

# **Highlights**

2013 National Healthcare Quality and Disparities Reports









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# Highlights: 2013 National Healthcare Quality and Disparities Reports

## U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Agency for Healthcare Research and Quality 540 Gaither Road Rockville, MD 20850

AHRQ Publication No. 14-0005-1 August 2014 www.ahrq.gov/research/findings/nhqrdr/index.html

### **ACKNOWLEDGMENTS**

The NHQR and NHDR are the products of collaboration among agencies across the Department of Health and Human Services (HHS). Many individuals guided and contributed to these reports. Without their magnanimous support, the reports would not have been possible.

Specifically, we thank:

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**Other:** Data for Native Hawaiian and Other Pacific Islanders provided by funding from National Institute on Minority Health and Health Disparities (NIMHD) of the National Institutes of Health, Health Resources and Services Administration (HRSA), and Kui ka Pono Funds from Queens Health Systems (QHS).

**Data Support Contractors:** CHD-Fu, Social and Scientific Systems, Truven Health Analytics, and Westat.

# **Highlights From the 2013 National Healthcare Quality and Disparities Reports**

Each year since 2003, the Agency for Healthcare Research and Quality (AHRQ) has reported on progress and opportunities for improving health care quality and reducing health care disparities. As mandated by the U.S. Congress, the *National Healthcare Quality Report* (NHQR) focuses on "national trends in the quality of health care provided to the American people" (42 U.S.C. 299b-2(b)(2)). The *National Healthcare Disparities Report* (NHDR) focuses on "prevailing disparities in health care delivery as it relates to racial factors and socioeconomic factors in priority populations" (42 U.S.C. 299a-1(a)(6)).

As in previous years, the 2013 NHQR and NHDR track more than 200 health care process, outcome, and access measures, covering a wide variety of conditions and settings. Data years vary across measures; most trend analyses include data points from 2000-2002 to 2010-2011. It is important to note that the reports provide a snapshot of health care prior to implementation of most of the health insurance expansions and consumer protections included in the Affordable Care Act and serve as a baseline against which to track progress in upcoming years. Each year, the reports emphasize one priority population; this year's reports provide expanded analyses of people with disabilities, including children with special health care needs and adults with multiple chronic conditions.

These Highlights summarize data gathered for the reports to address three key questions:

- What is the status of health care quality, access, and disparities in the United States?
- ◆ How have health care quality, access, and disparities changed over time?
- Where are health care quality, access, and disparities improving? And where are they getting worse?

Key findings are summarized below.

	Status	Change over time	Areas improving	Areas lagging
Quality	Fair  • 70% of recommended care actually received  • Large variation across States	Getting better	Improving more quickly  • Hospital care  • CMS publicly reported measures  • Adolescent vaccines Performing well  • New England and West North Central States	Improving more slowly  • Ambulatory care  • Diabetes care  • Maternal and child health Performing more poorly  • West South Central and East South Central States
Access	Fair • 26% with difficulties getting care*	Getting worse*	Improving  • Availability of providers by telephone	Not improving • Private health insurance coverage*
Disparities	Poor  • Minorities and people in poverty with worse quality and access for large proportion of measures	No change	Disparities getting smaller  • HIV disease  • Patient perceptions of care Few gaps in disparities data on Blacks, Hispanics, and Asians	Disparities getting bigger  Cancer screening  Maternal and child health Many gaps in disparities data on Native Hawaiians and Other Pacific Islanders

<sup>\*</sup> Findings reflect access prior to implementation of most of the health insurance expansions included in the Affordable Care Act. After a decade of deterioration, access was better in 2011 than in 2010 (see Figure H.6).

**Key:** CMS = Centers for Medicare & Medicaid Services.

Note: For the vast majority of measures in the reports, trend data are available from 2000-2002 to 2010-2011.

### **Quality of Health Care**

A key function of the reports is to review the state of health care quality for the Nation. This undertaking is difficult, as no single national health care database collects a comprehensive set of data elements that can produce national and state estimates for priority populations each year. Rather, data come from more than three dozen databases that provide estimates for different population subgroups and data years. Surveys of patients, patients' families, and providers; administrative data from health care facilities; abstracts of clinical charts; registry data; and vital statistics are used to assess health care quality in the reports and are summarized in the Highlights. While most data are gathered annually, some data are not collected regularly.

### What Is the Status of Health Care Quality?

The full set of quality measures tracked in the reports includes receipt of specific services needed to treat or prevent a medical condition, as well as outcomes of treatment, such as death and functional limitation. Domains of health care covered are effectiveness, safety, timeliness, patient centeredness, care coordination, efficiency, and adequacy of health system infrastructure. Within effectiveness, eight clinical conditions (cancer, cardiovascular disease, chronic kidney disease, diabetes, HIV and AIDS, mental health and substance abuse, musculoskeletal diseases, and respiratory diseases) and four cross-cutting services (maternal and child health, lifestyle modification, functional status preservation and rehabilitation, and supportive and palliative care) are discussed. Care delivered in doctor's offices, health centers, emergency rooms, hospitals, nursing homes, and home health and hospice settings is examined.

