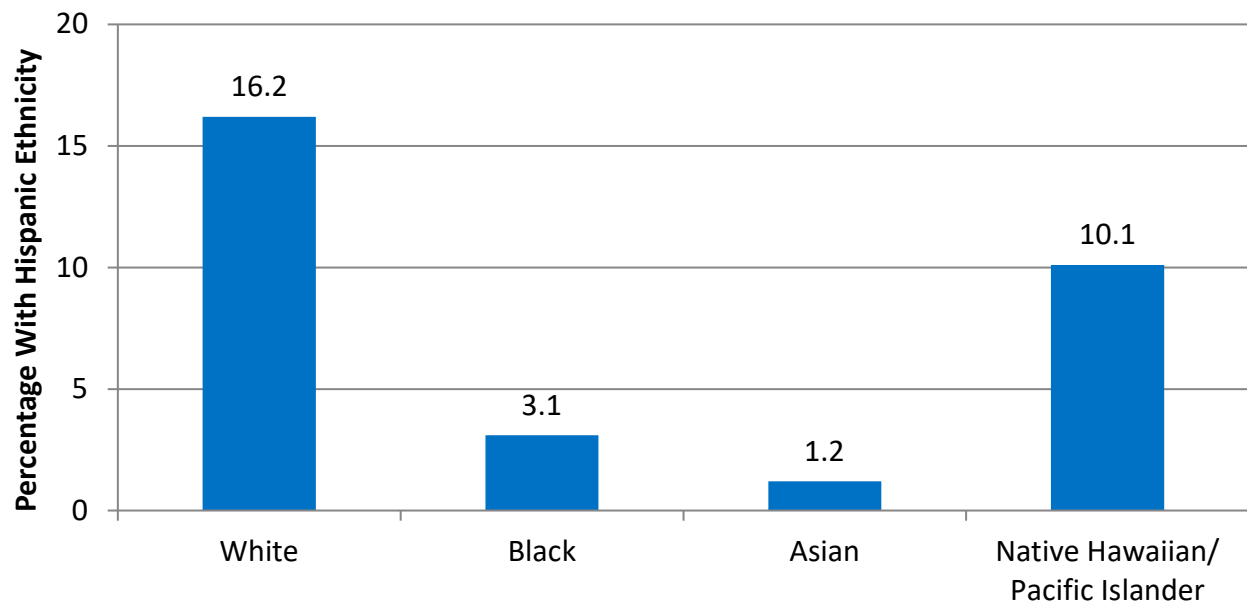
Racial Makeup of the U.S. Population, 2017



Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau ([https://data.census.gov/cedsci/table?q=United States](https://data.census.gov/cedsci/table?q=United+States)), Table DP05.

Note: All race categories exclude people reporting two or more races except the “>1 Race” category.

Ethnic Makeup of the U.S. Population, 2017



Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

- People of any race may also claim Hispanic, Latino, or Spanish origin or ethnicity.

PART 2: DEMOGRAPHICS OF ASIANS AND NHPIS

Health of the Asian and NHPI Populations in the United States

Asians and NHPIS have lower rates of mortality than other racial and ethnic groups for several top causes of death in the United States (Artiga, et al., 2016). The health of Asians and NHPIS is influenced by various social determinants,ⁱ such as:

- Socioeconomic status,
- Educational attainment,
- Time in the United States,
- English proficiency,
- Household size, and
- Other cultural characteristics.

Asians and NHPIS have lower death rates for diabetes, heart disease, and cancer.

Growth Rate of Asian and NHPI Populations

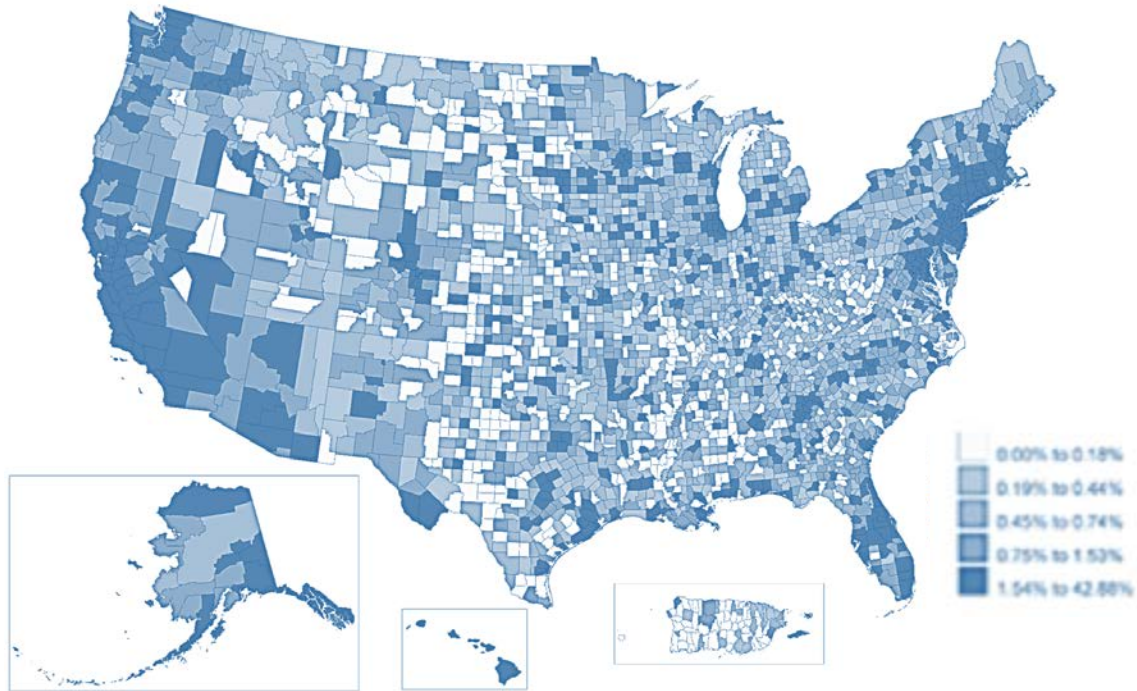
Asians are projected to be the second fastest growing racial/ethnic group in the United States in the next few decades:

- Rapid growth in the Asian population is driven by immigration rather than births.
- NHPIS are also among the fastest growing racial groups (Census Bureau, 2019).

The fastest growing racial or ethnic group is “Two or More Races,” driven by natural increase (the excess of births over deaths); next is “Asian Alone,” with international migration the primary driver. Third is “Hispanic,” with natural increase the primary driver.

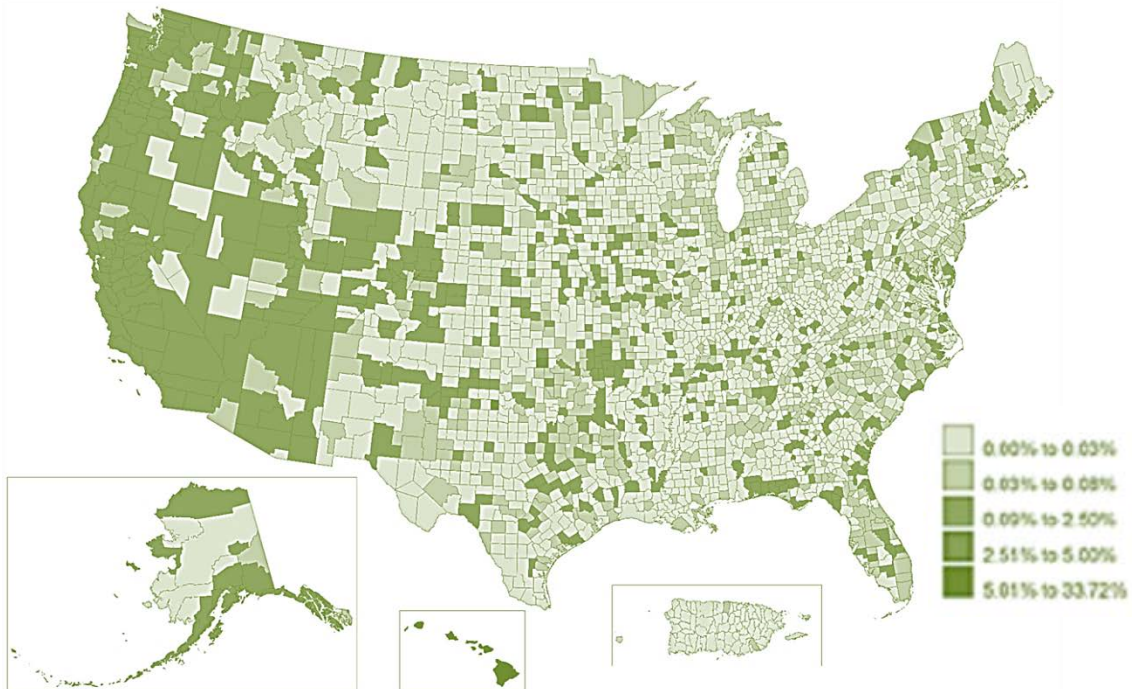
ⁱ Social determinants of health are economic and physical conditions in the environments in which people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes and risks (Kelly, 2015).

Geographic Distribution of the U.S. Asian Population, 2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Table B02001.
Note: Data include individuals reporting one race alone, not in combination with any other race.

Geographic Distribution of the U.S. NHPI Population, 2017



Source: U.S. Census Bureau, 2013-2017 American Community Survey 5-Year Estimates, Table B02001.
Note: Data include individuals reporting one race alone, not in combination with any other race.

Geographic Distribution of Asian and NHPI Populations

Ten States are home to 72.3% of Asian and NHPI populations:

- California (31.4%)
- New York (9.3%)
- Texas (7.4%)
- New Jersey (4.7%)
- Illinois (3.7%)
- Hawaii (3.7%)
- Washington (3.6%)
- Florida (3.2%)
- Virginia (2.9%)
- Massachusetts (2.4%)

Data are from the 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau. Data include individuals reporting one race alone. Individuals reporting two or more races make up 3.3% of the total population.

Asian and NHPI Populations Compared, 2017

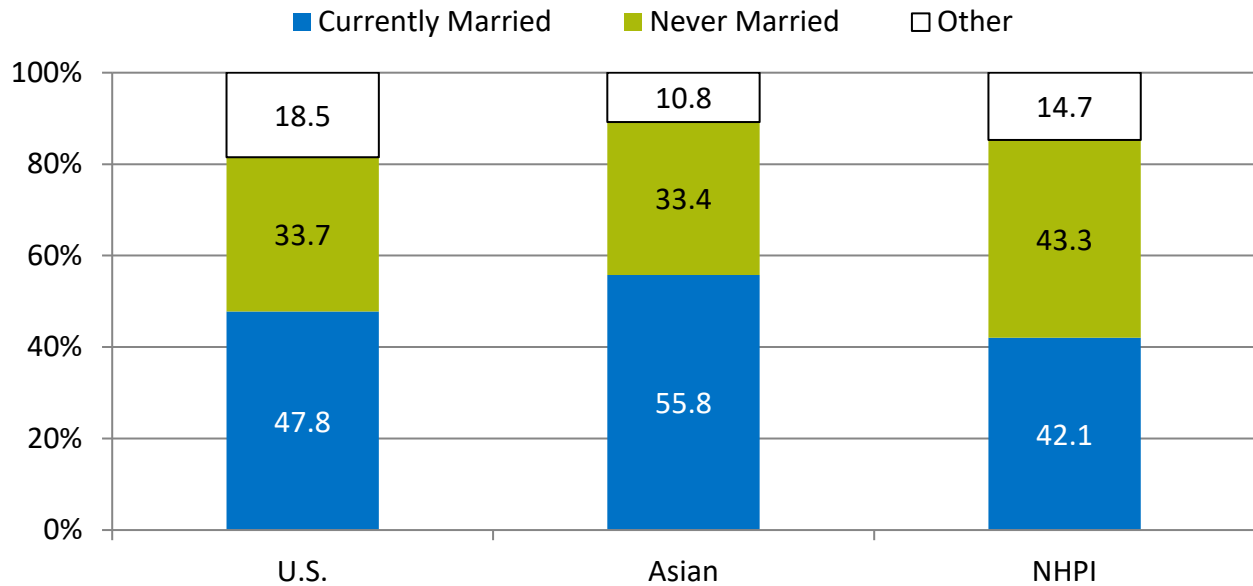
	Asian	NHPI
Population	21.6 million	1.4 million
Male	47.8%	50.2%
Female	52.2%	49.8%
Percentage of Total U.S. Population	6.6%	0.4%
U.S. born	9.1 million (41.9%)	1.2 million (84.3%)
Foreign born	12.6 million (58.1%)	0.2 million (15.7%)
U.S.-Born Group as a Percentage of Total U.S. Population*	2.8%	0.4%
Foreign-Born Group as a Percentage of Total U.S. Population*	3.9%	0.1%

* U.S.-Born Group and Foreign-Born Group percentages may not add to Percentage of Total U.S. Population U.S. born or foreign born due to rounding.

Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include individuals reporting one race alone or in combination with one or more races. Total U.S. population in 2017: 325.7 million.

Marital Status of the Population Age 15 Years and Over, 2017



Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include individuals reporting one race alone or in combination with one or more races. Other includes Widowed, Divorced, and Separated.

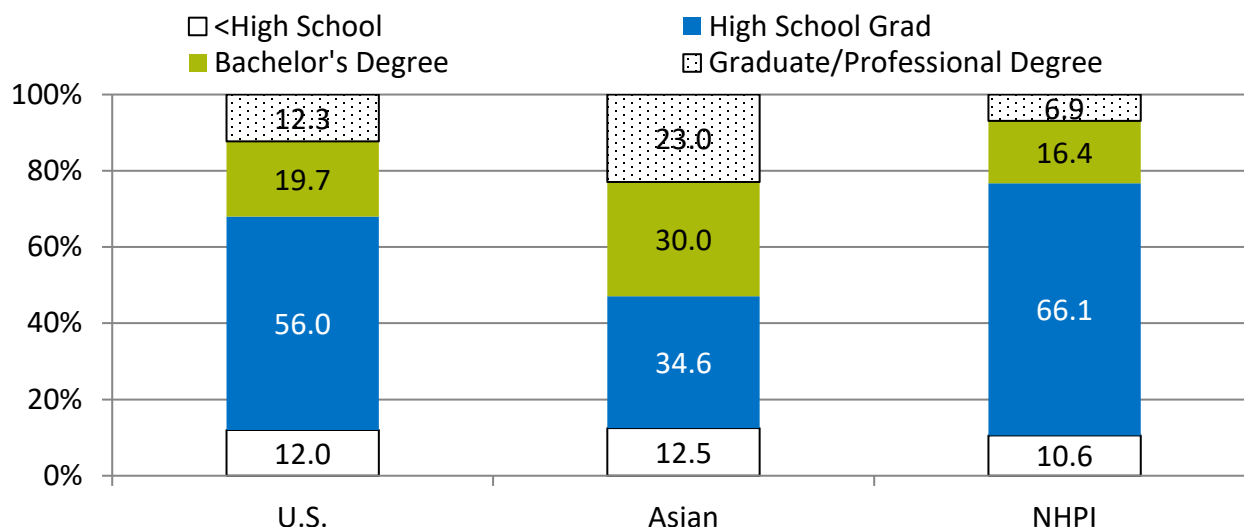
- As of 2017, 55.8% of Asians and 42.1% of NHPIs reported being married, while 33.4% and 43.3%, respectively, reported never being married.

Households by Type, 2017

- Among both the Asian and NHPI populations in 2017, approximately three-quarters (72.7% and 71.2%, respectively) lived in a family household.
- In 2017, approximately one-quarter of Asians and NHPIs (27.3% and 28.8%, respectively) lived in a non-family household.
- The average household size in 2017 was 3.04 for Asians and 3.23 for NHPIs, compared with 2.65 for the U.S. population as a whole.
- For the U.S. population as a whole, 65.5% lived in family households and 34.5% in non-family households in 2017.

