

Chapter 10. Priority Populations

To examine the issue of disparities in health care, Congress directed the Agency for Healthcare Research and Quality (AHRQ) to produce an annual report to track disparities related to “racial factors and socioeconomic factors in priority populations.”ⁱ Although the emphasis is on disparities related to race, ethnicity, and socioeconomic status, this directive includes a charge to examine disparities in “priority populations,” which are groups with unique health care needs or issues that require special attention.

In 2009, the Institute of Medicine released recommendations on improving race, ethnicity, and language data in a report called *Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement*.¹ The Subcommittee on Standardized Collection of Race/Ethnicity Data for Healthcare Quality Improvement recommends collecting data based on existing Office of Management and Budget race and Hispanic ethnicity categories. They also recommend using more fine-grained categories of ethnicity (referred to as granular ethnicity and based on one’s ancestry) and language need (a rating of spoken English language proficiency of “less than very well” and preferred language for health-related encounters).¹ Standardized race, ethnicity, and language data are needed to support comparisons across organizations and regions, create pooled datasets, and track data over time. Standardized race, ethnicity, and language data also support reporting and measuring successes of disparities reduction initiatives.

This chapter of the National Healthcare Disparities Report (NHDR) addresses the congressional directive on priority populations in addition to what is presented throughout the NHDR and in the National Healthcare Quality Report (NHQR) this year.ⁱⁱ Chapters 2 through 9 of this report examine racial, ethnic, socioeconomic, gender, geographic location, and age differences in quality of and access to health care in the general U.S. population. Subpopulation data for Asians and Hispanics are also presented in these chapters where data are available.

This chapter summarizes differences for each of the racial and ethnic and low-income populations for which there is relatively more data from multiple sources. For other relatively smaller populations, such as Native Hawaiians and Other Pacific Islanders (NHOPIs), American Indians and Alaska Natives (AI/ANs), and people with disabilities, this chapter highlights some unique data and findings.

The approach taken in this chapter may help policymakers understand the impact of racial, ethnic, and socioeconomic differences on specific populations and target quality improvement programs toward groups in greatest need. The Data Tables appendix includes detailed tables that allow examination of racial, ethnic, and socioeconomic disparities both in the general population and across priority populations for most measures.

ⁱ Available at: <http://origin.www.gpo.gov/fdsys/pkg/USCODE-2000-title42/html/USCODE-2000-title42-chap6A-subchapVII-partA-sec299a-1.htm>.

ⁱⁱ Populations of inner-city areas are also identified as one of AHRQ’s priority populations pursuant to 42 U.S.C. 299(c)(1)(A). However, no data are available to support findings for this population.

Priority Populations

AHRQ's Priority Populations

AHRQ's priority populations, specified by Congress in the Healthcare Research and Quality Act of 1999 (Public Law 106-129), are:

- Racial and ethnic minority groups.ⁱⁱⁱ
- Low-income groups.^{iv}
- Women.
- Children (under age 18).
- Older adults (age 65 and over).
- Residents of rural areas.^v
- Individuals with special health care needs,^{vi} including individuals with disabilities and individuals who need chronic care or end-of-life care.

How This Chapter Is Organized

This chapter provides the most recent information available on racial, ethnic, and income differences in quality and access for priority populations. It is presented in the following order:

- Racial and ethnic minorities.
- Low-income groups.
- Residents of rural areas.
- Individuals with disabilities or special health care needs.

Measures related to women, children, and older adults are presented in other chapters of this report and include comparisons by gender and age.

ⁱⁱⁱ Racial groups are White, Black, Asian, Native Hawaiian or Other Pacific Islander, American Indian and Alaska Native, and more than one race. Ethnic groups are Hispanic or Latino, non-Hispanic White, and non-Hispanic Black.

^{iv} Thresholds for income categories—poor, near poor, middle income, and high income—vary by family size and composition and are updated annually by the U.S. Bureau of the Census. For example, in 2009 the Federal poverty threshold for a family of two adults and two children was \$22,050.

^v Rural areas can be defined differently depending on the data source. The NHDR uses Office of Management and Budget revised definitions of metropolitan and micropolitan statistical areas. Noncore areas are rural areas.

^{vi} Individuals with special health care needs include children who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.

This chapter does not provide a comprehensive assessment of health care differences in each priority population. In general, most of the measures tracked in the NHQR and NHDR were selected to be applicable across many population groups to fulfill the purpose of these reports, which is to track quality and disparities at the national level. These general measures overlook some important health care problems specific to particular populations. For example, people with disabilities may face barriers in getting access to care and experience differences in quality of care that are not captured by data because of the limitations in the survey instruments.

In addition, national data may not address key health issues for specific population groups. It is not always possible to generate reliable estimates for many smaller groups, such as NHOPIs and AI/ANs. Instead, this chapter should be seen as a starting point, identifying some problem areas and indicating gaps in current data and understanding.

Racial and Ethnic Minorities

In 2000, about 33% of the U.S. population identified themselves as members of racial or ethnic minority groups.² By 2050, it is projected that these groups will account for almost half of the population. For 2007, the U.S. Census Bureau estimated that the United States had almost 38.8 million Blacks or African Americans³ (12.9% of the U.S. population)⁴; more than 45.5 million Hispanics or Latinos (15.1%)³; almost 13.4 million Asians (4.4%); more than half a million NHOPIs (0.2%); and nearly 3 million AI/ANs (1.0%), of whom 57% reside on Federal trust lands.⁵ Racial and ethnic minorities are more likely than non-Hispanic Whites to be poor or near poor.⁶ In addition, Hispanics, Blacks, and some Asian subgroups are less likely than non-Hispanic Whites to have a high school education.⁷

Previous chapters of the NHDR describe health care differences by racial and ethnic categories as defined by the Office of Management and Budget and used by the U.S. Census Bureau.⁸ In this section, quality of and access to health care for each minority group are summarized to the extent that statistically reliable data are available for each group.^{vii} Criteria for importance are that the difference is statistically significant at the $\alpha \leq 0.05$ level (two-tailed test) and that the relative difference from the reference group is at least 10% when framed positively as a favorable outcome or negatively as an adverse outcome. Access measures focus on facilitators and barriers to health care and exclude health care utilization measures.