Summarizing health care quality across these different types of measures is potentially problematic. Measures of structure, process, and outcomes often have different denominators and units of analysis that prevent aggregation. In this assessment of the status of health care quality, we focus on a panel of 48 measures, including immunization; counseling about smoking, weight loss, and exercise; treatment of cancer, diabetes, and pneumonia; and care by nursing homes and home health agencies.

Based on this composite, quality of health care in America is only fair. On average, in 2010, Americans received 70% of indicated health care services and failed to receive 30% of the care they needed to treat or prevent particular medical conditions. The gap between best possible care and what is routinely delivered remains substantial across the Nation.

The measures used in these reports span a wide range of structure, process, and outcome measures that can be measured with existing national data sources. The measures were selected for tracking based on their importance, scientific soundness, and feasibility by a Department of Health and Human Services Interagency Work Group that supports the reports. However, many important dimensions of quality are not currently captured. A few examples of important dimensions of quality that are not currently measured include:

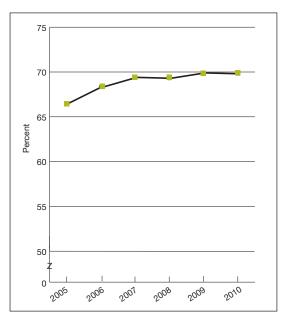
- Measures of the extent to which diagnostic errors are made in ambulatory care;
- Measures of the extent to which pain is reduced or function improves for patients undergoing back surgery, total joint replacement, or other orthopedic procedures;
- Measures of the rate of decline in function for patients with multiple sclerosis; and
- Measures of the appropriateness of therapeutic choices for patients presenting with angina.

We have made great strides in developing and implementing measures of many aspects of health care quality but should note that many vitally important dimensions of health care are not currently measured. Readers of this report should be aware both of the broad scope of the measures that are included, as well as the even broader areas of health care that are not currently measured.

### How Has Health Care Quality Changed Over Time?

The second key function of these reports is to examine change over time. Care that is suboptimal but showing clear evidence of vigorous improvement may be of less concern than care of a similar level that is failing to improve. Below, we assess change in average performance across a fixed panel of quality of care process measures. For these measures, estimates are available each year from 2005 to 2010. The measures are framed positively, indicating the proportion of people who needed a particular service and received it. The simple average across the panel of measures is shown.

Figure H.1. Average proportion of recommended care received across a panel of quality of care measures, 2005-2010



- Quality of care is improving but not very fast:
  - On average, in 2005, Americans received about 66% of health care services they should have received; by 2010, this had risen to 70% of services (Figure H.1).

Another way to track the progress of health care quality presented in these reports is to calculate annual rates of change, which represent how quickly the quality of services delivered by the health care system is improving or declining. As in past reports, regression analysis is used to estimate annual rate of change for each measure relative to the baseline year.

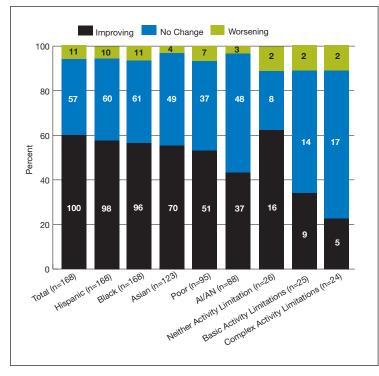
Annual rate of change is calculated only for measures with at least 4 years of data. For most measures, trends include data points from 2000-2002 to 2010-2011. Note that process measures that are retired or removed because they have achieved a performance level of 95% or better are not included in these trend analyses. (Chapter 1, Introduction and Methods, discusses how measures are retired or removed.)

Weighted log-linear regression is used to assess whether trends are statistically significant:

- Measures that are moving in a favorable direction at a rate that exceeds 1% per year and is statistically significant are considered to be improving.
- Measures moving in an unfavorable direction at a rate that exceeds 1% per year and is statistically significant are considered to be worsening.
- Measures that are changing at a rate that is less than or equal to 1% per year or that is not statistically significant are considered to be static.

Changes over time are presented for the overall population and for select racial, ethnic, and income groups that are tracked most often in the disparities report. Because the theme of this year's reports is people with disabilities, we also show information on people with basic or complex activity limitations and people with neither type of activity limitation.

Figure H.2. Number and proportion of all quality measures that are improving, not changing, or worsening, overall and for select populations



**Key:** AI/AN = American Indian or Alaska Native; n = number of measures.

**Improving** = Quality is going in a positive direction at an average annual rate greater than 1% per year.

**No Change** = Quality is not changing or is changing at an average annual rate less than or equal to 1% per year.

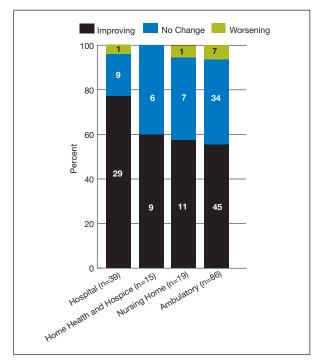
**Worsening** = Quality is going in a negative direction at an average annual rate greater than 1% per year.