Data are from the 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau. Data include individuals reporting one race alone or in combination with one or more races.

Educational Attainment of the Population Age 25 Years and Over, 2017



Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: High school graduate includes equivalency and some college or associate's degree. Data include individuals reporting one race alone or in combination with one or more races.

- In 2017, 53% of Asians had a bachelor's degree or higher (30.0% with bachelor's degrees and 23.0% with graduate/professional degrees), 34.6% were high school graduates, and 12.5% had less than a high school diploma.
- By contrast, among the NHPI population in the same year, 23.3% had a bachelor's degree or higher (16.4% with bachelor's degrees and 6.9% with graduate/professional degrees), 66.1% were high school graduates, and 10.6% had less than a high school diploma.

Disaggregation of Subpopulation Data

This chartbook does not include health and disparity data broken down by subpopulations because quality data are not yet available. This chartbook does include select demographic data for subpopulations to illustrate:

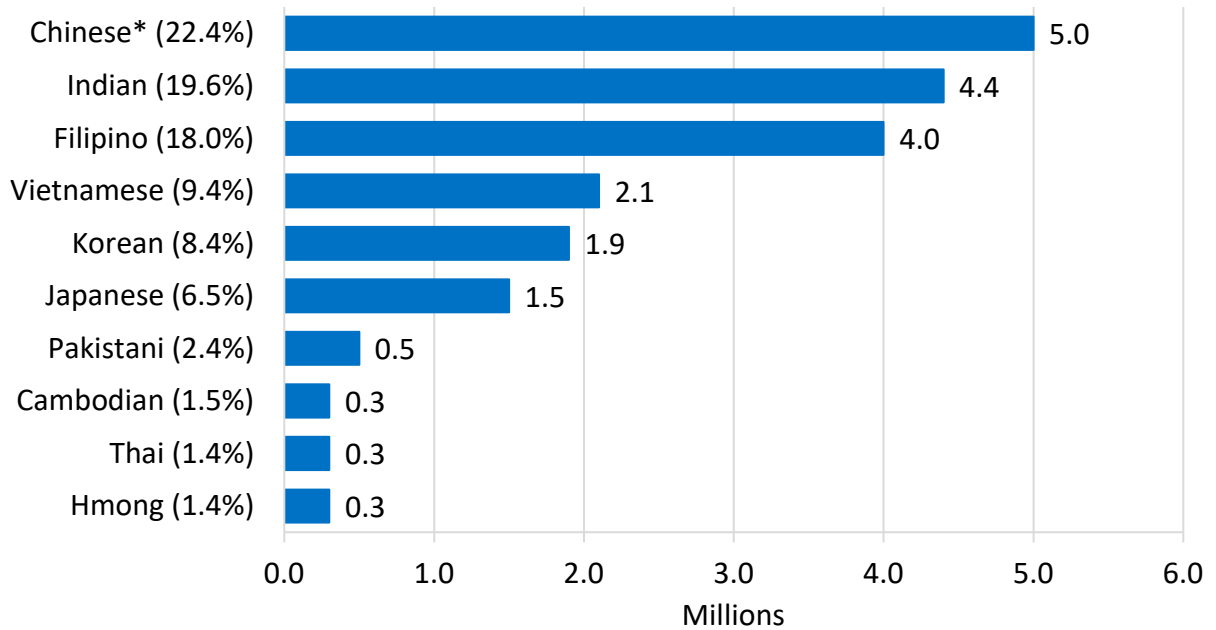
- The wide range of variability among subpopulations.
- The importance of collecting data at a more granular level.

A more granular view may become possible given the evolution of data collection instruments to allow disaggregation into smaller subpopulations of Asians and NHPs:

- 2011: The U.S. Department of Health and Human Services (HHS) adopted data collection standards that included additional specificity for Asian and NHPI racial groups on population surveys.
- 2012: The Centers for Disease Control and Prevention and the Centers for Medicare & Medicaid Services (CMS) began oversampling Asian subpopulations in some health surveys to provide additional granularity.

The two represent distinct racial groups with very different disease profiles, such as for cancer, although demographic and health data are often available only in aggregate.

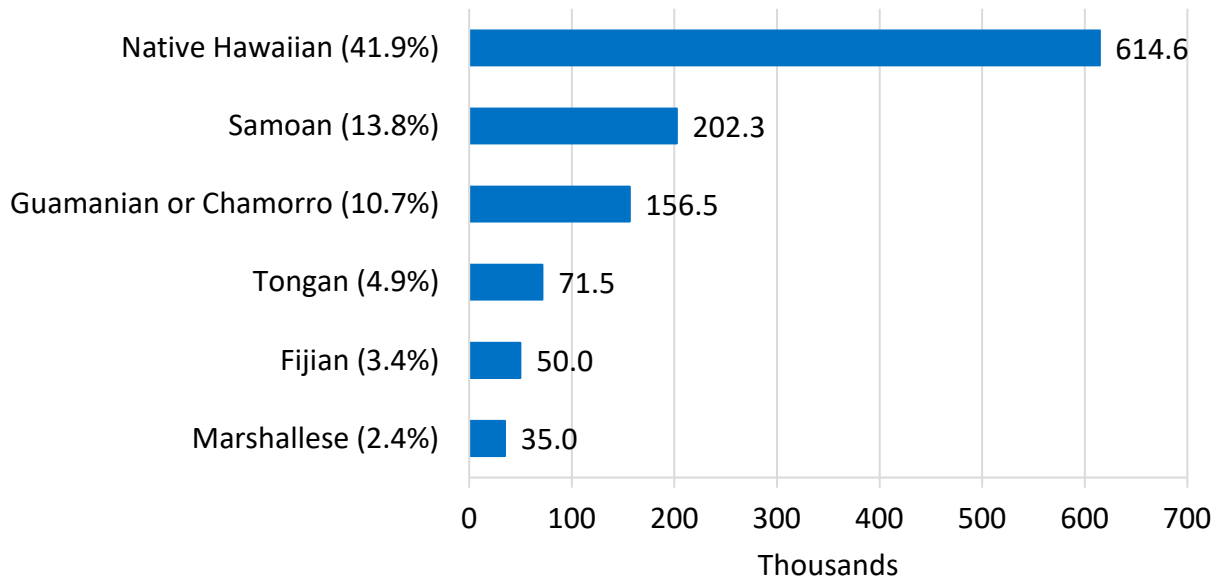
Ten Largest Asian Subpopulations, United States, 2017



* Excluding Taiwanese.

Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau. Data include individuals reporting one race alone or in combination with another race. Individuals reporting two or more races comprise 3.3 percent of the total population. Percentages represent each subpopulation as a percentage of the sum of all subpopulations. Because people may have identified with two or more subpopulations, the sum of subpopulations may exceed the total Asian population.

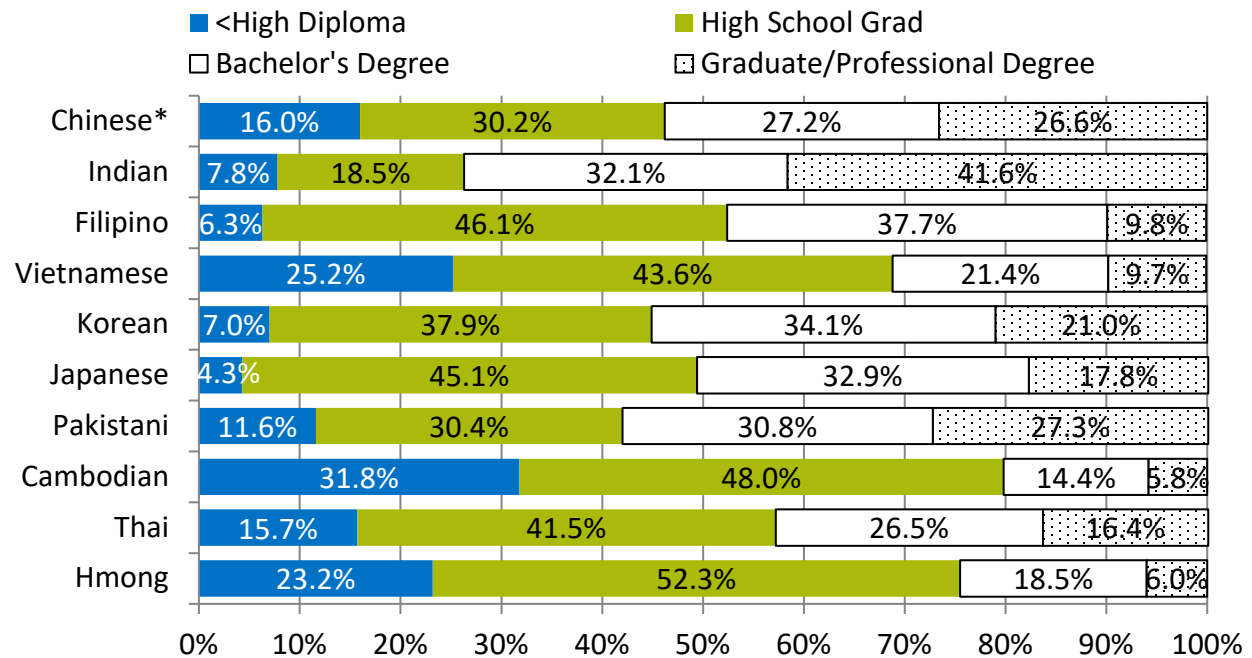
Six Largest NHPI Subpopulations, United States, 2017



Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include individuals reporting one race alone or in combination with another race. Individuals reporting two or more races make up 3.3 percent of the total population. Percentages represent each subpopulation as a percentage of the sum of all subpopulations. Because people may have identified with two or more subpopulations, the sum of subpopulations may exceed the total NHPI population.

Educational Attainment of Asian Subpopulations Age 25 Years and Over, 2017

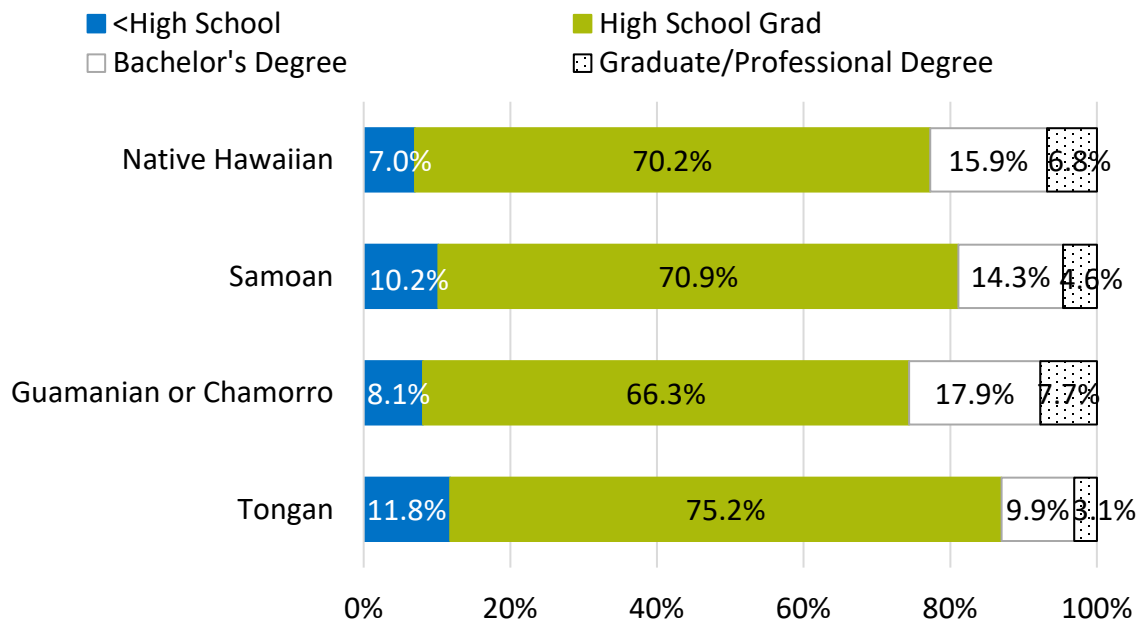


* Excluding Taiwanese.

Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include individuals reporting one race alone or in combination with one or more races.

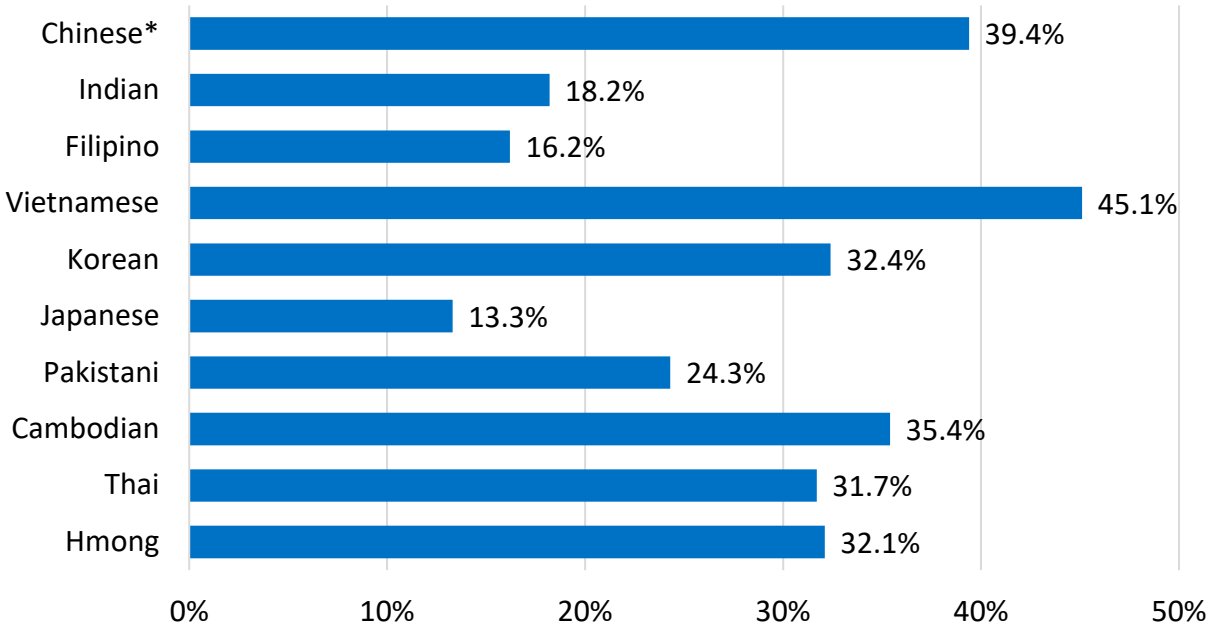
Educational Attainment of NHPI Subpopulations Age 25 Years and Over, 2017



Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include individuals reporting one race alone or in combination with one or more races. Data are not available for Fijian and Marshallese subpopulations due to low data reliability.