Changes Over Time

This section also examines changes over time in differences related to race and ethnicity. For each core report measure, racial, ethnic, and socioeconomic groups are compared with a designated comparison group. The time periods range from 2000-2002 to 2006-2008, depending on the data source. Consistent with Healthy People 2010, disparities are measured in relative terms as the percentage difference between each group and a comparison group. Changes in disparity are measured by subtracting the percentage difference from the comparison group at the baseline year from the percentage difference from the comparison group at the most recent year. The change in each disparity is then divided by the number of years between the baseline and most recent estimate to calculate change in disparity per year.

^{vii} Data are presented for each minority group except for people of multiple races due to unreliable estimates for this group.

Priority Populations

Core report measures (Table 1.3) for which the relative differences are changing less than 1% per year are identified as staying the same. Core report measures for which the relative differences are becoming smaller at a rate of 1% or more per year are identified as improving. Core report measures for which the relative differences are becoming larger at a rate of 1% or more per year are identified as worsening.

Gaps in Information

As in previous NHDRs, this section includes information on programs and issues that may affect racial and ethnic disparities. In interpreting findings for racial and ethnic minorities, readers should note that considerable gaps exist in information for some racial and ethnic minorities. These gaps limit the NHDR's ability to identify the current state of disparities for some groups.

Gaps can relate to insufficient data to produce reliable estimates or, when estimates are possible, to inadequate power to detect large differences. For example, of core report measures of quality, it is rarely possible to provide estimates for NHOPIs and people of more than one race. For Asians, only about two-thirds of core report measures of quality support analyses. For AI/ANs, only about half of these same measures support analyses.

In addition, many data sources changed racial classifications for Asians and NHOPIs in 2003 to adhere to new Federal standards. This change has further constrained the ability to perform trend analyses for these groups. Chapter 1, Introduction and Methods, presents more detailed descriptions of current data limitations and ways data are gradually improving.

Blacks or African Americans

Previous NHDRs showed that Blacks had poorer quality of care and worse access to care than Whites for many measures tracked in the reports. Findings based on core report measures (Table 1.3) of quality of and access to health care are shown below.

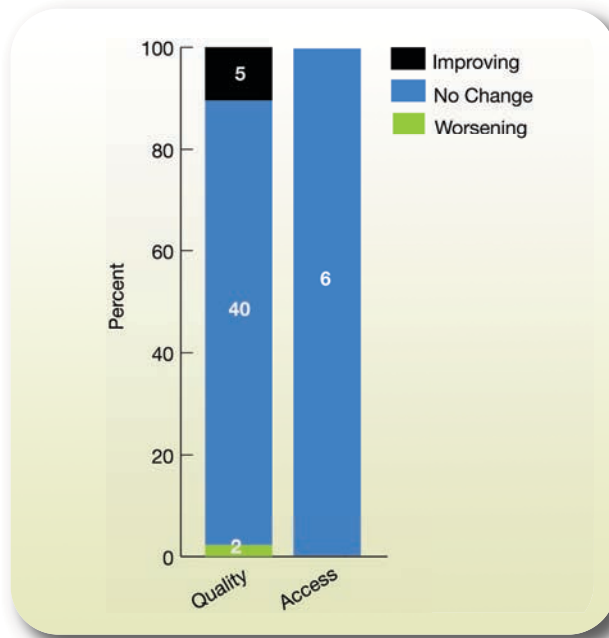
Priority Populations

Table 10.1. Measures for which Blacks were worse than Whites in most recent year and their trends over time

Topic	Blacks worse than Whites and getting better
Diabetes	Hospital admissions for short-term complications of diabetes per 100,000 population
HIV and AIDS	New AIDS cases per 100,000 population age 13 and over
Functional status preservation and rehabilitation	Female Medicare beneficiaries age 65 and over who reported ever being screened for osteoporosis with a bone mass or bone density measurement
Topic	Blacks worse than Whites and staying the same
Cancer	Breast cancer diagnosed at advanced stage per 100,000 women age 40 and over
	Breast cancer deaths per 100,000 female population per year
	Adults age 50 and over who ever received colorectal cancer screening
	Colorectal cancer diagnosed at advanced stage per 100,000 population age 50 and over
	Colorectal cancer deaths per 100,000 population per year
Diabetes	Hospital admissions for lower extremity amputations per 1,000 population age 18 and over with diabetes
Maternal and child health	Children ages 2-17 who had a dental visit in the calendar year
	Children ages 19-35 months who received all recommended vaccines
Mental health and substance abuse	Adults with a major depressive episode in the last 12 months who received treatment for depression in the last 12 months
	People age 12 and over treated for substance abuse who completed treatment course
Respiratory diseases	Adults age 65 and over who ever received pneumococcal vaccination
	Hospital patients with pneumonia who received recommended hospital care
Supportive and palliative care	High-risk long-stay nursing home residents with pressure sores
	Short-stay nursing home residents with pressure sores
	Adult home health care patients who were admitted to the hospital
	Hospice patients who received the right amount of medicine for pain
Timeliness	Adults who needed care right away for an illness, injury, or condition in the last 12 months who got care as soon as wanted
	Emergency department visits where patients left without being seen
Access	People with a usual primary care provider
	People with a specific source of ongoing care

Priority Populations

Figure 10.1. Change in Black-White disparities over time for all core measures



Improving = Black-White difference becoming smaller at an average annual rate greater than 1%.

Same = Black-White difference not changing.

Worsening = Black-White difference becoming larger at an average annual rate greater than 1%.

Note: The time period for this figure is the most recent and oldest years of data used in the NHDR. Only 53 core report measures could be tracked over time for Blacks.

Asians

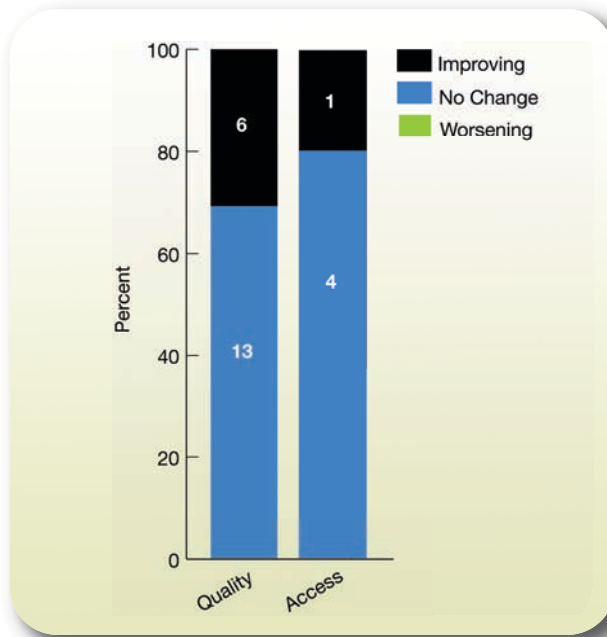
Previous NHDRs showed that Asians had similar or better quality of care than Whites but worse access to care than Whites for many measures that the report tracks. Findings based on core report measures of quality and access to health care that support estimates for either Asians or Asians and Pacific Islanders in aggregate are shown below.