**Note:** For the vast majority of measures, trend data are available from 2000-2002 to 2010-2011. Basic activity limitations include problems with mobility, self-care, domestic life, or activities that depend on sensory functioning. Complex activity limitations include limitations experienced in work or in community, social, and civic life.

- Quality is improving on some measures for all groups:
  - Across all measures of health care quality tracked in the reports, 60% showed improvement (Figure H.2).
  - Improvement occurred among all racial, ethnic, and income groups, although a smaller proportion of measures showed improvement among American Indians and Alaska Natives (Al/ANs).

• Few measures could be trended for people with activity limitations. However, among the measures that could be trended, fewer showed improvement among people with activity limitations compared with people with neither basic nor complex limitations. This is partly due to the larger standard errors of estimates for people with activity limitations.

Figure H.3. Number and proportion of measures that are improving, not changing, or worsening, by setting of care



**Key:** n = number of measures.

**Improving** = Quality is going in a positive direction at an average annual rate greater than 1% per year.

**No Change** = Quality is not changing or is changing at an average annual rate less than or equal to 1% per year.

**Worsening** = Quality is going in a negative direction at an average annual rate greater than 1% per year.

**Note:** For the vast majority of measures, trend data are available from 2000-2002 to 2010-2011.

- Quality of hospital care is improving rapidly; quality of ambulatory care is not improving as quickly:
  - Only about half of the ambulatory care quality measures showed improvement compared with three-quarters of the hospital care quality measures (Figure H.3).
  - About 60% of the quality measures in home health and hospices and in nursing homes improved. Hospitals, nursing homes, and home health and hospice agencies may have more infrastructure to improve quality and to respond to performance measurement compared with providers in ambulatory settings.

### Where Is Health Care Quality Improving and Where Is It Getting Worse?

The third key function of these reports is to identify opportunities for improvement. The NHQR tracks the pace of change over time for measures with at least 4 years of data. Table H.1 lists the quality measures with the highest rates of improvement and deterioration, as well as those that have been retired or removed because they achieved a 95% overall performance level.

Table H.1. Quality measures that have been retired or removed or have the most rapid pace of change

Retired or Removed	Quality Improving	Quality Worsening
Hospital patients with heart attack who:  • Received aspirin within 24 hours of admission • Received beta blocker within 24 hours	Patients with colon cancer who received recommended treatment: surgical resection of colon specimen that had 12+ regional lymph nodes pathologically examined	Women ages 21-65 who received a Pap smear in the last 3 years
of admission  • Were prescribed aspirin at discharge  • Were prescribed a beta blocker at discharge  • Were prescribed ACE inhibitor or ARB	Adult patients with HIV and CD4 <350 who received highly active antiretroviral therapy during the year	Adults age 40+ with diagnosed diabetes who had their feet checked for sores or irritation in the calendar year
at discharge  Received smoking cessation counseling while hospitalized	Adolescents ages 13-15 who received 1+ doses of meningococcal conjugate vaccine	Admissions with diabetes with short-term complications per 100,000 population, age 18+
Hospital patients with heart failure who:  • Received an evaluation of left	Adolescents ages 16-17 who received 1+ doses of meningococcal conjugate vaccine	Maternal deaths per 100,000 live births
ventricular ejection fraction  • Were prescribed ACE inhibitor or ARB at discharge	Adolescents ages 13-15 who received 1+ doses of tetanus-diphtheria-acellular pertussis booster	Children ages 19-35 months who received 3 or more doses of <i>Haemophilus influenzae</i> type B vaccine
Adult hemodialysis patients with adequate dialysis	Adolescents ages 16-17 who received 1+ doses of tetanus-diphtheria-acellular pertussis booster	Suicide deaths per 100,000 population
Adults with diabetes who had their blood cholesterol checked	Hospital patients age 50+ with pneumonia who received an influenza screening or vaccination	People with current asthma who report taking preventive medicine daily or almost daily (either oral or inhaler)
Hospital patients with pneumonia who:      Had blood cultures collected before antibiotics were administered	Hospital patients with pneumonia who received the initial antibiotic dose consistent with current recommendations	Postoperative physiologic and metabolic derangements per 1,000 elective-surgery admissions, age 18+
<ul> <li>Received antibiotics within 6 hours of hospital arrival</li> <li>Received a pneumococcal screening or vaccination</li> </ul>	Hospital patients with heart attack who received percutaneous coronary intervention within 90 minutes of arrival	
Adult surgery patients who:     Received prophylactic antibiotics within 1 hour prior to surgical incision     Had prophylactic antibiotics discontinued within 24 hours after surgery end time	Hospital patients with heart failure who were given complete written discharge instructions	
Emergency department visits in which patient left without being seen		

**Key:** ACE = angiotensin-converting enzyme; ARB = angiotensin receptor blocker.

**Note:** Dark blue = CMS publicly reported measures; light green = diabetes measures; green = cancer measures; gray = adolescent vaccinations; light blue = maternal and child health measures. For the vast majority of measures, trend data are available from 2000-2002 to 2010-2011.