Asian Subpopulations Age 5 Years and Over With Limited English Proficiency, 2017

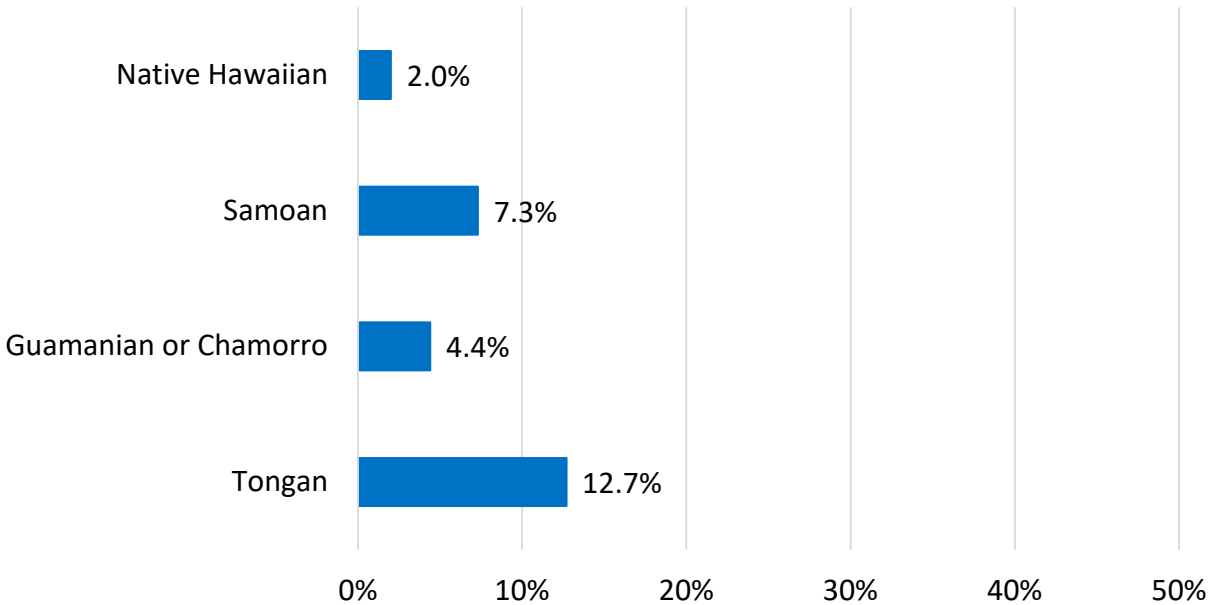


* Excluding Taiwanese.

Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include individuals reporting one race alone or in combination with one or more races. Limited English proficiency is defined as people who speak English less than “Very well.” Those who speak only English at home are not asked to rate their English proficiency.

NHPI Subpopulations Age 5 Years and Over With Limited English Proficiency, 2017



Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include individuals reporting one race alone or in combination with one or more races. Limited English proficiency is defined as people who speak English less than “Very well.” Those who speak only English at home are not asked to rate their English proficiency. Data are not available for Fijian and Marshallese populations due to low data reliability.

Growth of the Asian and NHPI Populations

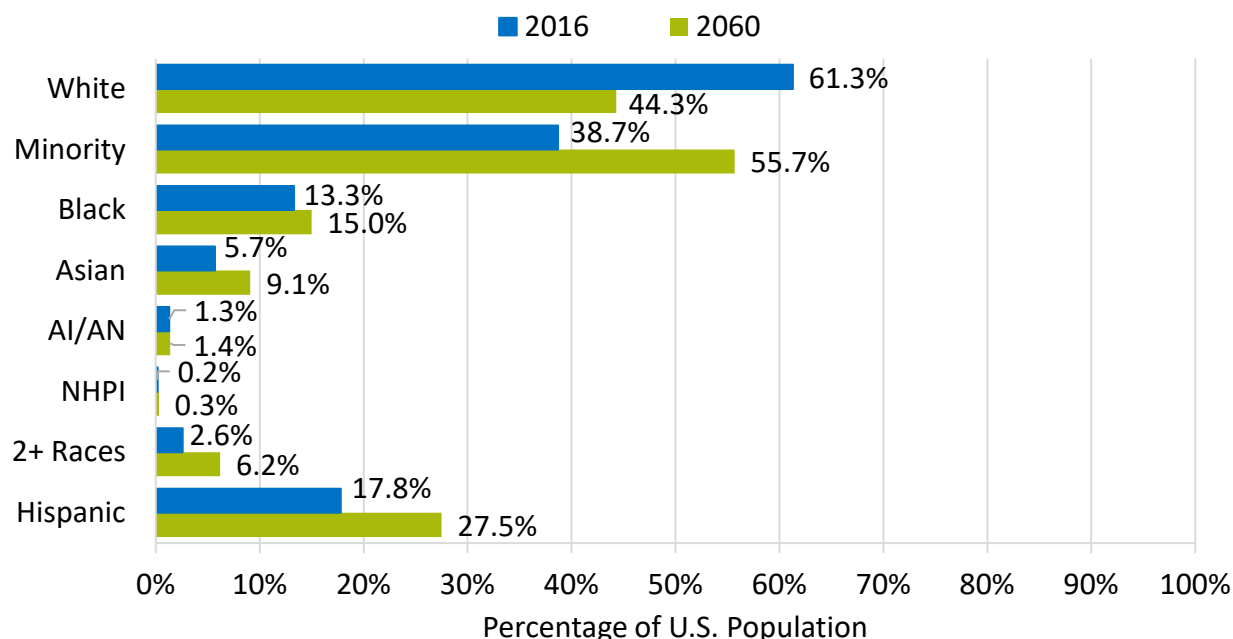
Year of Entry of the Foreign-Born Asian and NHPI Population, 2017

As of 2017, 58.1% of Asians and 15.7% of NHPIs were foreign born.

- Almost half of the foreign-born Asian population (48.9%) had arrived in the United States before 2000 while more than one quarter (27.1%) had arrived in 2010 or later.
- Similarly, among foreign-born NHPIs as of the same year, 49.3% had arrived in the United States before 2000 and 23.8% had arrived in 2010 or later.

In 2017, nearly 9 million Asians and over 1.1 million Native Hawaiians and Pacific Islanders had been born in the U.S. Over 12 million Asians and over 200,000 Native Hawaiians and Pacific Islanders were foreign-born. Data are from 2017 American Community Survey 1 Year Estimates—U.S. Census Bureau. Data include individuals reporting one race alone or in combination with one or more races.

Projected Growth of the U.S. Resident Population Between 2016 and 2060, by Race



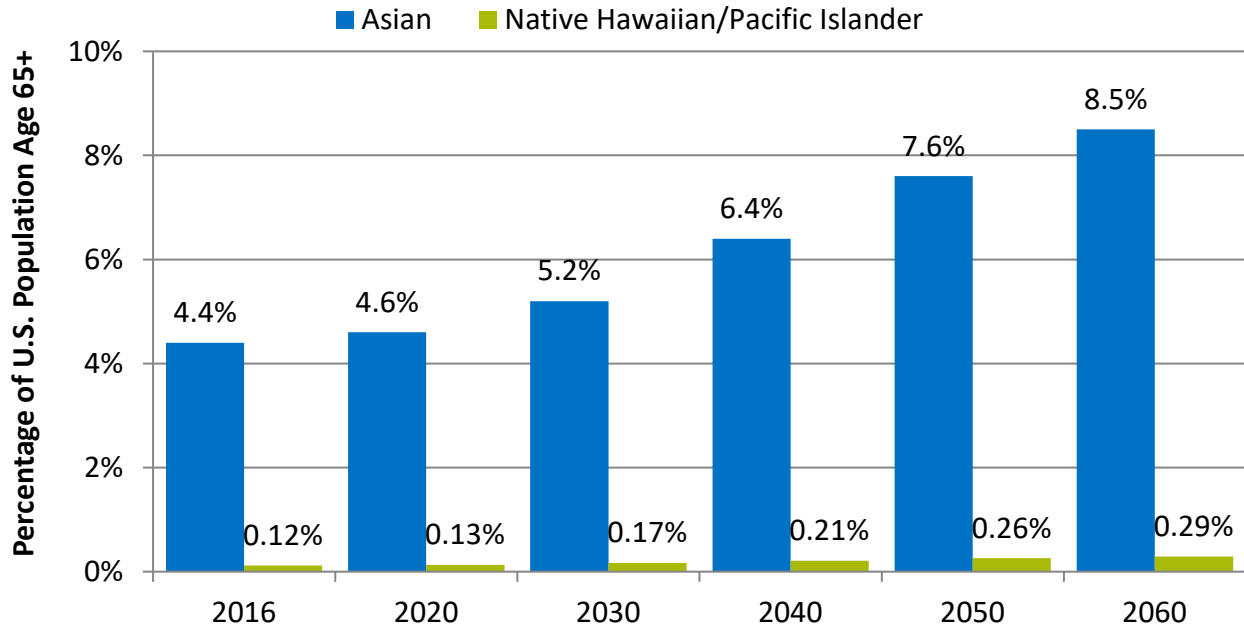
Key: AI/AN = American Indian or Alaska Native; NHPI = Native Hawaiian/Pacific Islander.

Source: U.S. Census Bureau., Population Division. Projected Race and Hispanic Origin: Main Projections Series for the United States, 2017 to 2060. <https://www.census.gov/data/tables/2017/demo/popproj/2017-summary-tables.html>.

Note: Categories are not mutually exclusive; therefore, percentages may add to more than 100 percent. Racial categories other than 2+ Races exclude people reporting two or more races. Whites are non-Hispanic only; all other categories may include Hispanics. Minority includes all groups other than the non-Hispanic White population.

- Population estimates for July 1, 2016, are based on the 2010 U.S. Census. Population projections for 2017-2060 were developed using evidence-based assumptions regarding demographic trends. The 2016 population estimates are the baseline for the 2017-2060 population projections. (See <https://www.census.gov/programs-surveys/popproj/about.html>.)

Projected Growth of Asians and NHPIs as Share of U.S. Population Age 65+ Between 2016 and 2060



Source: U.S. Census Bureau, Population Division. Race and Hispanic Origin by Selected Age Groups: Main Projections Series for the United States, 2017 to 2060. <https://www.census.gov/data/tables/2017/demo/popproj/2017-summary-tables.html>.

Note: Excludes people reporting two or more races; does not include Hispanics.

- Population estimates for July 1, 2016, are based on the 2010 U.S. Census. Population projections for 2017-2060 were developed using evidence-based assumptions regarding demographic trends. The 2016 population estimates are the baseline for the 2017-2060 population projections. (See <https://www.census.gov/programs-surveys/popproj/about.html>.)

Labor Force Participation

Labor Force and Employment Status of Civilian Population 16 Years and Over, 2017

In 2017, over 65% of both the Asian and NHPi populations were in the civilian labor force; only 1.1% or less of either population was in the military. Males made up a slight majority over females in the civilian labor force among both populations (5.8 million vs. 5.3 million for Asians; 356,000 vs. 321,000 for NHPis).

For more information, refer to 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau. Data include individuals reporting Asian or NHPi race alone or in combination with one or more races.

Occupation of the Asian Civilian Employed Population 16 Years and Over, 2017

Sector	Percentage
Management, business, sciences, and arts	51.0%
Service occupations	17.0%
Sales and office occupations	19.7%
Natural resources, construction, and maintenance	3.2%
Production, transportation, and material moving	9.2%

Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include individuals reporting one race alone or in combination with one or more races.

Occupation of the NHPI Civilian Employed Population 16 Years and Over, 2017

Sector	Percentage
Management, business, sciences, and arts	29.6%
Service occupations	23.1%
Sales and office occupations	25.5%
Natural resources, construction, and maintenance	8.7%
Production, transportation, and material moving	13.1%

Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include individuals reporting one race alone or in combination with one or more races.

Income

Income and Poverty Status, Asian Households, Families, and Individuals, 2017

Income and Poverty Status	Number
Median household income	\$82,180
Median family income	\$95,689
Median earnings	
Male	\$64,883
Female	\$51,428
Families living in poverty	7.9%
Individuals living in poverty	11.0%

Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau. Data include individuals reporting one race alone or in combination with one or more races. Median earnings are reported for full-time year-round workers only.

Note: Median household income is defined by the Census Bureau at <https://www.census.gov/quickfacts/fact/note/US/INC110218>.

Income and Poverty Status, NHPI Households, Families, and Individuals, 2017

Income and Poverty Status	Number
Median household income	\$64,308
Median family income	\$71,783
Median earnings	
Male	\$46,511
Female	\$39,085
Families living in poverty	13.0%
Individuals living in poverty	15.4%

Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau. Data include individuals reporting one race alone or in combination with one or more races. Median earnings are reported for full-time year-round workers only.

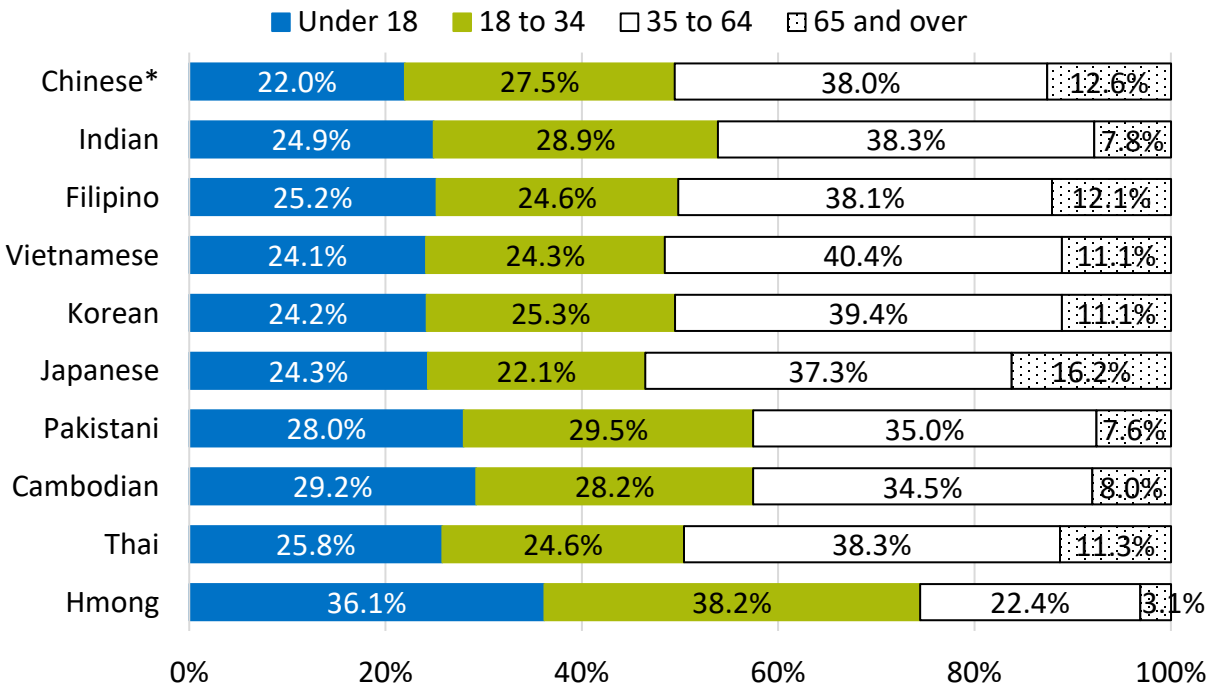
Note: Median household income is defined by the Census Bureau at <https://www.census.gov/quickfacts/fact/note/US/INC110218>.

Age

Largest Age Groups in the Asian and NHPI Population, 2017

The largest age group among Asians and NHPIs in 2017 was individuals ages 35-64. The next largest age group for both populations was individuals ages 18-34. The median age was 34.6 years old for Asians and 28.7 years old for NHPIs. For more information, refer to 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau. Data include individuals reporting one race alone or in combination with one or more races.