Table 10.2. Measures for which Asians were worse than Whites for most recent year and their trends over time

Topic	Asians worse than Whites and getting better
Cancer	Adults age 50 and over who ever received colorectal cancer screening
Patient safety	Adult surgery patients who received appropriate timing of antibiotics
Topic	Asians worse than Whites and staying the same
Respiratory diseases	Adults age 65 and over who ever received pneumococcal vaccination
	Hospital patients with pneumonia who received recommended hospital care
Access	People with a usual primary care provider

Priority Populations

Figure 10.2. Change in Asian-White disparities over time



Improving = Asian-White difference becoming smaller at an average annual rate greater than 1%.

Same = Asian-White difference not changing.

Worsening = Asian-White difference becoming larger at an average annual rate greater than 1%.

Note: The time period for this figure is the most recent and oldest years of data used in the NHDR. Only 24 core report measures could be tracked over time for Asians.

Native Hawaiians and Other Pacific Islanders

The ability to assess disparities among NHOPIs for the NHDR has been a challenge for two main reasons. First, the NHOPI racial category is relatively new to Federal data collection. Before 1997, NHOPIs were classified as part of the Asian and Pacific Islander racial category and could not be identified separately in most Federal data. In 1997, the Office of Management and Budget promulgated new standards for Federal data on race and ethnicity and mandated that information about NHOPIs be collected separately from information about Asians.⁸ However, these standards have not yet been incorporated into all databases. Second, when information about this population was collected, databases often included insufficient numbers of NHOPIs to allow reliable estimates to be made.

Due to these challenges, in previous NHDRs estimates for the NHOPI population could be generated for only a handful of measures. A lack of quality data on this population prevents the NHDR from detailing disparities for this group. This year, the NHDR features data from the Behavioral Risk Factor Surveillance System (BRFSS) to supplement the NHDR information for the NHOPI population. Preventive care and access to care measures were selected to highlight quality of care for people who identified themselves as NHOPI (including people of mixed race who identified primarily as NHOPI). This year, the measures include cholesterol screening, pneumonia admissions, and cost as a barrier to medical care.

Priority Populations

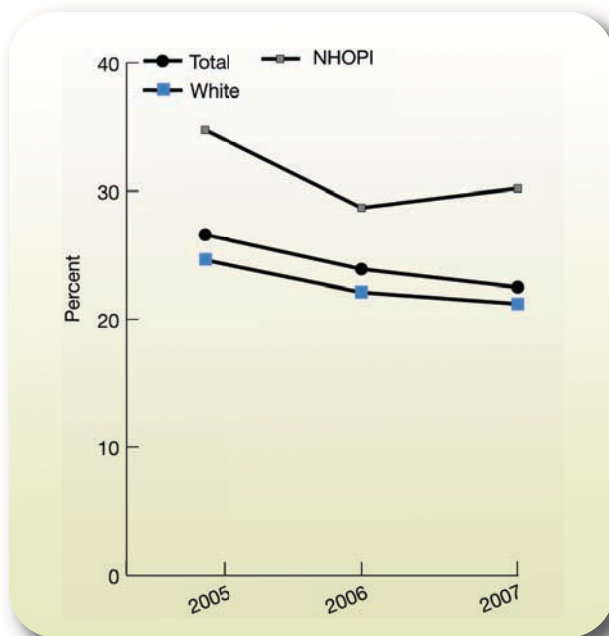
BRFSS data do not replace the need for continued efforts to improve data collection and statistical methods to provide more information on health and health care of the NHOPI population. BRFSS may have larger samples of NHOPIs due to State efforts to improve sample sizes, but it is not necessarily a comprehensive survey of health and health care. Other surveys and data collection efforts, such as vital statistics and hospital administrative data, include more topics but do not identify NHOPIs or have large enough sample sizes to provide data for these populations.

For all national data sources, the relatively small population sizes of many Pacific Islander groups can cause these populations to be overlooked when categorized as NHOPIs. In addition, identifying individuals with chronic conditions or other health conditions within such small populations further reduces the sample sizes. However, as data become available, this information will be included in future reports.

Preventive Care: Cholesterol Screening

In the State of Hawaii, where 54% of Native Hawaiians reside, cardiovascular disease is the leading cause of death.⁹ Screening for risk factors for cardiovascular disease, such as high blood pressure and high cholesterol, is important in preventing disease. Cholesterol screening is shown below to highlight one aspect of cardiovascular disease prevention for Native Hawaiians.

Figure 10.3. Adults who did NOT receive a cholesterol check in the last 5 years, Hawaii, 2005 , 2007, and 2009



Key: NHOPI = Native Hawaiian or Other Pacific Islander.

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2005, 2007, and 2009.

Denominator: Adults age 18 and over in Hawaii.

Note: These data are self-reported from a survey of adults in a household.

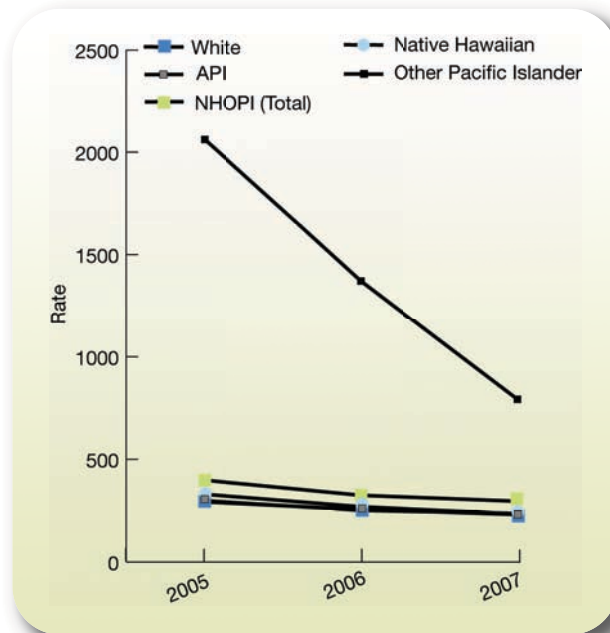
Priority Populations

- From 2005 to 2009, the percentage of adults who did not receive a cholesterol check in Hawaii improved overall for the general population (from 26.6% to 22.5%) and for NHOPIs (from 34.8% to 30.2%; Figure 10.3).
- In 2009, the percentage of adults who did not receive a cholesterol check in the last 5 years in Hawaii was significantly higher for NHOPIs than for Whites (30.2% compared with 21.2%).