### Quality changes unevenly across measures:

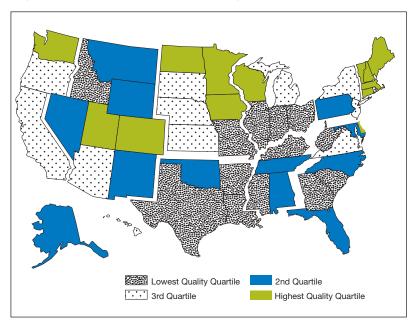
- Of the 16 quality measures that have been retired or removed due to achievement of 95% overall performance, 14 are measures that have been reported publicly by the Centers for Medicare & Medicaid Services (CMS) (dark blue) (Table H.1). Another four CMS measures are on the list of measures improving at the fastest pace. Of CMS publicly reported measures that have yet to be retired or removed, 70% show improvement over time.
- Four adolescent vaccination measures (gray) are on the list of measures improving at the fastest pace.
- Of the eight quality measures that are getting worse at the fastest pace, two relate to diabetes (light green) and two relate to maternal and child health (light blue).

Quality of care varies not only across types of care but also across parts of the country. Knowing where to focus efforts improves the efficiency of interventions. Delivering data that can be used for local benchmarking and improvement is a key step in raising awareness and driving quality improvement.

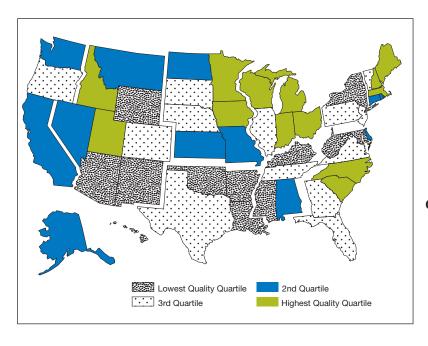
Since 2005, AHRQ has used the State Snapshots tool (http://nhqrnet.ahrq.gov/inhqrdr/state/select) to examine variation across states. This Web site helps state health leaders, researchers, consumers, and others understand the status of health care quality in individual states and the District of Columbia.

The State Snapshots are based on more than 100 NHQR measures, each of which evaluates a different aspect of health care performance and shows each state's strengths and weaknesses. Here, we use data from the 2012 State Snapshots to examine variation in quality across states by setting of care.

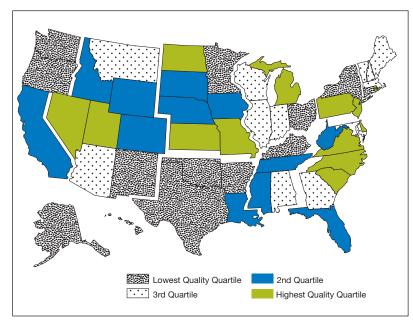
Figure H.4. Quality of care, by setting and state



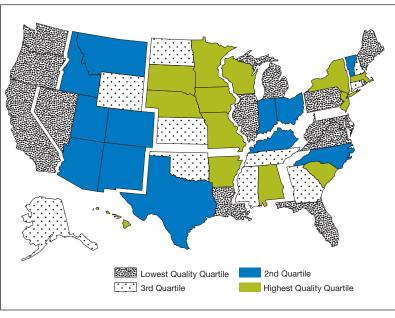
**Quality of Ambulatory Care** 



**Quality of Hospital Care** 



Quality of Home Health and Hospice Care



**Quality of Nursing Home** Care

**Source:** Agency for Healthcare Research and Quality, 2012 State Snapshots.

**Note:** States are divided into quartiles based on health care score for each setting of care.

### Quality of care differs across geographic regions:

- No state performed in the highest quality quartile in all four settings of care; every state could improve performance in at least one setting of care (Figure H.4).
- For quality of ambulatory care, states in the New England (CT, MA, ME, NH, RI, VT), West North Central (IA, KS, MN, MO, NE, ND, SD), and Pacific (AK, CA, HI, OR, WA) census divisions were most often in the top quartiles. States in the South Atlantic (DC [not shown], DE, FL, GA, MD, NC, SC, VA, WV), East South Central (AL, KY, MS, TN), West South Central (AR, LA, OK, TX), and Mountain (AZ, CO, ID, MT, NM, NV, UT, WY) census divisions were most often in the bottom quartiles.
- For quality of hospital care, states in the New England and East North Central (IL, IN, MI, OH, WI) census divisions were most often in the top quartiles. States in the East South Central, West South Central, Mountain, and Pacific census divisions were most often in the bottom quartiles.
- For quality of home health and hospice care, states in the New England, East North Central, and South Atlantic census divisions were most often in the top quartiles. States in the East South Central, West South Central, and Pacific census divisions were most often in the bottom quartiles.
- For quality of nursing home care, states in the New England, West North Central, and East South Central census divisions were most often in the top quartiles. States in the East North Central and Mountain census divisions were most often in the bottom quartiles.

### Access to Health Care

Discussions of health care quality are moot for Americans who cannot get into the health care system. Measures of access to care tracked in the reports include facilitators of care, such as having health insurance and a regular provider, and perceptions of difficulties and delays when trying to obtain care.