Age Distribution Among Asian Subpopulations, 2017

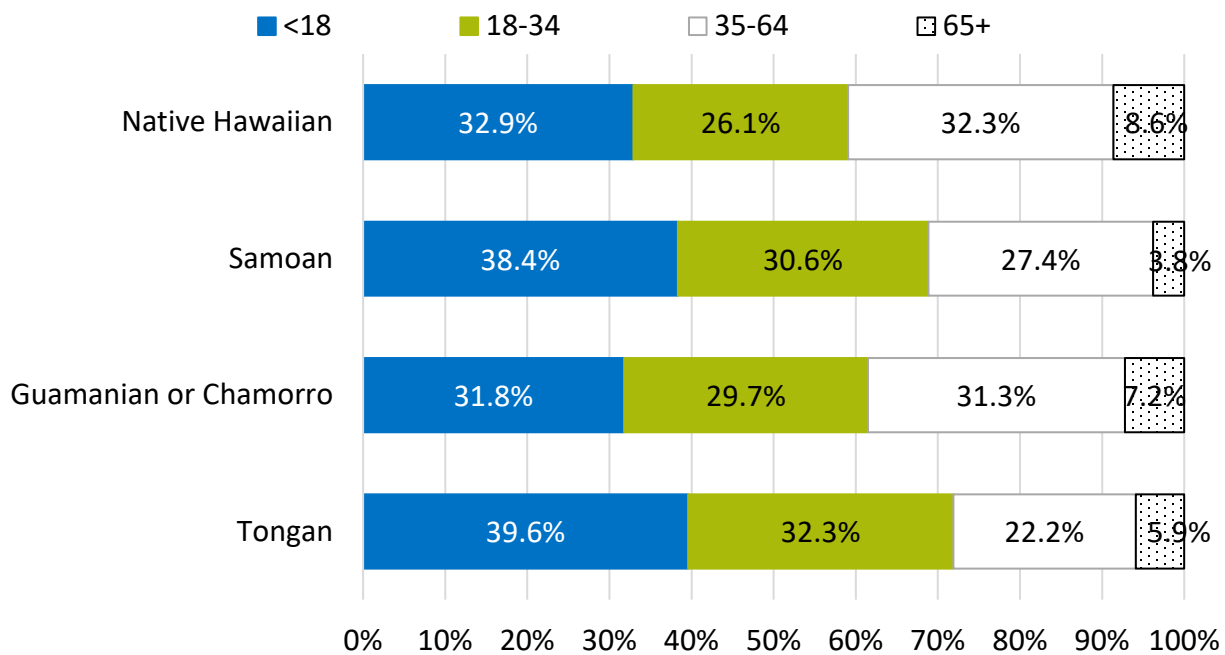


* Excluding Taiwanese.

Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau. Data include individuals reporting one race alone or in combination with one or more races.

- Among these Asian subpopulations, the Japanese population is the oldest, with 53.5% age 35 and over, and 16.2% age 65 and over.
- The Hmong population is the youngest, with 74.3% under 35 and 36.1% under 18.

Age Distribution Among NHPI Subpopulations, 2017



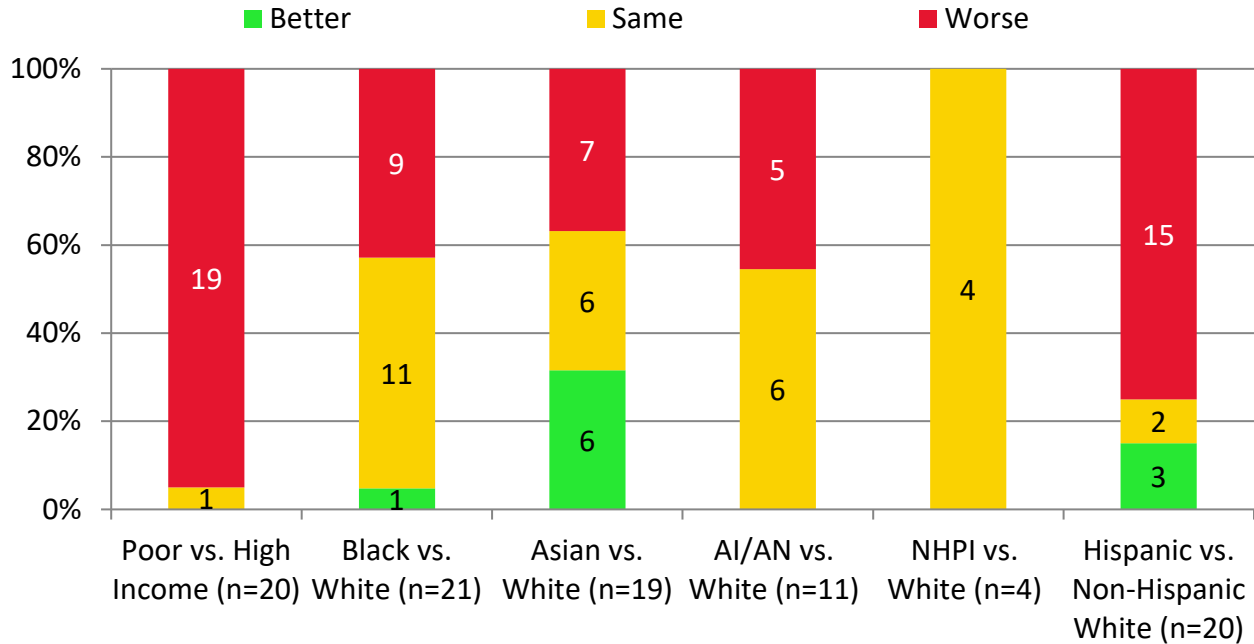
Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include individuals reporting one race alone or in combination with one or more races. Data are not available for Fijian and Marshallese populations due to low data reliability.

PART 3: HEALTHCARE ACCESS AND PRIORITY AREAS

Access to Care

Disparities in Access: Number and Percentage of Access Measures for Which Selected Groups Experienced Disparities in Access, 2016, 2017



Key: n = number of measures; AI/AN = American Indian or Alaska Native; NHPI = Native Hawaiian/Pacific Islander.
Note: The measures represented in this chart are available in Appendix A. The number of measures is based on the measures that have data for each population group.

- For the most recent data year (2016 or 2017), findings show that many disparities persist in access to care.

Health Insurance

Health Insurance Status, 2017

Health Insurance Status	United States	Asian	NHPI
Private	67.6%	74.3%	66.9%
Public	35.5%	25.7%	33.5%
Uninsured	8.7%	6.4%	8.3%

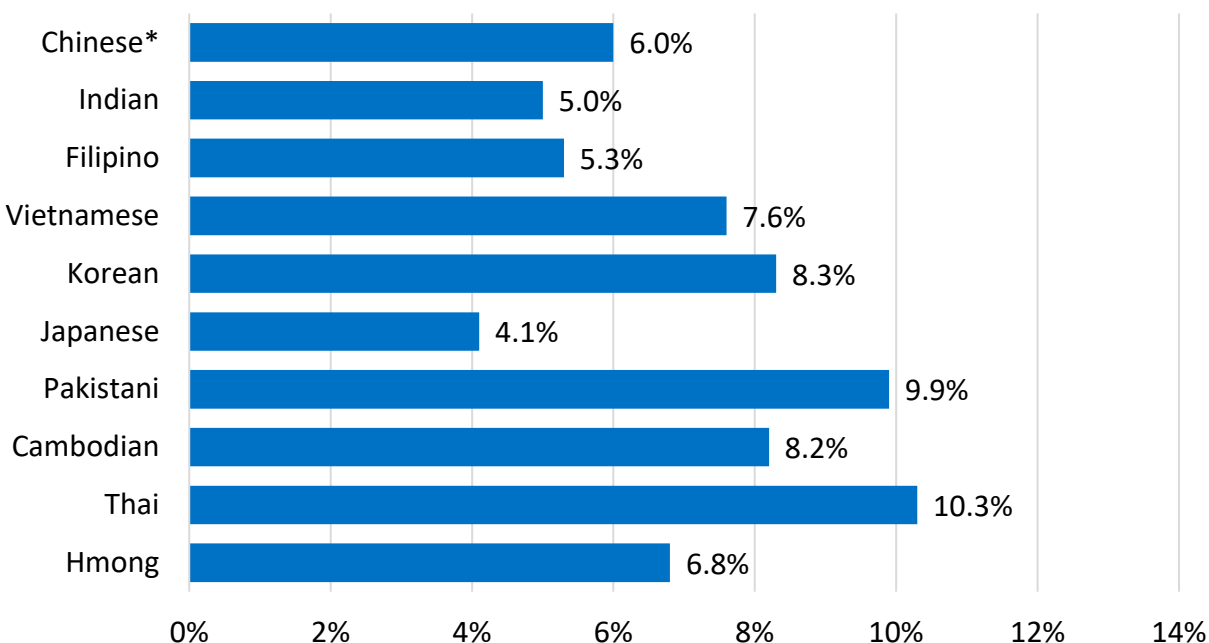
Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Includes all individuals in the civilian noninstitutionalized population. All race categories include individuals reporting one race alone or in combination with one or more races. Hispanics/Latinos may include individuals of any race. Totals exceed 100 percent because individuals may have both private and public coverage.

- Compared with the total U.S. population in 2017, Asian and NHPI individuals were:
 - More likely or as likely to have private health insurance.
 - Less likely to have public coverage.
 - Less likely to be uninsured.

- Compared with other racial and ethnic groups, Asians were the most likely to have private health insurance, while Hispanics/Latinos (of any race) were least likely (49.0%).
- Conversely, Asians were the least likely to have public coverage, while Blacks or African Americans were the most likely (43.8%), followed closely by American Indians and Alaska Natives (43.2%).
- Hispanics were the most likely to be uninsured (17.8%), while Asians were the least likely.

Individuals with no health insurance coverage, Asian subpopulations, 2017



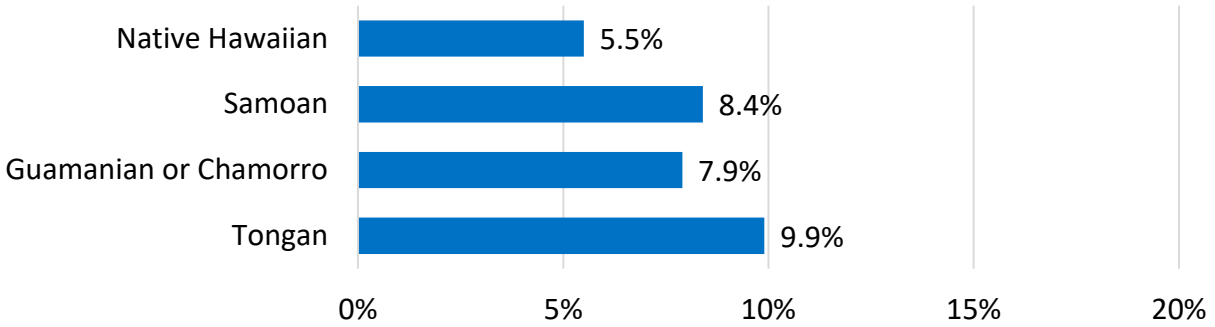
* Excluding Taiwanese.

Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include civilian noninstitutionalized population, all ages. Data also include individuals reporting one race alone or in combination with one or more races.

- In 2017, over 8.0% of Thais, Pakistanis, Koreans, and Cambodians were uninsured, the highest among Asian subpopulations.
- For individuals with health insurance coverage, the source varied considerably across groups. Among these Asian subpopulations, Japanese people had the highest level of private health insurance (84%) and Hmong people had the lowest level (58.1%).
- Conversely, Hmong people had the highest level of public health coverage (41.3%) and Indians had the lowest level (16.3%).
- Variations among groups likely reflect historical differences across the groups in how long they have been settling in the United States, the conditions under which they migrated, and their relationship to the labor market.

Individuals with no health insurance coverage, NHPI subpopulations, 2017



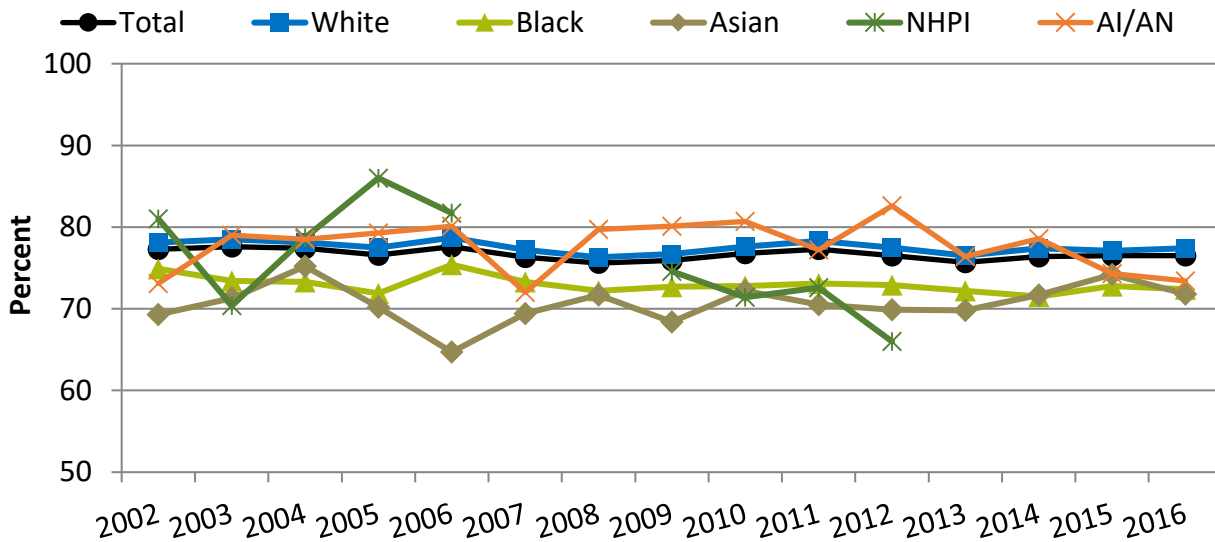
Source: 2017 American Community Survey 1 Year Estimates – U.S. Census Bureau.

Note: Data include civilian noninstitutionalized population, all ages. Data also include individuals reporting one race alone or in combination with one or more races.

- In 2017, among the NHPI subpopulations, Tongans were most likely to be uninsured (9.9%) and Native Hawaiians were the least likely (5.5%).
- For individuals with health insurance coverage, the source varied less among these NHPI subpopulations than among the Asian subpopulations shown previously.
- Guamanians/Chamorros were most likely to have private health insurance (71.1%) and Samoans were least likely (61.5%).
- Samoans were most likely to have public coverage (36.8%) and Guamanians/Chamorros were least likely to have public coverage (30.4%).

Access to Providers

People with a usual primary care provider, by race, 2002-2016



Key: AI/AN = American Indian or Alaska Native.

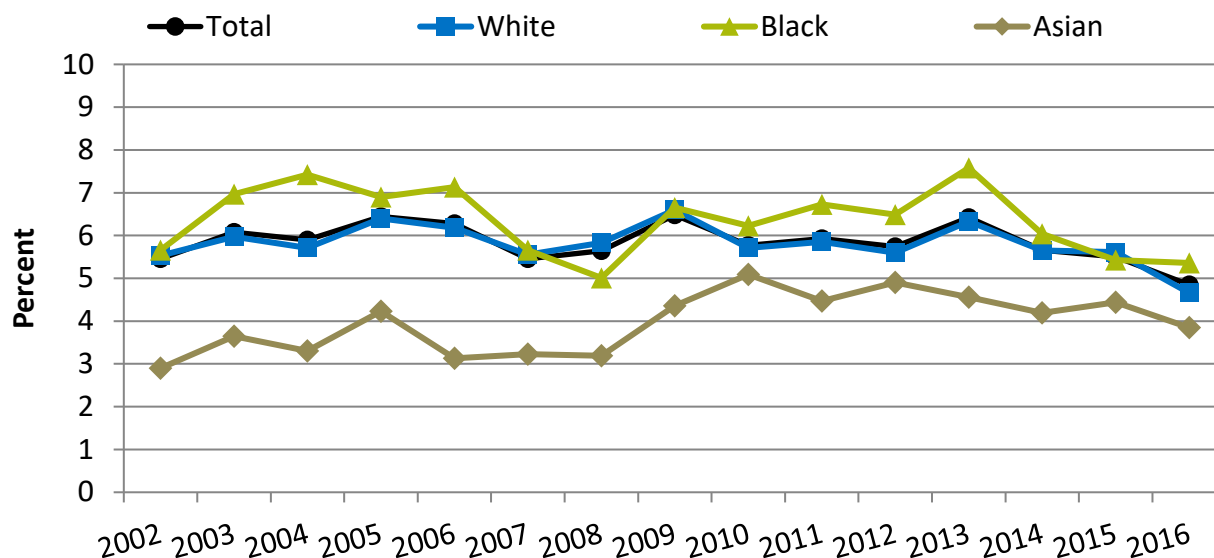
Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 2002-2016.

Denominator: U.S. civilian noninstitutionalized population.