Treatment: Pneumonia

High rates of hospitalizations for pneumonia may indicate poor outpatient care and low vaccination rates. NHOPIs have more hospital admissions for bacterial pneumonia than Whites. The problem appears to be worse for Pacific Islanders other than Native Hawaiians.

Figure 10.4. Bacterial pneumonia admissions per 100,000 population, age 18 and over, Hawaii only, by race, 2005-2007



Key: NHOPI = Native Hawaiian or Other Pacific Islander.

Source: Agency for Healthcare Research and Quality, Healthcare Cost and Utilization Project, Hawaii State Inpatient Databases, 2005-2007, and AHRQ Quality Indicators, version 3.1.

Denominator: Adults age 18 and over in Hawaii based on the Hawaii Health Survey.

Note: Excludes sickle cell or hemoglobin-S conditions, transfers from other institutions, and obstetric admissions. Rates are adjusted by age and gender using the total U.S. population for 2000 as the standard population.

- From 2005 to 2007, there was significant improvement among all groups in the rate of hospital admissions with bacterial pneumonia in Hawaii.
- In 2007, NHOPIs overall had a higher rate of hospital admission with bacterial pneumonia than Whites in Hawaii (294.4 per 100,000 population compared with 229.1 per 100,000 population; Figure 10.4).

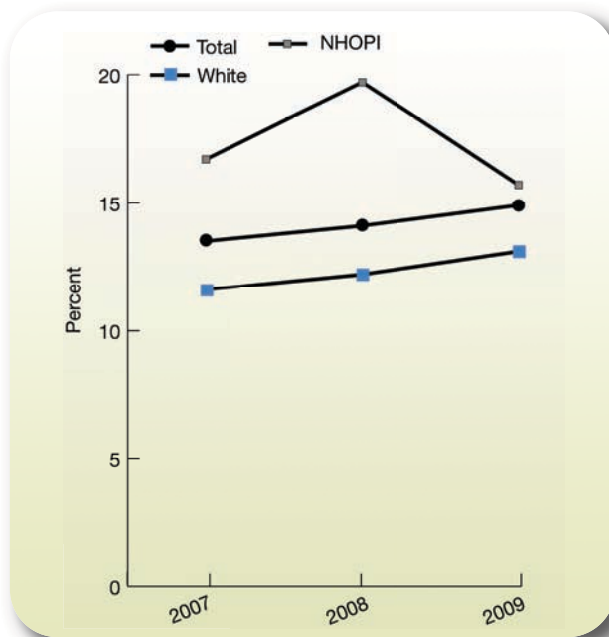
Priority Populations

- Native Hawaiians had a higher rate of hospital admissions with bacterial pneumonia than Whites in Hawaii (231.6 per 100,000 population compared with 229.1 per 100,000 population).
- Other Pacific Islanders had a significantly higher rate of hospital admission with bacterial pneumonia than Whites in Hawaii (793.3 per 100,000 population compared with 229.1 per 100,000 population).

Access to Care: Medical Costs

High premiums and out-of-pocket payments can be significant barriers to accessing needed medical treatment and preventive care. Studies show that racial and ethnic minorities are more likely to face barriers due to cost of care than other groups.^{10, 11}

Figure 10.5. Adults who needed to see a doctor in the past year but could not because of cost, Hawaii, 2007-2009



Key: NHOPI = Native Hawaiian or Other Pacific Islander.

Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System, 2007-2009.

Denominator: Adults age 18 and over in Hawaii.

Note: These data are self-reported from a survey of adults in a household.

- From 2007 to 2009, the percentage of adults who needed to see a doctor in the past year but could not because of cost in Hawaii worsened overall and for Whites, but improved for NHOPIs (from 16.7% to 15.7%; Figure 10.5).
- In 2007, the percentage of adults who needed to see a doctor in the past year but could not because of cost in Hawaii was higher for NHOPIs than for Whites (16.7% compared with 11.7%).

Priority Populations

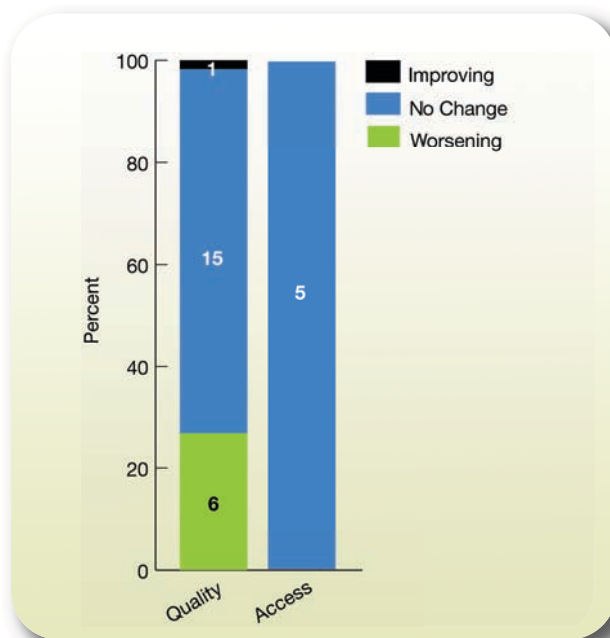
American Indians and Alaska Natives

Previous NHDRs showed that AI/ANs had poorer quality of care and worse access to care than Whites for many measures tracked in the reports. Findings based on core report measures of quality and access that support estimates for AI/ANs are shown below.