### What Is the Status of Health Care Access?

Like quality of care, access to health care in America is only fair. On average, in 2011, 26% of Americans reported barriers that restricted their access to care while 74% did not report problems accessing care.

### How Has Health Care Access Changed Over Time?

Annual rates of change can also be used to track how quickly access to services delivered by the health care system is improving or declining. As for quality measures, regression analysis is used to estimate annual rate of change for each access measure relative to the baseline year. For most access measures, trends include data points from 2000-2002 to 2010-2011.

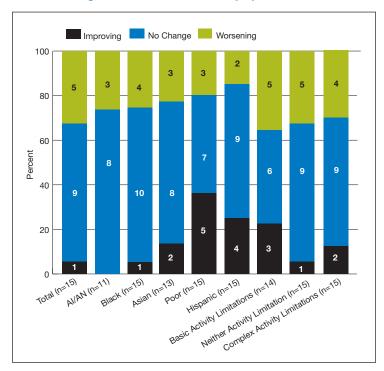


Figure H.5. Number and proportion of all access measures that are improving, not changing, or worsening, overall and for select populations

**Key:** AI/AN = American Indian or Alaska Native; n = number of measures.

**Improving** = Access is going in a positive direction at an average annual rate greater than 1% per year.

**No Change** = Access is not changing or is changing at an average annual rate less than or equal to 1% per year.

**Worsening** = Access is going in a negative direction at an average annual rate greater than 1% per year.

**Note:** For the vast majority of measures, trend data are available from 2000-2002 to 2010-2011. Basic activity limitations include problems with mobility, self-care, domestic life, or activities that depend on sensory functioning. Complex activity limitations include limitations experienced in work or in community, social, and civic life.

### Access got worse for many groups from 2000-2002 to 2010-2011, but some improvement was observed:

- Across the measures of health care access tracked in the reports, one-third were getting worse for the overall U.S. population (Figure H.5).
- For Hispanics and poor people, the number of access measures that were improving exceeded the number that were getting worse.

Below, we assess changes in average performance across a fixed panel of measures of access to health care related to health insurance, lack of a regular provider, and barriers encountered when trying to obtain care. For these measures, estimates are available each year from 2002 to 2011. The measures are framed negatively, indicating the proportion of people who experienced a problem when trying to access care. The simple average across the panel of measures is shown.

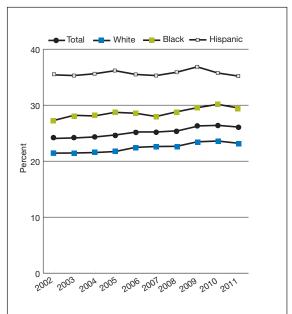
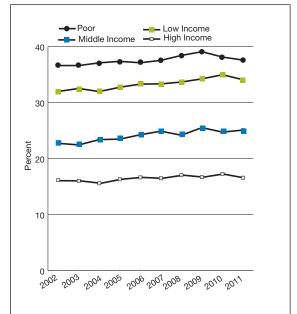


Figure H.6. Average proportion of people across a panel of access to care measures reporting barriers to care, by race/ethnicity and family income, 2002-2011



Note: White and Black are non-Hispanic; Hispanic includes all races.

### Barriers to care grew worse from 2002 to 2010, but leveled off between 2010 and 2011:

- On average, in 2002, 24.0% of Americans reported difficulties accessing health care; by 2010, this had increased to 26.4% (Figure H.6).
- In 2011, for the first time in a decade, Americans reported fewer barriers to health care.
   Americans encountering difficulties fell to 26.1%, and most groups experienced this improved access.
- Groups with the worst access began experiencing improvements earlier, in 2009.
  - » On average, 35.4% of Hispanics reported barriers that restricted their access to care in 2002. This gradually increased to 36.9% in 2009 and then fell to 35.2% in 2011, the lowest level of barriers over the decade.
  - » On average, 36.6% of poor Americans reported barriers that restricted their access to care in 2002. This gradually increased to 39.1% in 2009 and then fell to 37.6% in 2011.

### Where Is Health Care Access Doing Well and Where Is It Doing Poorly?

- ◆ The access measure getting better from 2000-2002 to 2010-2011 was:
  - People with difficulty contacting their usual source of care by telephone during regular business hours about a health problem.

### Access measures getting worse from 2000-2002 to 2010-2011 were:

- O People under age 65 with any private health insurance.
- O Adults age 65 and over with any private health insurance.
- O People under age 65 who were uninsured all year.
- People without a usual source of care who indicate a financial or insurance reason for not having a source of care.
- People unable to get or delayed in getting needed medical care, dental care, or prescription medicines due to financial or insurance reasons.

### **Disparities in Health Care**

Some Americans routinely face more barriers to care and receive poorer quality of care when they can get it. In these Highlights, we focus on racial/ethnic contrasts between Blacks, Hispanics, Asians, and Al/ANs and Whites and socioeconomic contrasts between poor and high-income people. Keeping with the theme of this year's reports, we also compare people with basic or complex activity limitations with people with neither type of activity limitation.