Note: Hispanics may be included in any racial group. A person is determined to have had a primary care provider if his or her usual source of care setting was either a physician's office or a hospital setting (other than an emergency room), and he or she reported going to this usual source of care for new health problems, preventive health services, and referrals. Trends could not be calculated for NHPI adults because data for 2007, 2008, and 2013-2016 did not meet the criteria for statistical reliability, data quality, and confidentiality.

- **Importance:** Having adequate access to a primary care provider can significantly influence appropriate healthcare use and health outcomes. Lacking a usual source of care may have important implications for the appropriateness, quality, and continuity of care received and patient outcomes (Roberts, 2002). The likelihood of having a usual source of healthcare may differ among Asian and NHPI subpopulations (Barnes, et al., 2008).
- **Overall Rate:** In 2016, 76.5% of people had a usual primary care provider.
- **Groups With Disparities:** In 2002, the baseline year for this analysis:
 - Asians were less likely to have a usual primary care provider compared with Whites (69.3% vs. 78.1%). This gap did not narrow over time (71.8% for Asians in 2016 vs. 77.4% for Whites).
 - Blacks were less likely to have a usual primary care provider compared with Whites (74.9% vs. 78.1%). This gap did not narrow over time (72.4% for Blacks in 2016 vs. 77.4% for Whites).

People who were unable to get or delayed in getting needed dental care in the last 12 months, by race, 2002-2016



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 2002-2016.

Denominator: U.S. civilian noninstitutionalized population.

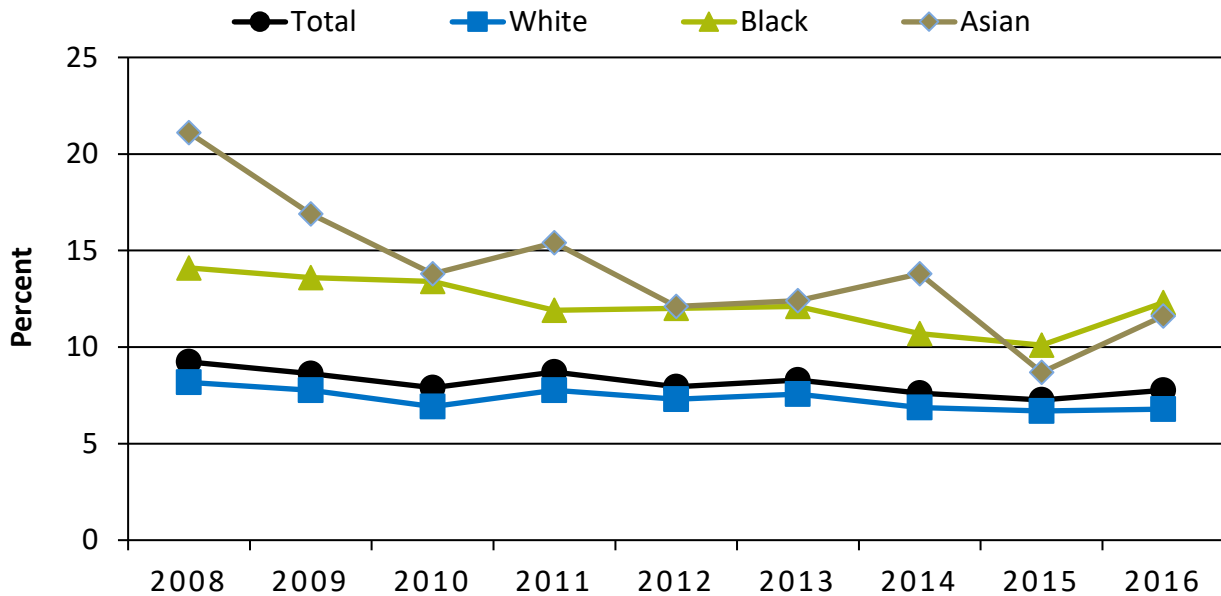
Note: For this measure, lower percentages are better. Data for NHPI adults did not meet the criteria for statistical reliability, data quality, and confidentiality.

- **Importance:** Oral health is important to an individual’s overall health and well-being. While advances in oral health have benefited most Americans, some cannot afford all the care they need, resulting in needless pain and suffering, complications that may devastate overall health and well-being, and social costs that diminish quality of life (National Institute of Dental and Craniofacial Research, 2000).
- **Overall Rate:** In 2016, 4.9% were unable to get or delayed in getting needed dental care in the last 12 months.

• **Trends:**

- The percentage of Asians unable to get or delayed in getting needed dental care in the last 12 months worsened between 2002 and 2016, increasing from 2.9% to 3.9%.

Adults who had a doctor's office or clinic visit in the last 12 months and needed care, tests, or treatment who sometimes or never found it easy to get the care, tests, or treatment, by race, 2008-2016



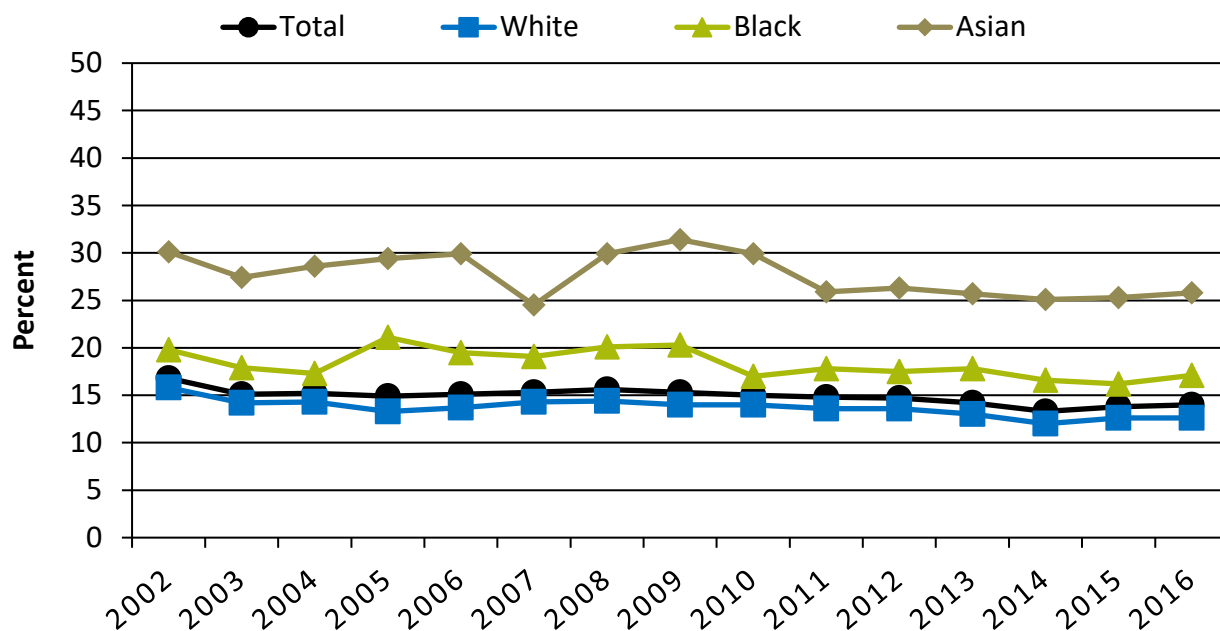
Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, Self-Administered Questionnaire, 2008-2016.

Denominator: U.S. civilian noninstitutionalized adults age 18 and over who needed care, tests, or treatment in the last 12 months.

Note: For this measure, lower percentages are better. Disparities could not be calculated for NHPPI adults because data did not meet the criteria for statistical reliability, data quality and confidentiality.

- **Importance:** Timely delivery of appropriate care can help reduce mortality and morbidity for chronic conditions (Smart and Titus, 2011) and is a measure of the healthcare system’s capacity to provide care quickly after a need is recognized (Healthy People 2020).
- **Overall Rate:** In 2016, 7.8% of adults sometimes or never found it easy to get the care, tests, or treatment in the last 12 months.
- **Trend:** All groups improved between 2008 and 2016.
- **Groups With Disparities:** In 2008, the baseline year for this analysis:
 - The percentage of adults who had a doctor’s office or clinic visit in the last 12 months and needed care, tests, or treatment and sometimes or never found it easy to get the care, tests, or treatment was higher for Asians (21.1%) than for Whites (8.2%). This gap did not narrow over time (11.6% for Asians vs. 6.8% for Whites).
 - The percentage of adults who had a doctor’s office or clinic visit in the last 12 months and needed care, tests, or treatment and sometimes or never found it easy to get the care, tests, or treatment was higher for Blacks (14.1%) than for Whites (8.2%). This gap did not narrow over time (12.3% for Blacks vs. 6.8% for Whites).

Adults who had any appointments for routine healthcare in the last 12 months who sometimes or never got an appointment for routine care as soon as needed, by race, 2002-2016



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, Self-Administered Questionnaire, 2002-2016.

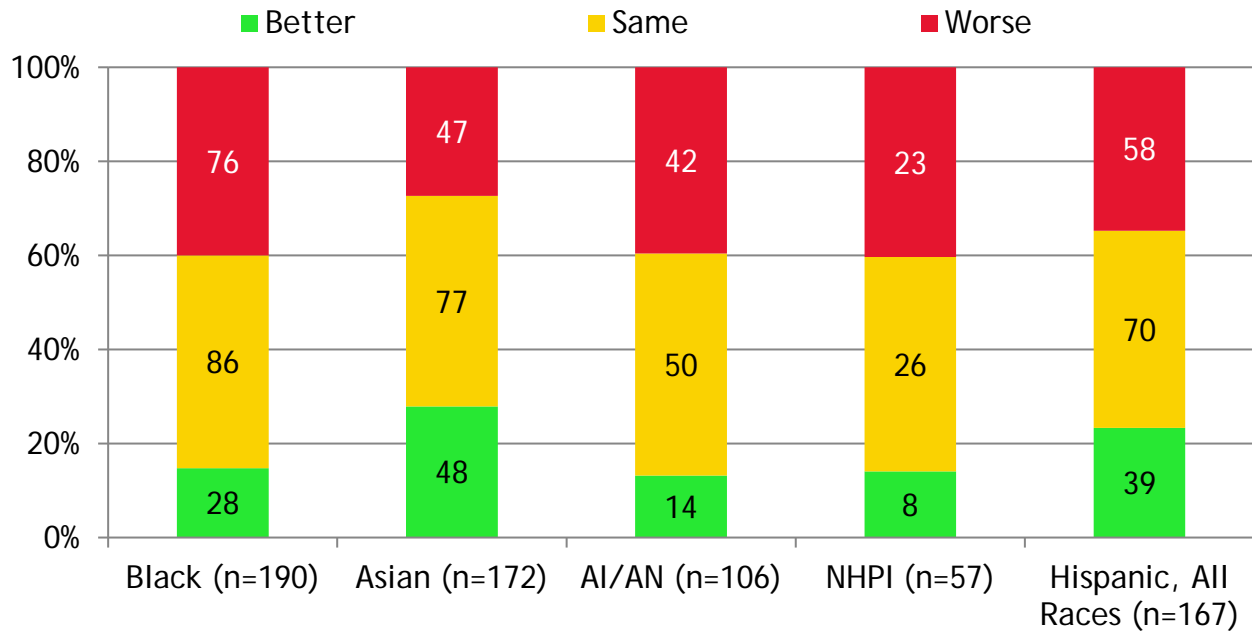
Denominator: U.S. civilian noninstitutionalized population age 18 and over who made an appointment for regular or routine healthcare in the past 12 months and had a valid response to the question, "In the last 12 months, how often did you get an appointment for regular or routine healthcare as soon as you wanted?"

Note: For this measure, lower percentages are better. Disparities could not be calculated for NHPI adults because data did not meet the criteria for statistical reliability, data quality and confidentiality.

- **Importance:** Timely delivery of appropriate care can help reduce mortality and morbidity for chronic conditions (Smart and Titus, 2011) and is a measure of the healthcare system’s capacity to provide care quickly after a need is recognized (Healthy People 2020).
- **Overall Rate:** In 2016, 14% of adults sometimes or never got an appointment for routine healthcare as soon as they needed.
- **Trend:** All groups improved between 2002 and 2016.
- **Groups With Disparities:** In 2002, the baseline year for this analysis, among adults who had any appointments for routine healthcare in the last 12 months:
 - Asians were more likely to answer that they sometimes or never got an appointment for routine care as soon as needed compared with Whites (30.1% vs. 15.8%). This gap did not narrow over time (25.8% for Asians in 2016 compared with 12.6% for Whites).
 - Blacks were more likely to answer that they sometimes or never got an appointment for routine care as soon as needed compared to Whites (19.8% vs. 15.8%). This gap did not narrow over time (17.1% for Blacks in 2016 compared with 12.6% for Whites).

Quality of Care

DISPARITIES IN QUALITY: Number and Percentage of Quality Measures for Which Selected Groups Experienced Disparities in Quality of Care



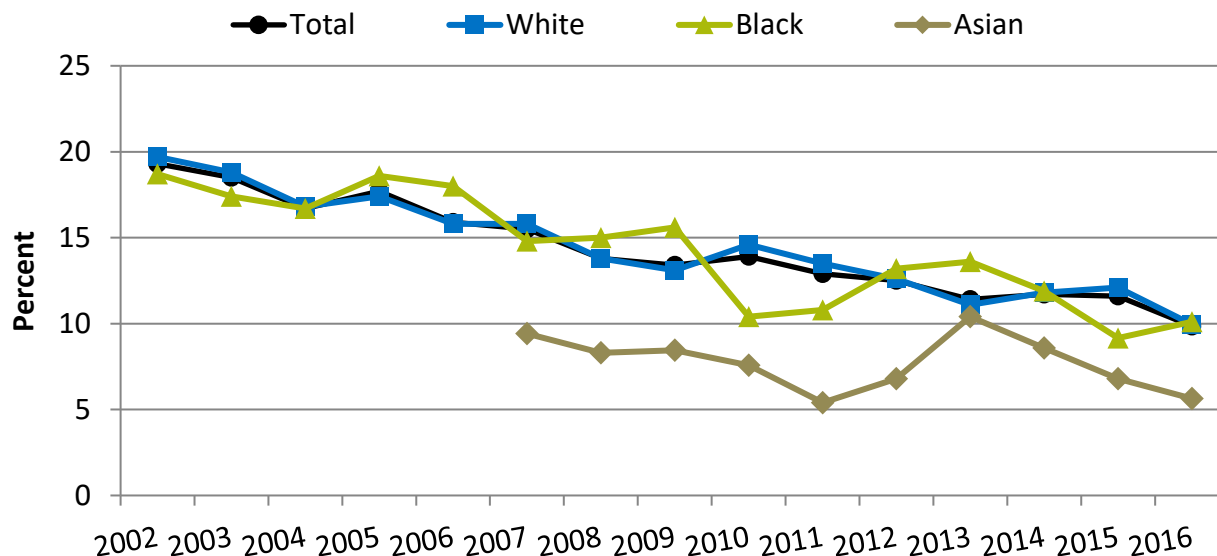
Key: n = number of measures; NHPI = Native Hawaiian/Pacific Islander; AI/AN = American Indian or Alaska Native.
Note: The most recent data years are used for this analysis. Different data sources have different data years for most recent data year. For example, the most recent data year from NIDDK USRDS is 2013 and from AHRQ HCUP is 2016.

- For the most recent data year (2016 or 2017), findings show that many disparities persist.
- Asians performed better than Whites on 28% of quality measures and NHPIs Asians performed better than Whites on 14% of quality measures.

Priority Area: Patient Safety

Patient Safety is the first of five healthcare priorities covered by this chartbook. The other four priorities are Person- and Family-Centered Care, Effective Treatment, Healthy Living, and Care Affordability. A sixth priority, Care Coordination, was addressed separately in the Chartbook on Care Coordination, available at <https://www.ahrq.gov/research/findings/nhqdr/chartbooks/carecoordination/index.html>.