Table 10.3. Measures for which American Indians and Alaska Natives were worse than Whites for most recent year and their trends over time

Topic	AI/ANs worse than Whites and staying the same
Heart disease	Hospital patients with heart failure who received recommended hospital care
HIV and AIDS	New AIDS cases per 100,000 population age 13 and over
Respiratory diseases	Hospital patients with pneumonia who received recommended hospital care
Functional status preservation and rehabilitation	Female Medicare beneficiaries age 65 and over who reported ever being screened for osteoporosis with a bone mass or bone density measurement
Supportive and palliative care	Hospice patients who received the right amount of medicine for pain
	High-risk long-stay nursing home residents with pressure sores
	Adult home health care patients who were admitted to the hospital
Access	People under age 65 with health insurance
Topic	AI/ANs worse than Whites and getting worse
Cancer	Adults age 50 and over who ever received colorectal cancer screening
Patient safety	Adult surgery patients who received appropriate timing of antibiotics

Figure 10.6. Change in American Indian or Alaska Native-White disparities over time for all core measures



Improving = AI/AN-White difference becoming smaller at an average annual rate greater than 1%.
Same = AI/AN-White difference not changing.
Worsening = AI/AN-White difference becoming larger at an average annual rate greater than 1%.
Key: AI/AN = American Indian or Alaska Native.
Note: The time period for this figure is the most recent and oldest years of data used in the NHDR. Only 27 core report measures could be tracked over time for AI/ANs.

Priority Populations

Hispanics or Latinos

Previous NHDRs showed that Hispanics had poorer quality of care and worse access to care than non-Hispanic Whites for many measures that the report tracks. Findings based on core report measures of quality of and access to health care that support estimates for Hispanics are shown below. Figure 10.7 shows changes over time.

Table 10.4. Measures for which Hispanics were worse than non-Hispanic Whites for most recent year and their trends over time

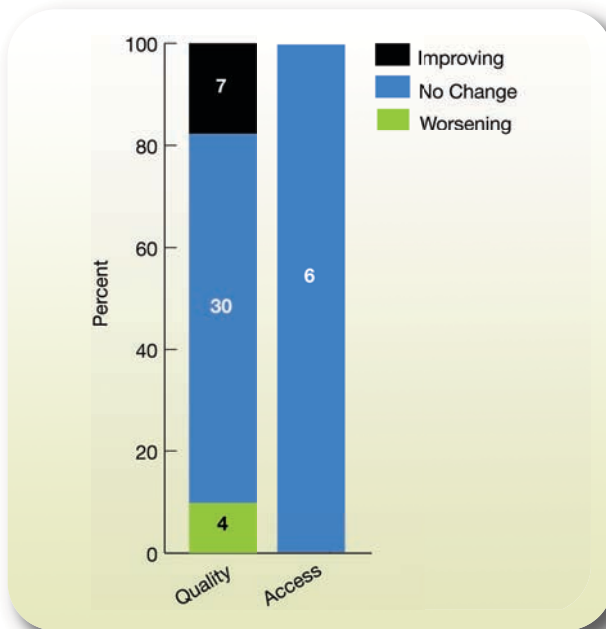
Topic	Hispanics worse than non-Hispanic Whites and getting better
Maternal and child health	Children ages 2-17 who had a dental visit in the calendar year
Lifestyle modification	Adult current smokers with a checkup in the last 12 months who received advice to quit smoking
	Adults with obesity who ever received advice from a health provider about healthy eating
Functional status preservation and rehabilitation	Female Medicare beneficiaries age 65 and over who reported ever being screened for osteoporosis with a bone mass or bone density measurement
Topic	Hispanics worse than non-Hispanic Whites and staying the same
Cancer	Women age 40 and over who received a mammogram in the last 2 years
	Adults age 50 and over who ever received colorectal cancer screening
Diabetes	Adults age 40 and over with diagnosed diabetes who received all three recommended services for diabetes in the calendar year
Heart disease	Hospital patients with heart attack and left ventricular systolic dysfunction who were prescribed angiotensin-converting enzyme inhibitor or angiotensin receptor blocker at discharge
	Hospital patients with heart failure who received recommended hospital care
HIV and AIDS	New AIDS cases per 100,000 population age 13 and over
Mental health and substance abuse	Adults with a major depressive episode in the last 12 months who received treatment for depression in the last 12 months
Respiratory disease	Adults age 65 and over who ever received pneumococcal vaccination
	Hospital patients with pneumonia who received recommended hospital care
Lifestyle modification	Adults with obesity who ever received advice from a health provider to exercise more
Supportive and palliative care	Long-stay nursing home residents with physical restraints
	High-risk long-stay nursing home residents with pressure sores
	Short-stay nursing home residents with pressure sores
	Adult home health care patients who were admitted to the hospital
	Hospice patients who received the right amount of medicine for pain

Priority Populations

Table 10.4. Measures for which Hispanics were worse than non-Hispanic Whites for most recent year and their trends over time

Topic	Hispanics worse than non-Hispanic Whites and staying the same
Patient safety	Adult surgery patients who received appropriate timing of antibiotics
Timeliness	Adults who needed care right away for an illness, injury, or condition in the last 12 months who got care as soon as wanted
Patient centeredness	Adults with ambulatory visits who reported poor communication with health providers
	Children with ambulatory visits who reported poor communication with health providers
Access	People under age 65 with health insurance
	People under age 65 who were uninsured all year
	People with a specific source of ongoing care
	People with a usual primary care provider
	People unable to get or delayed in getting needed care due to financial or insurance reasons
Topic	Hispanics worse than non-Hispanic Whites and getting worse
Maternal and child health	Children ages 3-6 who ever had their vision checked by a health provider

Figure 10.7. Change in Hispanic–non-Hispanic White disparities over time for all core measures



Improving = Hispanic–non-Hispanic White difference becoming smaller at an average annual rate greater than 1%.

Same = Hispanic–non-Hispanic White difference not changing.

Worsening = Hispanic–non-Hispanic White difference becoming larger at an average annual rate greater than 1%.

Note: The time period for this figure is the most recent and oldest years of data used in the NHDR. Only 47 core report measures could be tracked over time for Hispanics.