### What Is the Status of Health Care Disparities in the United States?

To quantify disparities, we examine the relative difference between a selected group and its reference group:

- ◆ Differences that are statistically significant, are equal to or larger than 10%, and favor the reference group are labeled as indicating worse quality or access for the selected group.
- Differences that are statistically significant, are equal to or larger than 10%, and favor the selected group are labeled as indicating better quality or access for the selected group.
- Differences that are not statistically significant or are smaller than 10% are labeled as the same for the selected and reference groups.

Process measures are retired or removed when they have achieved an overall performance level of 95% or better and are not included in these analyses. Because disparities are typically eliminated when overall performance reaches 95%, our analyses may overstate the proportion of quality measures exhibiting disparities.

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Throughout the Highlights, poor, low income, middle income, and high income indicate individuals whose household income is <100%, 100-199%, 200-399%, and 400% or more of the Federal poverty level, respectively.

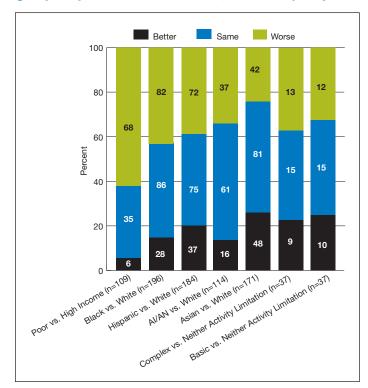


Figure H.7. Number and proportion of all quality measures for which members of selected groups experienced better, same, or worse quality of care compared with reference group

**Key:** AI/AN = American Indian or Alaska Native; n = number of measures.

**Better** = Population received better quality of care than reference group.

**Same** = Population and reference group received about the same quality of care.

**Worse** = Population received worse quality of care than reference group.

**Note:** For each measure, the most recent data available to our team were analyzed; for the majority of measures, this represents data from 2010 and 2011. Basic activity limitations include problems with mobility, self-care, domestic life, or activities that depend on sensory functioning. Complex activity limitations include limitations experienced in work or in community, social, and civic life.

### ♦ Disparities in quality of care are common:

- Blacks and Hispanics received worse care than Whites for about 40% of quality measures (Figure H.7).
- Al/ANs received worse care than Whites for one-third of quality measures.
- Asians received worse care than Whites for about one-quarter of quality measures but better care than Whites for about 30% of quality measures.
- O Poor people received worse care than high-income people for about 60% of quality measures.
- People with basic or complex activity limitations received worse care than people with neither type of activity limitation for about one-third of quality measures and better care for about onequarter of quality measures.

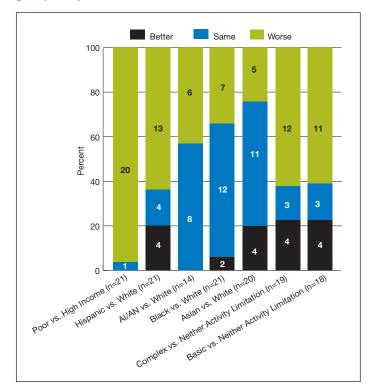


Figure H.8. Number and proportion of all access measures for which members of selected groups experienced better, same, or worse access to care compared with reference group

**Key:** AI/AN = American Indian or Alaska Native; <math>n = number of measures.

**Better** = Population had better access to care than reference group.

**Same** = Population and reference group had about the same access to care.

**Worse** = Population had worse access to care than reference group.

Note: For each measure, the most recent data available to our team were analyzed; for the majority of measures, this represents data from 2010 and 2011. Basic activity limitations include problems with mobility, self-care, domestic life, or activities that depend on sensory functioning. Complex activity limitations include limitations experienced in work or in community, social, and civic life.

- Disparities in access are also common, especially among AI/ANs, Hispanics, poor people, and people with activity limitations:
  - O Blacks had worse access to care than Whites for one-third of measures, and Al/ANs had worse access to care than Whites for about 40% of access measures (Figure H.8).
  - Asians had worse access to care than Whites for 25% of access measures but better access to care than Whites for a similar proportion of access measures.
  - O Hispanics had worse access to care than Whites for about 60% of measures.
  - Poor people had worse access to care than high-income people for all measures but one.
  - People with basic or complex activity limitations had worse access to care than people with neither basic nor complex activity limitations for about 60% of measures.

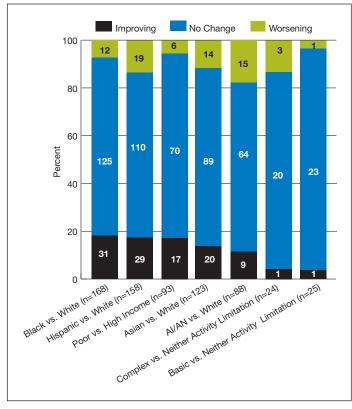
### How Have Health Care Disparities Changed Over Time?

A new approach to assess change in disparities is introduced this year. First, a selected group's rate of change and its reference group's rate of change are calculated using weighted least squares regression. Next, this difference in rates of change is assessed for statistical significance. Then, the difference in rates of change relative to the reference group's baseline estimate is calculated.