Adults age 65 and over who received in the calendar year at least 1 of 33 potentially inappropriate prescription medications for older adults, by race, 2002-2016



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 2002-2016.

Denominator: U.S. civilian noninstitutionalized population age 65 and over.

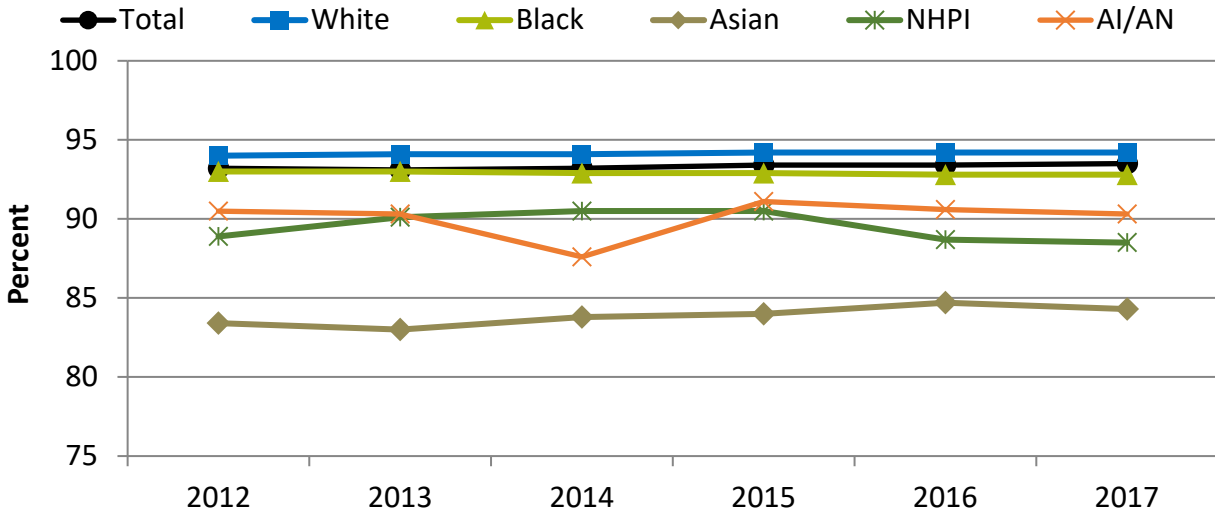
Note: For this measure, lower percentages are better. Data for Asians prior to 2007 and data for NHPs do not meet criteria for statistical reliability, data quality, and confidentiality. Prescription medications received include all prescribed medications initially purchased or otherwise obtained during the calendar year, as well as any refills. For more information on inappropriate medications, refer to the American Geriatrics Society 2012 BEERS Criteria Update Expert Panel: American Geriatrics Society Updated Beers Criteria for Potentially Inappropriate Medication Use in Older Adults. J Am Geriatr Soc 2012 Apr;60(4):616-31. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3571677/>.

- **Importance:** Some drugs prescribed for older adults are known to be potentially harmful for this age group and can lead to adverse drug events that are both expensive and associated with poor health outcomes (American Geriatrics Society, 2015).
- **Overall Rate:** In 2016, 9.9% of adults age 65 and over had received at least one of 33 potentially inappropriate medications during the calendar year.
- **Trends:**
 - From 2007 to 2016, there was no statistically significant change in the percentage of older Asian adults who were prescribed potentially inappropriate medications.
 - For all other groups, the percentage decreased between 2002 and 2016.
- **Groups With Disparities:**
 - In 2016, Asians were less likely than Whites to have received any of the 33 potentially inappropriate medications (5.6% vs. 10.0%).

Priority Area: Person- and Family-Centered Care

Person- and Family-Centered Care is one of five healthcare priorities covered by this chartbook. The other four priorities are Patient Safety, Effective Treatment, Healthy Living, and Care Affordability. A sixth priority, Care Coordination, was addressed separately in the Chartbook on Care Coordination, available at <https://www.ahrq.gov/research/findings/nhqrd/chartbooks/carecoordination/index.html>.

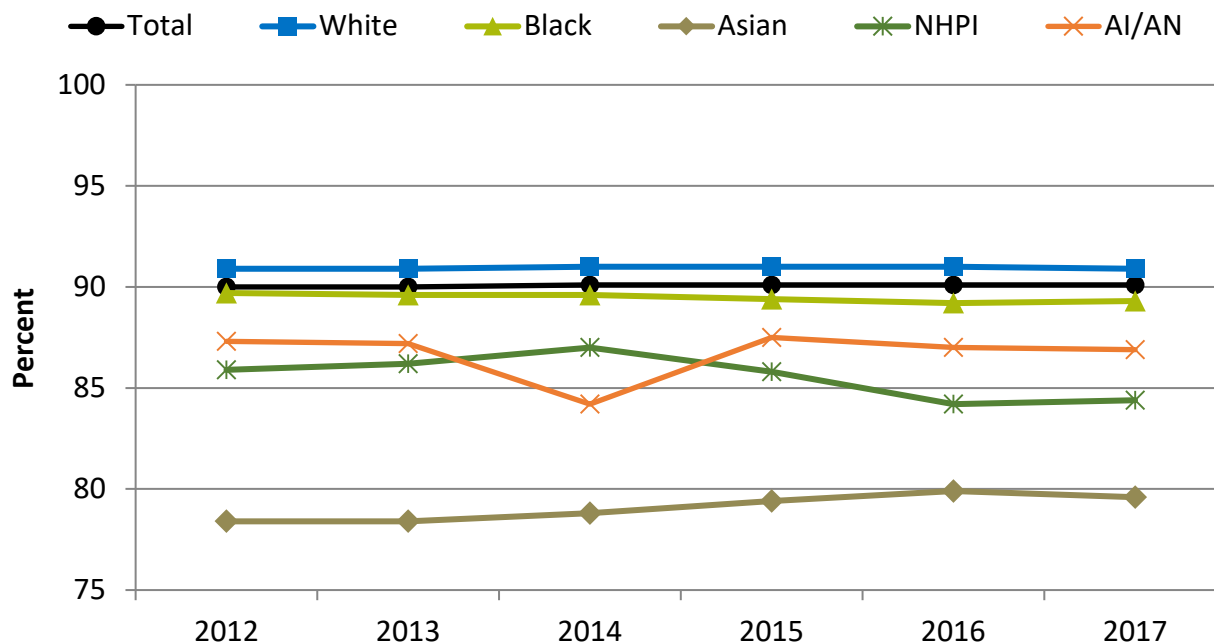
Adults who reported that home health providers always treated them with courtesy and respect in the last 2 months of care, by race, 2012-2017



Key: AI/AN = American Indian or Alaska Native; NHPI = Native Hawaiian and Pacific Islander
Source: Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems, 2012-2017.
Denominator: Adult home health patients age 18 and over who provided a valid response to the question, "In the last 2 months of care, how often did home health providers from this agency treat you with courtesy and respect?" excluding nonrespondents.

- **Importance:** A person- and family-centered approach to healthcare is defined by the inclusion and participation of patients and their families in decision making and treatment. A fundamental basis for inclusivity is treating patients with courtesy and respect. There is a positive association between being treated with courtesy, dignity, and respect and improved patient experiences with care and health outcomes (Beach, 2005; Van de Ven, 2014).
- **Overall Rate:** In 2017, 93.5% of adults reported that home health providers always treated them with courtesy and respect in the last 2 months of care.
- **Trends:** From 2012 to 2017, adults who reported that home health providers always treated them with courtesy and respect in the last 2 months of care improved for Asians (83.4% to 84.3%) and overall (93.2% to 93.5%).
- **Groups With Disparities:** In 2012, the baseline year for this analysis:
 - Asian adults were less likely to report that home health providers always treated them with courtesy and respect in the last 2 months of care compared with White adults (83.4% vs. 94.0%). This gap did not narrow over time (84.3% for Asians in 2017 vs. 94.2% for Whites).
 - NHPI adults were less likely to report that home health providers always treated them with courtesy and respect in the last 2 months of care compared with White adults (88.9% vs. 94.0%). This gap did not narrow over time (88.5% for NHPIs in 2017 vs. 94.2% for Whites).
 - American Indian or Alaska Native (AI/AN) adults were less likely to report that home health providers always treated them with courtesy and respect in the last 2 months of care compared with White adults (90.5% vs. 94.0%). This gap did not narrow over time (90.3% for AI/ANs in 2017 vs. 94.2% for Whites).
 - Black adults were less likely to report that home health providers always treated them with courtesy and respect in the last 2 months of care compared with White adults (93.0% vs. 94.0%). This gap did not narrow over time (92.8% for Blacks in 2017 vs. 94.2% for Whites).

Adults who reported that home health providers always treated them as gently as possible in the last 2 months of care, by race, 2012-2017



Key: AI/AN = American Indian or Alaska Native; NHPI = Native Hawaiian/Pacific Islander.

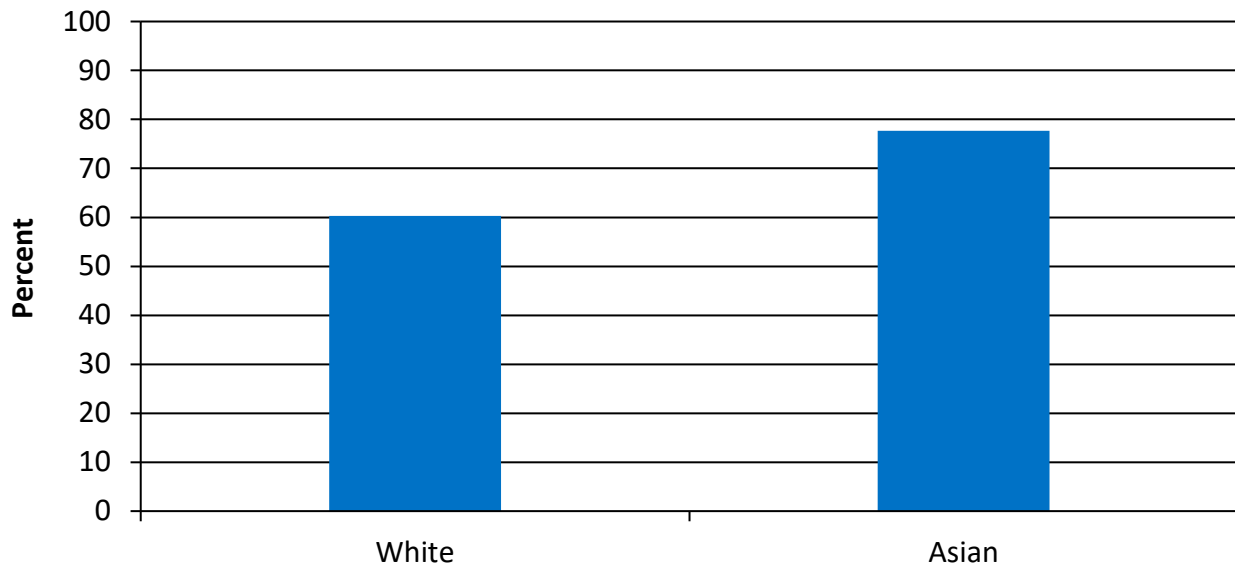
Denominator: Adult home health patients age 18 and over who provided a valid response to the question, "In the last 2 months of care, how often did home health providers from this agency treat you as gently as possible?" excluding nonrespondents.

Source: Centers for Medicare & Medicaid Services, Home Health Consumer Assessment of Healthcare Providers and Systems, 2012-2017.

- **Importance:** A person- and family-centered approach to healthcare is defined by the inclusion and participation of patients and their families in decision making and treatment. A fundamental basis for inclusivity is treating patients with courtesy and respect. There is a positive association between being treated with courtesy, dignity, and respect and improved patient experiences with care and health outcomes (Beach, 2005; Van de Ven, 2014).
- **Overall Rate:** In 2017, 90.1% of adults reported that that home health providers always treated them as gently as possible in the last 2 months of care.
- **Trends:** Between 2012 and 2017, the percentage of Asian adults who reported that home health providers always treated them as gently as possible in the last 2 months of care improved from 78.4% to 79.6%.
- **Groups With Disparities:** In 2012, the baseline year for this analysis:
 - Asians were less likely to report that home health providers always treated them as gently as possible in the last 2 months of care compared with Whites (78.4% vs. 90.9%). This gap did not narrow over time (79.6% for Asians in 2017 vs. 90.9% for Whites).
 - NHPIs were less likely to report that home health providers always treated them as gently as possible in the last 2 months of care compared with Whites (85.9% vs. 90.9%). This gap did not narrow over time (84.4% For NHPIs in 2017 vs. 90.9% for Whites).

- AI/ANs were less likely to report that home health providers always treated them as gently as possible in the last 2 months of care compared with Whites (87.3% vs. 90.9%). This gap did not narrow over time (86.9% for AI/ANs in 2017 vs. 90.9% for Whites).
- Blacks were less likely to report that home health providers always treated them as gently as possible in the last 2 months of care compared with Whites (89.7% vs. 90.9%). This gap did not narrow over time (89.3% for Blacks in 2017 vs. 90.9% for Whites).

Adults with limited English proficiency who had a usual source of care, by race, 2016



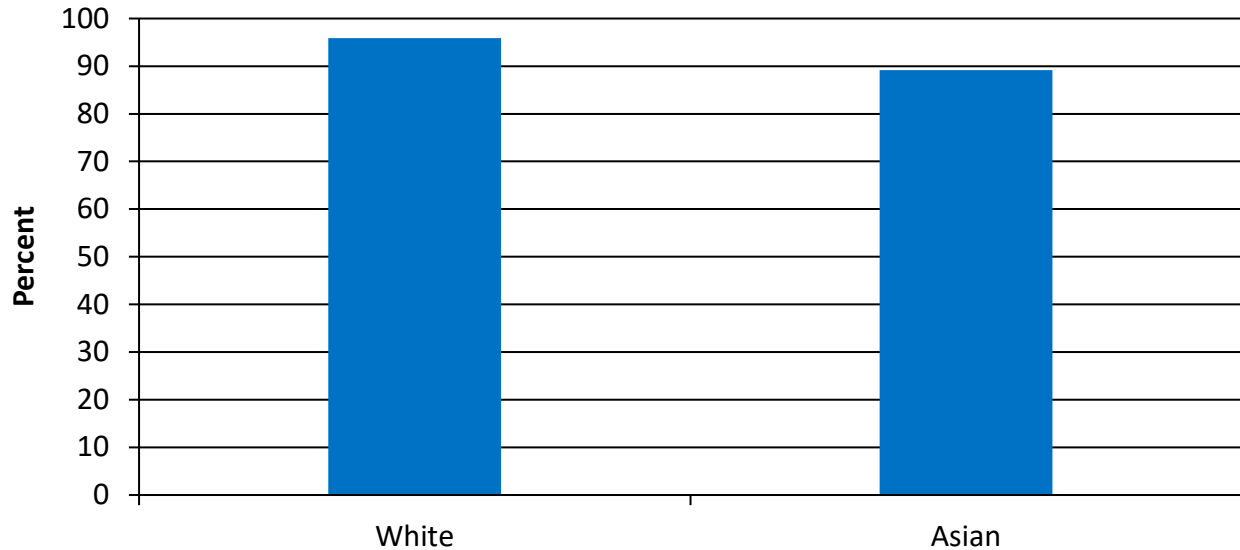
Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 2016.

Denominator: U.S. civilian noninstitutionalized adults age 18 and over.

Note: Data did not meet the criteria for statistical reliability, data quality, and confidentiality for any groups other than Whites and Asians. The source data could not be disaggregated for Asian and NHPI subpopulations and thus does not reflect the variance among subpopulations that has been observed in rates of LEP.