Priority Populations

Low-Income Groups

In this report, poor populations are defined as people living in families whose household income falls below specific poverty thresholds. These thresholds vary by family size and composition and are updated annually by the U.S. Bureau of the Census.¹² After falling for a decade (1990-2000), the number of poor people in America rose from 31.6 million in 2000 to 36.5 million in 2006, and the rate of poverty increased from 11.3% to 12.3% during the same period.¹³

Poverty varies by race and ethnicity. In 2006, 24% of Blacks, 21% of Hispanics, 10% of Asians, and 8% of Whites were poor. People with low incomes often experience worse health and are more likely to die prematurely.¹⁴ In general, poor populations have reduced access to high-quality care. While people with low incomes are more likely to be uninsured, income-related differences in quality of care that are independent of health insurance coverage have also been demonstrated.¹⁵

Previous chapters of this report describe health care differences by income. This section summarizes disparities in quality of and access to health care for poor^{viii} individuals compared with high-income^{ix} individuals. For each core report measure, poor people can have health care that is worse than, about the same as, or better than health care received by high-income people. Only relative differences of at least 10% that are statistically significant at $\alpha \leq 0.05$ are discussed in this report. Access measures focus on facilitators and barriers to health care and exclude health care utilization measures. In addition, changes in differences related to income are examined over time.

Table 10.5. Measures for which poor people were worse than high-income people for most recent year and their trends over time

Topic	Poor worse than high income and getting better
Maternal and child health	Children ages 2-17 who had a dental visit in the calendar year
Lifestyle modification	Adults with obesity who ever received advice from a health provider about healthy eating
Topic	Poor worse than high income and staying the same
Diabetes	Hospital admissions for short-term complications of diabetes per 100,000 population
Heart disease	Deaths per 1,000 adult hospital admissions with acute myocardial infarction
Maternal and child health	Children ages 2-17 for whom a health provider ever gave advice about exercise
	Children ages 2-17 for whom a health provider ever gave advice about healthy eating
	Children ages 19-35 months who received all recommended vaccines
Mental health and substance abuse	Adults with a major depressive episode in the last 12 months who received treatment for depression in the last 12 months

^{viii} Household income less than Federal poverty thresholds.

^{ix} Household income 400% of Federal poverty thresholds and higher.

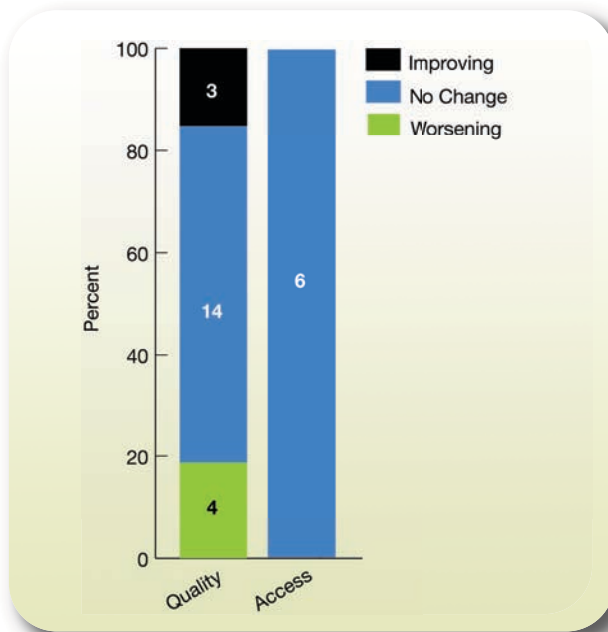
Priority Populations

Table 10.5. Measures for which poor people were worse than high-income people for most recent year and their trends over time

Topic	Poor worse than high income and staying the same
Respiratory diseases	Adults age 65 and over who ever received pneumococcal vaccination People with current asthma who are now taking preventive medicine daily or almost daily
Lifestyle modification	Adults with obesity who ever received advice from a health provider to exercise more
Functional status preservation and rehabilitation	Female Medicare beneficiaries age 65 and over who reported ever being screened for osteoporosis with a bone mass or bone density measurement
Timeliness	Adults who needed care right away for an illness, injury, or condition in the last 12 months who got care as soon as wanted
Patient safety	Adults age 65 and over who received potentially inappropriate prescription medications in the calendar year
Patient centeredness	Adults with ambulatory visits who reported poor communication with health providers
	Children with ambulatory visits whose parents reported poor communication with health providers
Access	People under age 65 with health insurance
	People under age 65 who were uninsured all year
	People with a specific source of ongoing care
	People with a usual primary care provider
	People unable to get or delayed in getting needed care due to financial or insurance reasons
	People who were unable to get or delayed in getting needed medical care, dental care, or prescription medicines in the last 12 months
Topic	Poor worse than high income and getting worse
Cancer	Women age 40 and over who received a mammogram in the last 2 years
	Adults age 50 and over who ever received colorectal cancer screening
Diabetes	Adults age 40 and over with diagnosed diabetes who received all three recommended services for diabetes in the calendar year

Priority Populations

Figure 10.8. Change in poor–high-income disparities over time for all core measures



Improving = Poor–high-income difference becoming smaller at an average annual rate greater than 1%.

Same = Poor–high-income difference not changing.

Worsening = Poor–high-income difference becoming larger at an average annual rate greater than 1%.

Note: The time period for this figure is the most recent and oldest years of data used in the NHDR. Only 27 core report measures of quality and access could be tracked over time for poor individuals. No acute care measures reported data for income.

Residents of Rural Areas

About one in five Americans lives in a nonmetropolitan area.¹⁶ Compared with their urban counterparts, rural residents are more likely to be older, be poor,¹⁷ and be in fair or poor health, and have chronic conditions.¹⁶ Rural residents are less likely than their urban counterparts to receive recommended preventive services and on average report fewer visits to health care providers.¹⁸

Although 20% of Americans live in rural areas,^x only 9% of physicians in America practice in those settings.¹⁹ Other important providers of health care in those settings include nurse practitioners, nurse midwives, and physician assistants. A variety of programs deliver needed services in rural areas, such as the National Health Service Corps Scholarship Program, Indian Health Service, State offices of rural health, rural health clinics, and community health centers. Cost-based Medicare reimbursement incentives are also available for rural health clinics, critical access hospitals, sole community hospitals, and Medicare-dependent hospitals and physicians in health professional shortage areas.

^x Many terms are used to refer to the continuum of geographic areas. For Census 2000, the U.S. Census Bureau's classification of "rural" consists of all territory, population, and housing units located outside of urban areas and urban clusters. The Census Bureau classified as "urban" all territory, population, and housing units located within (1) core census block groups or blocks that have a population density of at least 1,000 people per square mile and (2) surrounding census blocks that have an overall density of at least 500 people per square mile.

Priority Populations

Many rural residents depend on small rural hospitals for their care. There are approximately 2,000 rural hospitals throughout the country,²⁰ 1,500 of which have 50 or fewer beds. Most of these hospitals are critical access hospitals that have 25 or fewer beds. Rural hospitals face unique challenges due to their size and case mix. During the 1980s, many were forced to close due to financial losses.²¹ More recently, finances of small rural hospitals have improved and few closures have occurred since 2003.