- When the difference in rates of change is significant and when the difference relative to the reference group's baseline is greater than 1% per year, we label the disparity as improving if the selected group's rate is higher than the reference group's rate and worsening if the reverse.
- When the difference relative to the reference group's baseline is less than or equal to 1% or the difference is not statistically significant, we label the disparity as static.

Process measures that are retired or removed because they have achieved a performance level of 95% or better are not included in these analyses; if included, many would be labeled as disparities improving over time.

Figure H.9. Number and proportion of all quality measures for which disparities related to race, ethnicity, income, and activity limitations are improving, not changing, or worsening



**Key:** Al/AN = American Indian or Alaska Native; n = number of measures.

**Improving** = Disparity is getting smaller at a rate greater than 1% per year.

**No Change** = Disparity is not changing or is changing at a rate less than or equal to 1% per year.

**Worsening** = Disparity is getting larger at a rate greater than 1% per year.

**Note:** For the vast majority of measures, trend data are available from 2000-2002 to 2010-2011. Basic activity limitations include problems with mobility, self-care, domestic life, or activities that depend on sensory functioning. Complex activity limitations include limitations experienced in work or in community, social, and civic life.

### While most disparities in quality are not changing, some improvement is observed:

- Most disparities in quality of care related to race, ethnicity, or income showed no significant change, neither getting smaller nor larger (Figure H.9).
- The number of disparities that were getting smaller exceeded the number of disparities that were getting larger for Blacks, Hispanics, Asians, and poor people.
- Of the few disparities related to activity limitations that could be assessed, most were not changing.

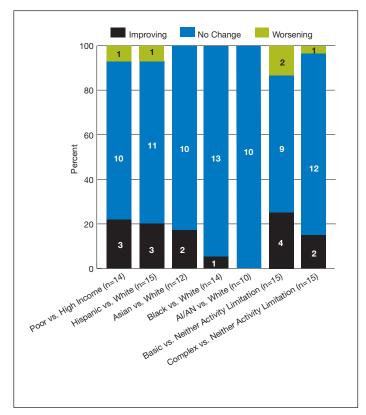


Figure H.10. Number and proportion of all access measures for which disparities related to race, ethnicity, income, and activity limitations are improving, not changing, or worsening

**Key:** Al/AN = American Indian or Alaska Native; n = number of measures.

**Improving** = Disparity is getting smaller at a rate greater than 1% per year.

**No Change** = Disparity is not changing or is changing at a rate less than or equal to 1% per year.

**Worsening** = Disparity is getting larger at a rate greater than 1% per year.

**Note:** For the vast majority of measures, trend data are available from 2000-2002 to 2010-2011. Basic activity limitations include problems with mobility, self-care, domestic life, or activities that depend on sensory functioning. Complex activity limitations include limitations experienced in work or in community, social, and civic life.

- While most disparities in access are not changing, some improvement is observed:
  - Most disparities in access to care related to race, ethnicity, or income showed no significant change, neither getting smaller nor larger (Figure H.10).
  - In most cases, the number of disparities that were getting smaller exceeded the number of disparities that were getting larger.

## Where Are Health Care Disparities Decreasing and Where Are They Increasing?

Analyzing disparities requires data that can provide reliable estimates stratified by race, ethnicity, and socioeconomic status. Figure H.11 shows the percentage of quality measures in the 2006, 2011, 2012, and 2013 reports for which an estimate that met our reliability criteria could not be generated for single-race Asians, Native Hawaiians and Other Pacific Islanders (NHOPIs), Al/ANs, Hispanics, and poor people. Except for one measure related to language assistance, reliable estimates for all measures could be generated for Blacks, so they are not shown.

ii The measure is the percentage of adults with limited English proficiency and a usual source of care who had language assistance.

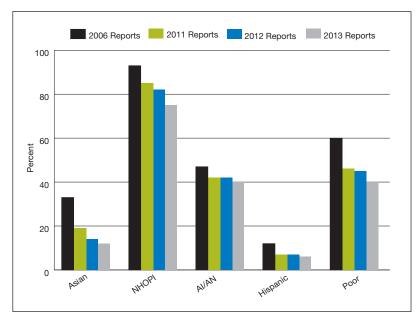


Figure H.11. Percentage of quality measures in the 2006, 2011, 2012, and 2013 reports for which a reliable estimate could not be generated

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

- Data on disparities continue to improve but still miss some populations:
  - Since 2006, the percentage of quality measures that could not be used to assess disparities has decreased for all groups (Figure H.11).
  - Reliable estimates for Blacks, Asians, and Hispanics are available for more than 85% of measures.
  - For NHOPIs, reliable estimates were not available for three-quarters of the measures, making any assessment of disparities incomplete. Reliable estimates for Al/AN and poor populations also could not be generated for a large percentage of measures.

Despite data limitations, analyses of patterns of disparities can help identify where improvement is and is not occurring. Table H.2 summarizes disparities in health care quality for each major group tracked in the reports. For each group, it shows the measures of health care quality where disparities favor the reference group and are improving at the fastest rate (disparity present at start of tracking and has become smaller in magnitude over time or has been eliminated entirely) and the measures where disparities favor the reference group and are worsening at the fastest rate (disparity present at start of tracking and has become larger in magnitude over time or new disparity that has developed).