- **Importance:** Having adequate access to healthcare services and language-appropriate care can significantly influence healthcare utilization and health outcomes. People with limited English proficiency (LEP) face additional communication challenges when interacting with the healthcare system that can contribute to fewer physician visits, less preventive care, reduced patient safety, and healthcare disparities (Association of Asian Pacific Community Health Organizations, 2014; Tsoh, et al., 2016).
- **Overall Rate:** In 2016, 62.9% of adults with LEP had a usual source of care.
- **Groups With Disparities:** In 2016, among adults with LEP, Asians were more likely to have a usual source of care compared with Whites (77.7% vs. 60.3%).

Adults with limited English proficiency and usual source of care (USC) whose USC had language assistance, by race, 2016



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 2016.

Denominator: U.S. civilian noninstitutionalized adults age 18 and over with limited English proficiency and a usual source of care.

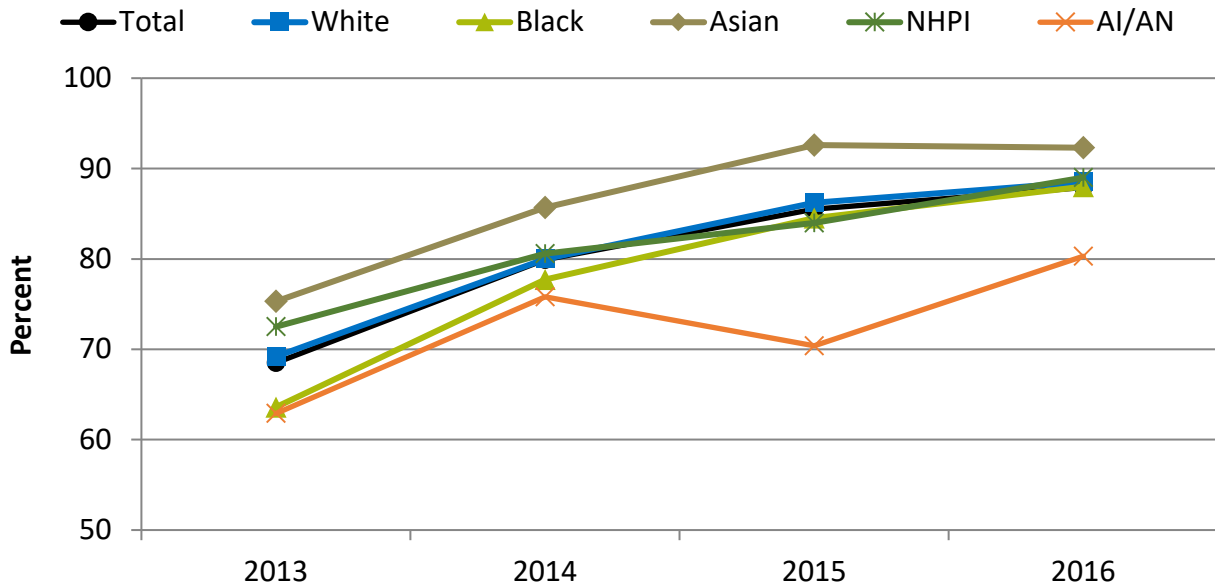
Note: Data did not meet the criteria for statistical reliability, data quality, and confidentiality for any groups other than Whites and Asians. The source data could not be disaggregated for Asian and NHPI subpopulations and thus does not reflect the variance among subpopulations that has been observed in rates of LEP.

- **Importance:** Having adequate access to healthcare services and language-appropriate care can significantly influence healthcare utilization and health outcomes. People with limited English proficiency face additional communication challenges when interacting with the healthcare system that can contribute to fewer physician visits, less preventive care, reduced patient safety, and healthcare disparities (Association of Asian Pacific Community Health Organizations, 2014; Tsoh, et al., 2016).
- **Overall Rate:** In 2016, 94.1% of adults with limited English proficiency and USC had language assistance.
- **Groups With Disparities:** In 2016, among adults with limited English proficiency and USC, Asians were less likely to have language assistance compared with Whites (89.2% vs. 95.9%).

Priority Area: Effective Treatment

Effective Treatment is one of five healthcare priorities covered by this chartbook. The other four priorities are Patient Safety, Person- and Family-Centered Care, Healthy Living, and Care Affordability. A sixth priority, Care Coordination, was addressed separately in the Chartbook on Care Coordination, available at <https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/carecoordination/index.html>.

Acute stroke patients for whom IV thrombolytic therapy was initiated at hospital within 3 hours of time last known well, by race, 2013-2016



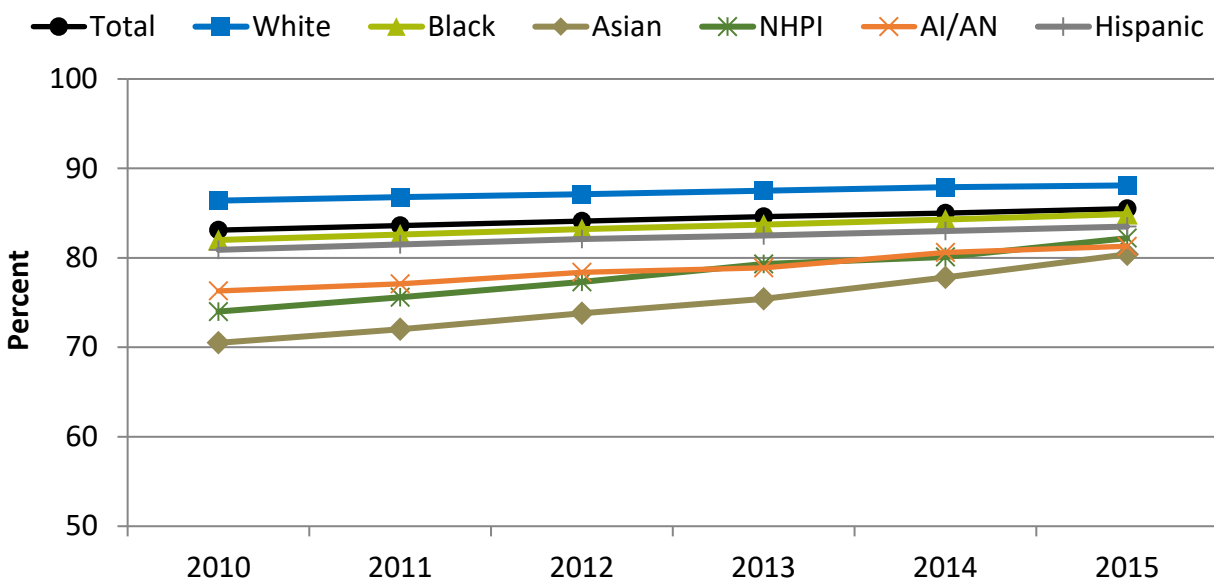
Key: AI/AN = American Indian or Alaska Native; NHPI = Native Hawaiian and Pacific Islander.

Source: Centers for Medicare & Medicaid Services, Quality Improvement Organization Program, Clinical Data Warehouse for Hospital Inpatient Quality Reporting Program, 2013-2016.

Denominator: All Patients age 18 years and over with a diagnosis of acute stroke whose time of arrival is within 3 hours (less than or equal to 180 minutes) of time last known well.

- **Importance:** Cerebrovascular disease (stroke) is one of the leading causes of death and serious long-term disability in the United States (Demaerschalk, et al., 2010). The appropriately timed administration of thrombolytic agents to carefully screened eligible patients with acute ischemic stroke has been shown to save lives, improve outcomes, and lower costs (Fagan, et al., 1998; Johnston, 2010). Obesity-related stroke risk may differ among Asian and NHPI subpopulations (Ritenour, et al., 2017).
- **Overall Rate:** In 2016, 87.9% of adults who were acute stroke patients had IV thrombolytic therapy initiated at the hospital within 3 hours of time last known well.
- **Trends:** All groups improved between 2013 and 2016 except AI/ANs, which did not change significantly during this time.
- **Groups With Disparities:**
 - In 2016, Asians were more likely to have IV thrombolytic therapy initiated at the hospital within 3 hours of time last known well compared with Whites (92.3% vs. 88.5%).
 - AI/ANs were less likely to have IV thrombolytic therapy initiated at the hospital within 3 hours of time last known well compared with Whites (80.3% vs. 88.5%).

People age 13 and over living with HIV who know their serostatus, by race/ethnicity, 2010-2015



Key: AI/AN = American Indian or Alaska Native; NHPI = Native Hawaiian/Pacific Islander.

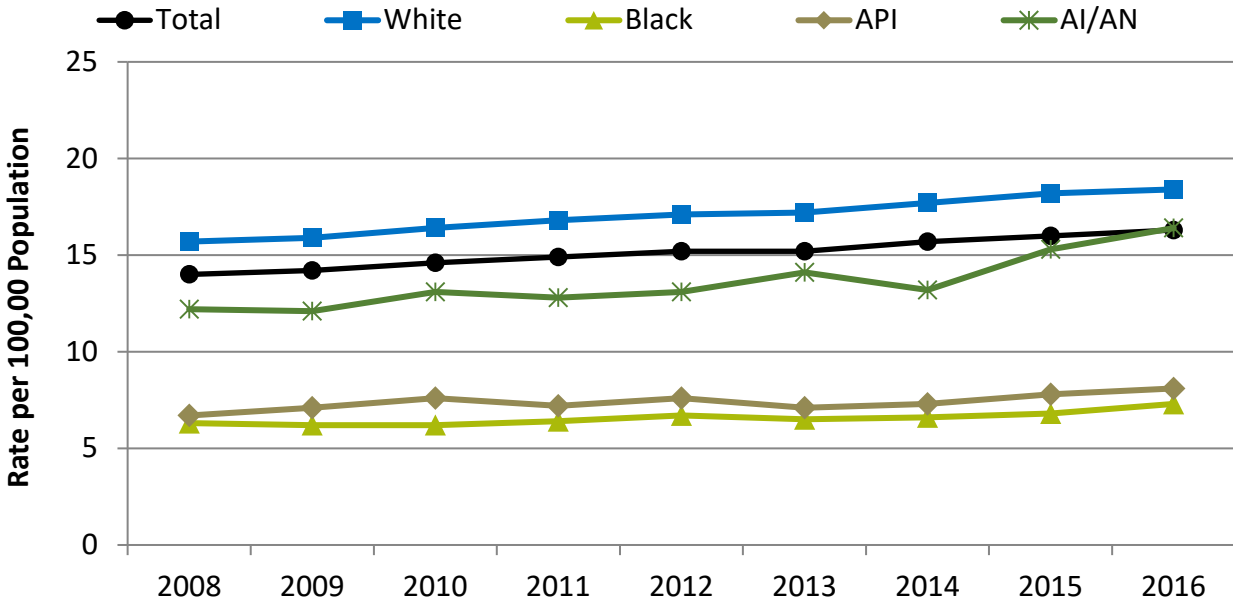
Source: Centers for Disease Control and Prevention, National Center for HIV, Viral Hepatitis, STD, and TB Prevention, Division of HIV/AIDS Prevention, National HIV/AIDS Surveillance System, 2010-2015.

Denominator: Adolescents and adults age 13 and over.

Note: White, Black, Asian, NHPI, and AI/AN are non-Hispanic. Hispanic includes all races. For more information on Asians and NHPIs and HIV, see, for example, Substance Abuse and Mental Health Services Administration, A Snapshot of Behavioral Health Issues for Asian American/Native Hawaiian/Pacific Islander Boys and Men: Jumpstarting an Overdue Conversation. Rockville, MD: Substance Abuse and Mental Health Services Administration; 2016. HHS Publication No. (SMA) 16-4959.

- **Importance:** People with HIV need to know they are HIV positive so they can take medicine to treat HIV. Taking HIV medicine as prescribed can make the level of virus in their body very low or even undetectable. A person with HIV who gets and stays virally suppressed or undetectable can stay healthy and has significantly low risk of transmitting HIV to HIV-negative partners through sex (CDC, 2019a, 2019b).
- **Overall Rate:** In 2015, 85.5% of people age 13 years and over living with HIV knew their serostatus.
- **Trend:** All groups improved from 2010 to 2015.
- **Groups With Disparities:** In 2010, the baseline year for this analysis, among people age 13 years and over living with HIV:
 - Asians were less likely to know their serostatus compared with Whites (70.5% vs. 86.4%). This gap narrowed over time (80.4% for Asians in 2015 vs. 88.1% for Whites).
 - NHPIs were less likely to know their serostatus compared with Whites (74.0% vs. 86.4%). This gap narrowed over time (82.2% for NHPIs in 2015 vs. 88.1% for Whites).
 - AI/ANs were less likely to know their serostatus compared with Whites (76.3% vs. 86.4%). This gap did not narrow over time (81.3% for AI/ANs in 2015 vs. 88.1% for Whites).
 - Blacks were less likely to know their serostatus compared with Whites (82.0% vs. 86.4%). This gap did not narrow over time (84.9% for Blacks in 2015 vs. 88.1% for Whites).
 - Hispanics were less likely to know their serostatus compared with Whites (80.9% vs. 86.4%). This gap did not narrow over time (83.5% for Hispanics in 2015 vs. 88.1% for Whites).

Suicide deaths among people age 12 and over per 100,000 population, by race, 2008-2016



Key: API = Asian/Pacific Islander; AI/AN = American Indian or Alaska Native.

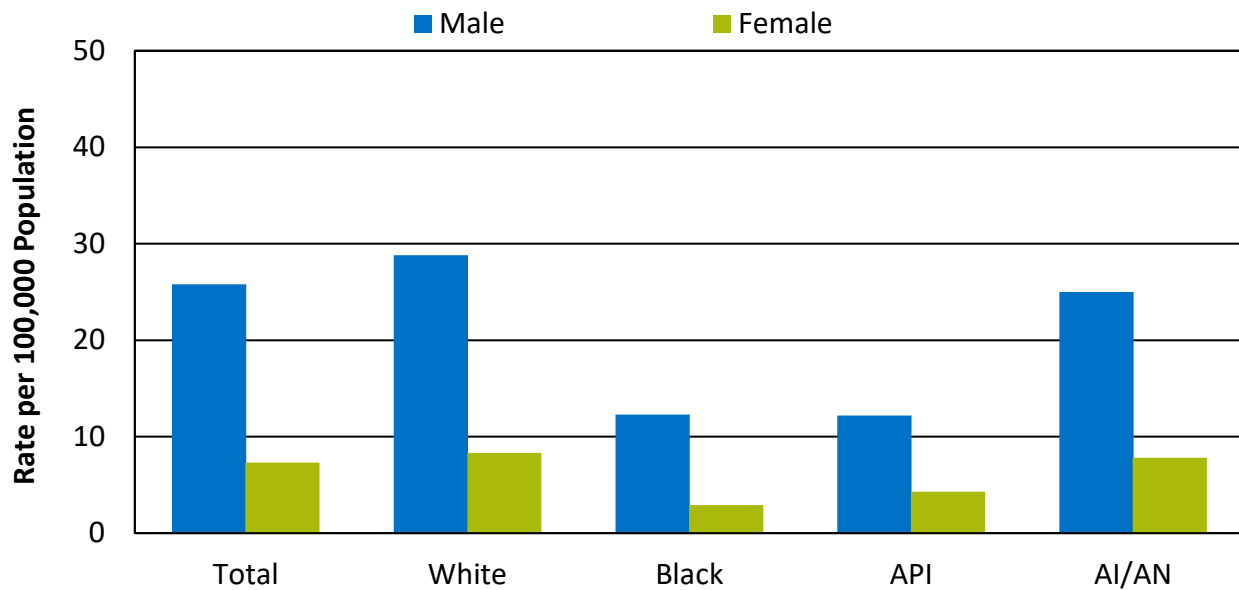
Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System—Mortality, 2008-2016.

Denominator: U.S. resident population age 12 and over.

Note: For this measure, lower rates are better. Suicides may be undercounted because of difficulty in the determination of suicidal intent by the coroner or medical examiner. Estimates are age adjusted to the 2000 U.S. standard population. Individuals for whom age is not reported are not included in the age adjustment calculations and are excluded from numerators. This data source combined data for Asian and NHPI into a single category, API.