Transportation needs are pronounced among rural residents, who must travel longer distances to reach health care delivery sites. Of the nearly 1,000 “frontier counties”^{xi} in the Nation, most have limited health care services and many do not have any.²²

Geographic areas are classified in different ways depending on the data source. Chapter 1, Introduction and Methods, provides more information on the classifications used. In this chapter, we compare residents of noncore^{xii} (rural) areas with residents of large fringe metropolitan (suburban) areas because residents of suburban areas tend to have higher quality health care and better outcomes.



^{xi} “Frontier counties” have a population density of less than 7 people per square mile; thus, residents may have to travel long distances for care.

^{xii} Noncore areas are outside of metropolitan or micropolitan statistical areas. Micropolitan and noncore areas are typically regarded as “rural.”

Priority Populations

Table 10.6. Measures for which residents of noncore areas were worse than residents of large fringe metropolitan areas for most recent year only^{xiii}

Topic	Measure
Cancer	Adults age 50 and over who ever received colorectal cancer screening
	Colorectal cancer deaths per 100,000 population per year
	Cancer deaths per 100,000 population per year
	Lung cancer deaths per 100,000 population per year
Diabetes	Hospital admissions for short-term complications of diabetes per 100,000 population
	Adults age 40 and over with diagnosed diabetes who received an influenza vaccination in the last 12 months
	Hospital admissions for uncontrolled diabetes per 100,000 population age 18 and over
Heart disease	Adults who received a blood cholesterol measurement in the last 5 years
	Deaths per 1,000 adult hospital admissions with acute myocardial infarction
	Deaths per 1,000 adult hospital admissions with congestive heart failure
	Deaths per 1,000 hospital admissions with coronary artery bypass surgery, age 40 and over
Maternal and child health	Women who completed a pregnancy in the last 12 months who received prenatal care in the first trimester
	Children ages 2-17 for whom a health provider ever gave advice about the amount and kind of exercise, sports, or physically active hobbies they should have
	Children ages 2-17 for whom a health provider ever gave advice about healthy eating
	Children who ever had their height and weight measured by a health provider
	Children 41-80 lb for whom a health provider ever gave advice about using booster seats
	Children ages 2-17 for whom a health provider ever gave advice about using a helmet when riding a bicycle or motorcycle
Mental health and substance abuse	Suicide deaths per 100,000 population
Respiratory diseases	Hospital admissions for immunization-preventable influenza per 100,000 population age 65 and over
	Deaths per 1,000 adult hospital admissions with pneumonia
Lifestyle modification	Adults with obesity who ever received advice from a health provider to exercise more

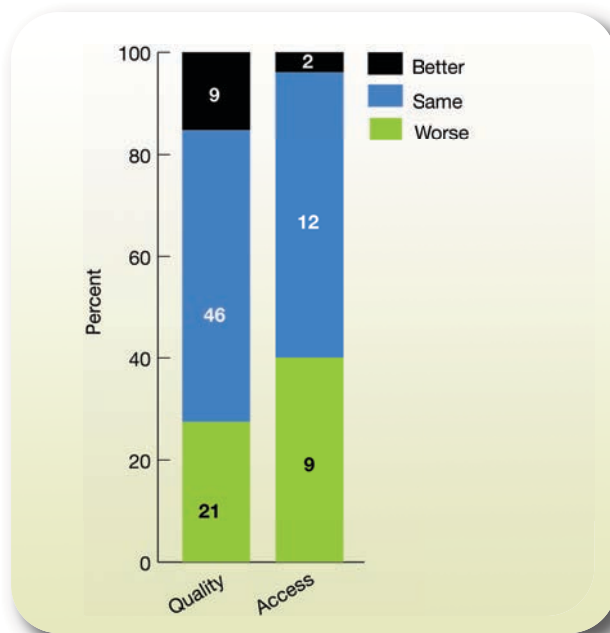
^{xiii} Data were insufficient to assess change over time.

Priority Populations

Table 10.6. Measures for which residents of noncore areas were worse than residents of large fringe metropolitan areas for most recent year only

Topic	Measure
Efficiency	Avoidable admissions for angina per 100,000 population age 18 and over
	Avoidable admissions for chronic obstructive pulmonary disease per 100,000 population age 18 and over
	Avoidable admissions for bacterial pneumonia per 100,000 population age 18 and over
	Perforated appendixes per 1,000 admissions with appendicitis
Access	People under age 65 who were uninsured all year
	People under age 65 whose family's health insurance premium and out-of-pocket medical expenditures were more than 10% of total family income
	People under age 65 with health insurance
	People under age 65 with any private health insurance
	People with a usual source of care who has office hours nights or weekends

Figure 10.9. Distribution of measures for residents of noncore areas compared with residents of large fringe metropolitan areas for most recent year^{xiv}



Better = Noncore area is better than large fringe metropolitan area at a relative rate greater than 10%.

Same = No difference between noncore area and large fringe metropolitan area.

Worse = Noncore area is worse than large fringe metropolitan area at a relative rate greater than 10%.

Note: All measures with data for metropolitan areas are included (core and supporting measures).

^{xiv} Data were insufficient to assess change over time.

Priority Populations

Individuals With Disabilities or Special Health Care Needs

Individuals with disabilities or special health care needs include individuals with disabilities, individuals who use nursing home and home health care or end-of-life health care, and children with special health care needs. The NHDR tracks many measures of relevance to individuals with special health care needs.

Again this year, the NHQR and NHDR aim to include more information about individuals with disabilities. To reach this goal, AHRQ convened a disabilities subgroup of the NHQR/NHDR Interagency Work Group. This subgroup received assistance from the Interagency Subcommittee on Disability Statistics of the Interagency Committee on Disability Research. The charge to the disabilities subgroup was to advise AHRQ on measures of disabilities from existing data that could track disparities for disabled individuals in quality of and access to care for the NHDR and that would be comparable across national surveys. For this initial effort, the subgroup focused on measures for adults, a population for which the most survey data are available.