Table H.2. Disparities in health care quality that are changing most quickly over time

Groups	Disparities Improving	Disparities Worsening
Black	HIV infection deaths per 100,000 population	Maternal deaths per 100,000 live births
compared with White	New AIDS cases per 100,000 population age 13 and over	Postoperative pulmonary embolism or deep vein thrombosis per 1,000 surgical admissions, age 18 and over
	Admissions for uncontrolled diabetes without complications per 100,000 population, age 18 and over	People with current asthma who report taking preventive medicine daily or almost daily (either oral or inhaler)
Asian compared with White	Patients under age 70 with treated chronic kidney failure who received a transplant within 3 years of date of renal failure	Adults ages 18-64 at high risk who ever received pneumococcal vaccination
	Hospital patients age 65 and over with pneumonia who received a pneumococcal screening or vaccination	Children 0-40 lb for whom a health provider gave advice within the past 2 years about using a child safety seat while riding in a car
	Adult hospital patients who sometimes or never had good communication with nurses in the hospital	Live-born infants with low birth weight (less than 2,500 grams)
AI/AN compared with White	Adjusted incident rates of end stage renal disease due to diabetes per million population	Adults age 50+ who ever received a colonoscopy, sigmoidoscopy, or proctoscopy
	Patients under age 70 with treated chronic kidney failure who received a transplant within 3 years of date of renal failure	
	Surgical resection of colon cancer that includes at least 12 lymph nodes	
Hispanic compared	New AIDS cases per 100,000 population age 13 and over	Home health care patients who have less shortness of breath
with Non- Hispanic White	HIV infection deaths per 100,000 population	Adults age 50 and over who ever received a colonoscopy, sigmoidoscopy, or proctoscopy
	Admissions for uncontrolled diabetes without complications per 100,000 population, age 18 and over	People with a usual source of care who usually asks about prescription medications and treatments from other doctors
Poor compared with High	Adolescent females ages 13-15 years who received 3 or more doses of human papillomavirus (HPV) vaccine	Adults age 50+ who ever received a colonoscopy, sigmoidoscopy, or proctoscopy
Income	Rating of health care 0-6 on a scale from 0 to 10 (best grade) for children who had a doctor's office or clinic visit in the last year	Admissions with diabetes with short-term complications per 100,000 population, age 18 and over
	Children who needed care right away for an illness, injury, or condition in the last year who sometimes or never got care as soon as wanted	

**Note:** Green = HIV disease measures; dark blue = diabetes measures; light blue = patient perceptions of care; light gray = cancer screening measures; dark gray = respiratory disease measures; light green = maternal and child health measures. For the vast majority of measures, trend data are available from 2000-2002 to 2010-2011.

#### **HIGHLIGHTS**

- Disparities change unevenly across measures:
  - Of the disparities that favor the comparison group and are improving, four relate to HIV infection (green) and three relate to patient perceptions of care (light blue) (Table H.2).
  - Of the disparities that favor the comparison group and are getting worse, three relate to cancer screening (light gray) and three relate to maternal and child health (light green).
  - Measures related to diabetes (dark blue) and respiratory disease (dark gray) showed mixed patterns, with some disparities improving and others worsening.

### Conclusion

The NHQR and NHDR track health care quality and disparities at the national level, but the statistics reported in the reports reflect the aggregated everyday experiences of patients and their providers across the Nation. Improving quality and reducing disparities require measurement and reporting, as provided in the NHQR and NHDR. These statistics, however, are only useful to the extent that they inform policies and initiatives and help us track progress toward the ultimate goal of Department of Health and Human Services initiatives, which is to improve the lives of patients and families.

It makes a difference in people's lives when breast cancer is diagnosed early; when a patient having a heart attack gets the correct lifesaving treatment in a timely fashion; when medications are correctly administered; and when health care providers listen to their patients and their families, show them respect, and answer their questions in a culturally and linguistically appropriate manner. All Americans should have access to quality care that helps them achieve the best possible health.

With the publication of this 11th NHQR and NHDR, AHRQ continues to contribute to efforts that encourage and support the development of national, state, tribal, and local solutions using national data and achievable benchmarks of care. Only possible because of the national investment in high-quality health care data and metrics, these documents identify areas where quality improvement and disparities reduction strategies have made a difference in improving patients' lives, as well as many areas where much more should be done. Over the next decade, we look forward to tracking the success of the Affordable Care Act as it expands health insurance coverage, improves consumer protections, gradually increases access to health care, and ultimately raises quality of health care.

To remain competitive, our nation needs to improve access to care, reduce disparities, and accelerate the pace of quality improvement, especially in the areas of preventive care and chronic disease management. Data on often overlooked small population subgroups need to be gathered, and the burden of measurement needs to be minimized. Information needs to be disseminated more quickly to partners who have the skills and commitment to change health care. Building on the NHQR, NHDR, and State Snapshots, stakeholders can design and target strategies and clinical interventions to ensure that all patients receive the high-quality care needed to make their lives better.