- **Importance:** The age-adjusted suicide rate in the United States in 2017 was increasing and was 33% higher than the rate in 1999 (Curtin and Hedegaard, 2019). In 2017, suicide was the leading cause of death for Asian Americans ages 15 to 24 (Office of Minority Health, 2019) and the second leading cause for those ages 25 to 34 (CDC, 2017). Among the Asian and Pacific Islander population, complex interactions between social environments, developmental contexts, and acculturation serve as both risk and protective factors for the manifestation of depression and suicide (SAMHSA, 2016; Wyatt, et al., 2015).
- **Overall Rate:** In 2016, 16.3 per 100,000 people age 12 and over died by suicide.
- **Trends:** Suicide deaths per 100,000 population for people age 12 and over increased for all groups between 2008 and 2016.

Suicide deaths among people age 12 and over per 100,000 population, by race and sex, 2016



Key: API = Asian or Pacific Islander; AI/AN = American Indian or Alaska Native.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics, National Vital Statistics System—Mortality, 2016.

Denominator: U.S. resident population age 12 and over.

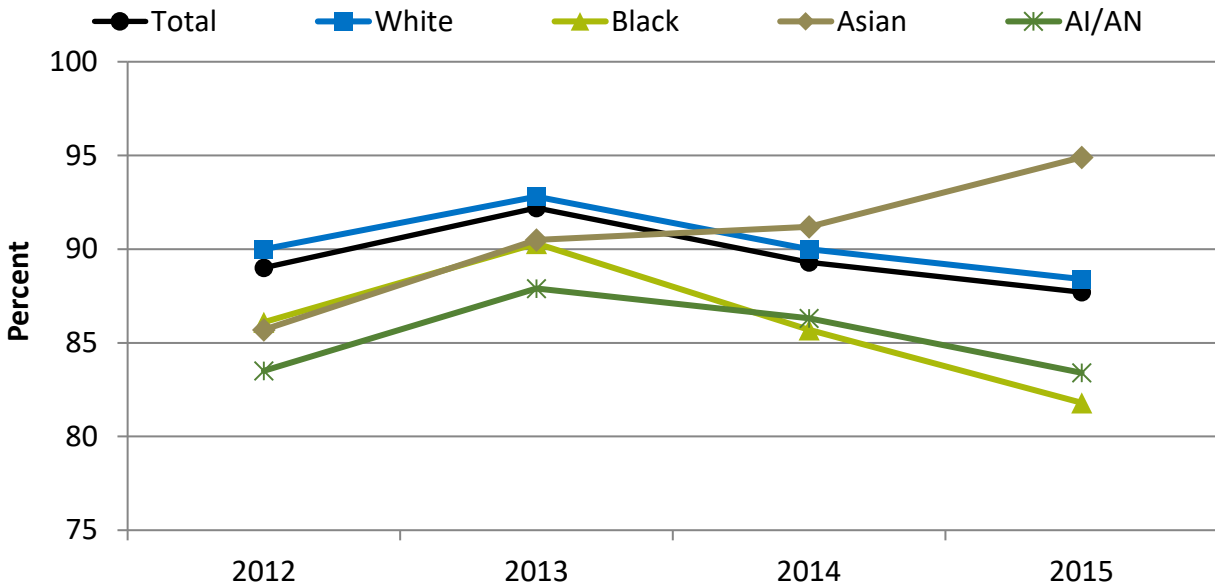
Note: For this measure, lower rates are better. Suicides may be undercounted because of difficulty in the determination of suicidal intent by the coroner or medical examiner. Estimates are age adjusted to the 2000 U.S. standard population. Individuals for whom age is not reported are not included in the age adjustment calculations and are excluded from numerators. This data source combined data for Asian and NHPI into a single category, Asian/Pacific Islander.

- **Importance:** The age-adjusted suicide rate in the United States in 2017 was 33% higher than the rate in 1999. Suicide rates are typically higher among males than females (Curtin and Hedegaard, 2019; SAMHSA, 2016).
- **Overall Rate:** In 2016, 16.3 per 100,000 people age 12 and over died by suicide.
- **Groups With Disparities:** In 2016, among people age 12 and over:
 - Overall and across all racial groups, males were significantly more likely to die by suicide than females. (Other results reported below were not tested for statistical significance.)
 - Overall, the suicide rate was 25.8 per 100,000 for males and 7.3 per 100,000 for females.
 - The ratio of male to female suicides was largest among Blacks (4.2:1) and lowest among Asians/Pacific Islanders (2.8:1)
 - Among males, Whites were the most likely to die by suicide (28.8 per 100,000), while Asians/Pacific Islanders were the least likely (12.2 per 100,000).
 - Among females, Whites were the most likely to die by suicide (8.3 per 100,000) and Blacks were the least likely (2.9 per 100,000).

Priority Area: Healthy Living

Healthy Living is one of five healthcare priorities covered by this chartbook. The other four priorities are Patient Safety, Person- and Family-Centered Care, Effective Treatment, and Care Affordability. A sixth priority, Care Coordination, was addressed separately in the Chartbook on Care Coordination, available at <https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/carecoordination/index.html>.

Hospital patients who received pneumococcal immunization, by race, 2012-2015



Key: AI/AN = American Indian or Alaska Native.

Source: Centers for Medicare & Medicaid Services, Quality Improvement Organization Clinical Data Warehouse for Hospital Inpatient Quality Reporting Program.

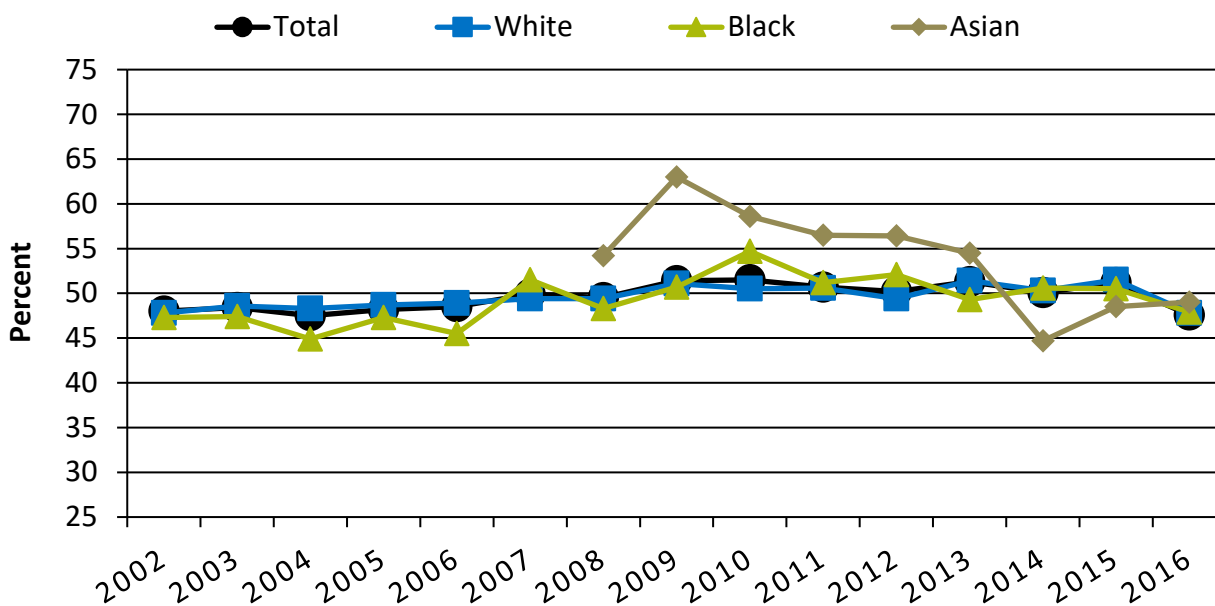
Denominator: Discharged hospital patients age 65 years and over and ages 5-64 years with a high-risk condition.

Note: NHPI is excluded from this analysis because data were only available for 2013-2015; 4 years of data are required for inclusion in trend analyses. Estimates are calculated using hospital-level scores. Further information on this and other immunization measures is available at <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/HospitalProcessOfCareMeasures.html>.

- Importance:** Pneumococcal disease is caused by bacteria and can result in a range of ailments, from mild ear infection to meningitis, sepsis, and fatal pneumonia (NIAID, 2014). Adults over age 65 and individuals of any age with chronic illness are at increased risk for pneumococcal disease and death. The best way to prevent pneumococcal disease is by getting vaccinated (CDC, 2019c). Immunization rates may differ among Asian and NHPI subpopulations (Barnes, et al., 2008).
- Overall Rate:** In 2015, 87.7% of hospital patients age 65 years and over and ages 5-64 years with a high-risk condition received pneumococcal immunization.
- Trend:** The percentage of Asian hospital patients age 65 years and over and ages 5-64 years with a high-risk condition who received a pneumococcal immunization increased from 85.7% in 2012 to 94.9% in 2015. No other group experienced a statistically significant change over this period.

- Groups With Disparities:** In 2012, the baseline year for this analysis, among hospital patients age 65 years and over and ages 5-64 with a high-risk condition:
 - Asians were less likely to receive the pneumococcal immunization compared with Whites (85.7% vs. 90.0%). By 2015, Asians were more likely than Whites to receive pneumococcal immunization (94.9% vs. 88.4%).
 - American Indians/Alaska Natives were less likely to receive the pneumococcal immunization compared with Whites (83.5% vs. 90.0%). This gap did not narrow over time (83.4% for AI/ANs in 2015 vs. 88.4% for Whites).
 - Blacks were less likely to receive the pneumococcal immunization compared with Whites (86.1% vs. 90.0%). This gap did not narrow over time (81.8% for Blacks in 2015 vs. 88.4% for Whites).
 - In 2015, Native Hawaiians/Pacific Islanders were more likely to receive the pneumococcal immunization compared with Whites (95.6% vs. 88.4%).

Adults with obesity who ever received advice from a health professional about eating fewer high-fat or high-cholesterol foods, by race, 2002-2016



Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 2002-2016.
Denominator: U.S. civilian noninstitutionalized population age 18 and over with a body mass index (BMI) of 30 or greater, excluding pregnant women.
Note: Data for Asians before 2008 do not meet criteria for statistical reliability, data quality, and confidentiality. BMI is based on reported height and weight. Estimates are age adjusted to the 2000 U.S. standard population using three age groups: 18-44, 45-64, and 65 and over. Nonrespondents and "Don't Know" responses were excluded from the analysis. Data were not included for NHPI adults because they did not meet the criteria for statistical reliability, data quality, and confidentiality.

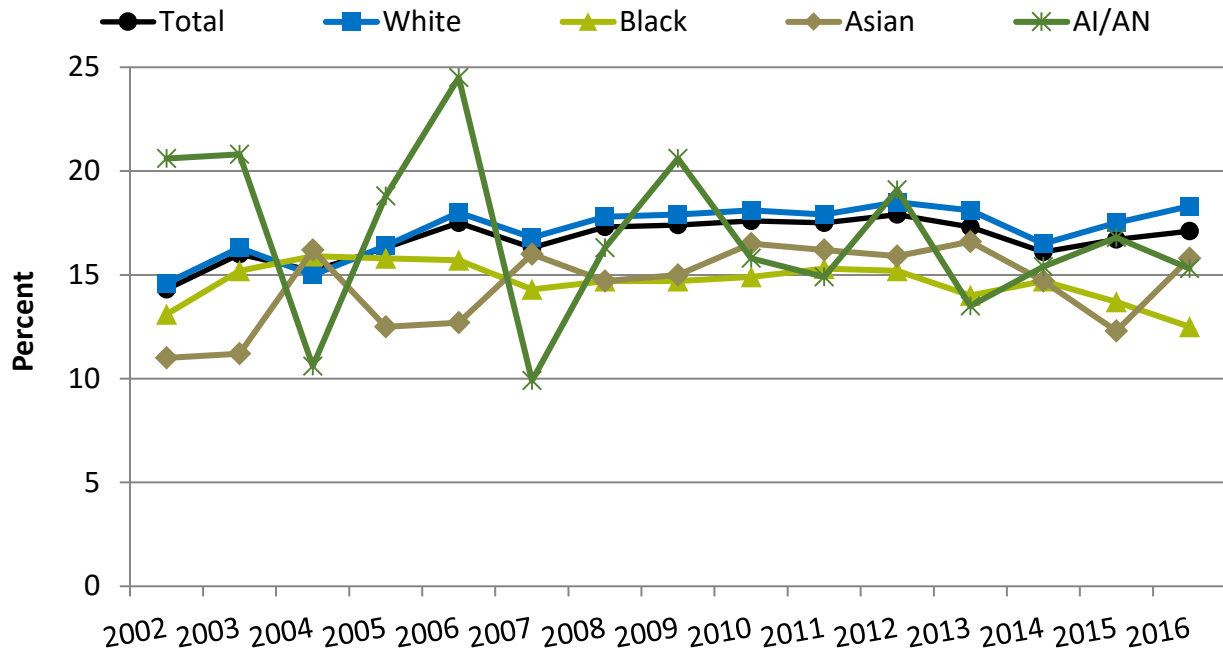
- Importance:** Obesity increases the risks for numerous diseases and detrimental health conditions, such as hypertension, diabetes, coronary heart disease, stroke, sleep apnea, and depression. In addition, obesity increases individual risk for mortality, particularly from cardiovascular disease and cancer (Jensen, et al., 2014).

- **Overall Rate:** In 2016, 47.6% of adults with obesity received advice from a health professional about eating fewer high-fat or high-cholesterol foods.
- **Trends:**
 - The percentage of Asian adults with obesity who ever received advice from a health professional about eating fewer high-fat or high-cholesterol foods decreased from 54.2% to 49.0% between 2008 and 2016.

Priority Area: Affordable Care

Care Affordability is one of five healthcare priorities covered by this chartbook. The other four priorities are Patient Safety, Person- and Family-Centered Care, Effective Treatment, and Healthy Living. A sixth priority, Care Coordination was addressed separately in the Chartbook on Care Coordination, available at <https://www.ahrq.gov/research/findings/nhqrdr/chartbooks/carecoordination/index.html>.

People under age 65 whose family's health insurance premium and out-of-pocket medical expenditures were more than 10% of total family income, by race, 2002-2016



Key: AI/AN = American Indian or Alaska Native.

Source: Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 2002-2016.

Denominator: U.S. civilian noninstitutionalized population under age 65.

Note: For this measure, lower percentages are better. Health insurance premium is the sum of insurance premiums (imputed) and Medicare Part B expenditures. Total family income is the sum of person-level pretax total income, refund income, and sales income. "Family" is defined in terms of health insurance eligibility units (HIEUs), which are composed of individuals who could be covered as a family under most private health insurance plans. For income, insurance, expenditures, and premiums, a family is defined in terms of HIEUs. Trends could not be calculated for NHPI adults because data did not meet the criteria for statistical reliability, data quality, and confidentiality.

- **Importance:** Healthcare costs can represent a significant financial burden on patients and their families. Even with commercial insurance, Medicare or Medicaid coverage, patients still face out-of-pocket costs for premiums, deductibles, cost sharing, and costs for noncovered services. These healthcare costs can pose a challenge, particularly for individuals with modest incomes and those with significant medical needs.
- **Overall Rate:** In 2016, 17.1% of the population under age 65 family's health insurance premium and out-of-pocket medical expenditures were more than 10% of total family income.
- **Trends:**
 - Between 2002 and 2016, the percentage of people under age 65 whose family's health insurance premium and out-of-pocket medical expenditures were more than 10% of total family income increased for Asians (from 11.0% to 15.8%) and Whites (from 14.6% to 18.3%).
 - There was no statistically significant change in the overall trend or the trend for other groups included in the analysis.
- **Groups With Disparities:**
 - Blacks under age 65 were less likely to spend more than 10% of total family income on their family's health insurance premiums and out-of-pocket medical expenditures compared with Whites (12.5% vs. 18.3%).

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