For the 2010 NHDR, AHRQ is again using a broad, inclusive measure of disability for adults. This measure is intended to be consistent with statutory definitions of disability, such as the first criterion of the 1990 Americans With Disabilities Act (ADA) (i.e., having a physical or mental impairment that substantially limits one or more major life activities^{23,24}) and Federal program definitions of disability based on the ADA. For the purpose of the NHDR, adults with disabilities are those with physical, sensory, and/or mental health conditions that can be associated with a decrease in functioning in such day-to-day activities as bathing, walking, doing everyday chores, and engaging in work or social activities.

In displaying the data on disability, paired measures are shown to preserve the qualitative aspects of the data:

- Limitations in *basic activities* represent problems with mobility and other basic functioning at the person level.
- Limitations in *complex activities* represent limitations encountered when the person, in interaction with the environment, attempts to participate in community life.

Limitations in basic activities include problems with mobility, self-care (activities of daily living), domestic life (instrumental activities of daily living), and activities that depend on sensory functioning (limited to people who are blind or deaf). Limitations in complex activities include limitations experienced in work and in community, social, and civic life. The use of the subgroup's recommendation of these paired measures of basic and complex activity limitations is conceptually similar to the way others have divided disability²⁵ and is consistent with the International Classification of Functioning, Disability, and Health separation of activities and participation domains.²⁶ These two categories are not mutually exclusive; people may have limitations in basic activities and complex activities. The residual category *Neither* includes adults with neither basic nor complex activity limitations.

In this year's reports, analyses by activity limitations for adults are presented in the Patient Centeredness chapter of both the NHQR and NHDR. In addition, the appendix tables include activity limitations as a stub variable for all National Health Interview Survey and Medical Expenditure Panel Survey tables.

In summarizing disparities for individuals with disabilities, we present comparisons between adults with basic or complex activity limitations and adults with neither basic nor complex activity limitations.

Priority Populations

Table 10.7. Measures for which adults with basic activity limitations were worse than adults with neither basic nor complex activity limitations for most recent year and their trends over time

Topic	Adults with basic activity limitations worse than adults with neither basic nor complex activity limitations and staying the same
Lifestyle modification	Adults with obesity who spend half an hour or more in moderate or vigorous physical activity at least three times a week
Patient Safety	Adults age 65 and over who received potentially inappropriate prescription medications in the calendar year
Patient Centeredness	Adults who had a doctor's office or clinic visit in the last 12 months whose health providers explained things in a way they could understand
	Adults who had a doctor's office or clinic visit in the last 12 months whose health providers showed respect for what they had to say
	Rating of health care by adults who had a doctor's office or clinic visit in the last 12 months
	People with a usual source of care for whom health care providers explained and provided all treatment options
Access	People without a usual source of care who indicated a financial or insurance reason for not having a source of care
	People who were unable to get or delayed in getting needed medical care in the last 12 months
	People who were unable to get or delayed in getting needed dental care in the last 12 months
	People who were unable to get or delayed in getting needed prescription medicines in the last 12 months
	People with a usual source of care, excluding hospital emergency rooms, who has office hours nights or weekends
	People with difficulty contacting their usual source of care over the telephone

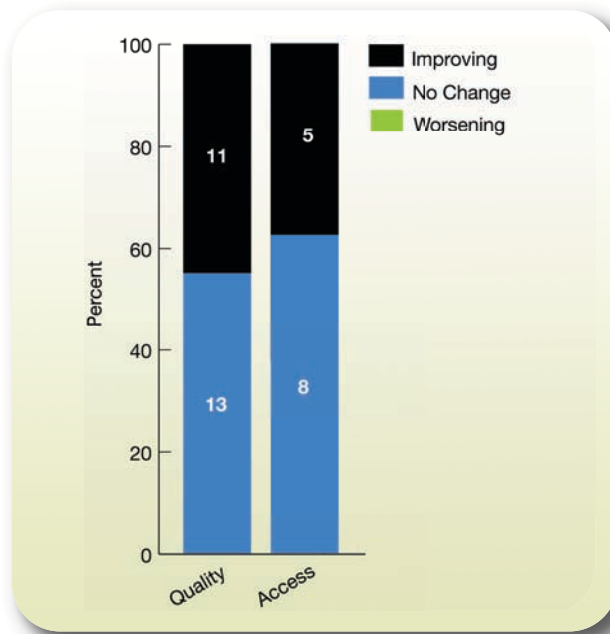
Priority Populations

Table 10.8. Measures for which adults with complex activity limitations were worse than adults with neither basic nor complex activity limitations for most recent year and their trends over time

Topic	Adults with complex activity limitations worse than adults with neither basic nor complex activity limitations and getting worse
Access	People without a usual source of care who indicated a financial or insurance reason for not having a source of care
Topic	Adults with complex activity limitations worse than adults with neither basic nor complex activity limitations and staying the same
Lifestyle modification	Adults with obesity who spend half an hour or more in moderate or vigorous physical activity at least three times a week
Patient safety	Adults age 65 and over who received potentially inappropriate prescription medications in the calendar year
Patient centeredness	Adults who had a doctor's office or clinic visit in the last 12 months whose health providers listened carefully to them
	Adults who had a doctor's office or clinic visit in the last 12 months whose health providers explained things in a way they could understand
	Adults who had a doctor's office or clinic visit in the last 12 months whose health providers showed respect for what they had to say
	Adults who had a doctor's office or clinic visit in the last 12 months whose health providers spent enough time with them
	Rating of health care by adults who had a doctor's office or clinic visit in the last 12 months
	People with a usual source of care for whom health care providers explained and provided all treatment options
Access	People who were unable to get or delayed in getting needed medical care in the last 12 months
	People who were unable to get or delayed in getting needed dental care in the last 12 months
	People who were unable to get or delayed in getting needed prescription medicines in the last 12 months
	People with a usual source of care, excluding hospital emergency rooms, who has office hours nights or weekends
	People with difficulty contacting their usual source of care over the telephone
	Adults who did not have problems seeing a specialist they needed to see in the last 12 months

Priority Populations

Figure 10.10. Change in complex vs. neither disability-related disparities over time for all measures



Improving = Difference between complex activity limitations and neither basic nor complex activity limitations becoming smaller at an average annual rate greater than 1%.

Same = Difference between complex activity limitations and neither basic nor complex activity limitations not changing.

Worsening = Difference between complex activity limitations and neither basic nor complex activity limitations and no limitations becoming larger at an average annual rate greater than 1%.

Note: The time period for this figure is the most recent and oldest years of data used in the NHDR. Measures include supporting measures. Only 37 measures of quality and access could be tracked over time for individuals with activity limitations.

Priority Populations

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