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AIMING HIGHER:

Results from the Commonwealth Fund Scorecard on State Health System Performance

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ABSTRACT

ISSUE: States are a locus of policy and leadership for health system performance.

GOAL: To compare and evaluate trends in health care access, quality, avoidable hospital use and costs, health outcomes, and health system equity across all 50 states and the District of Columbia.

METHODS: States are ranked on 44 performance measures using recently available data.

KEY FINDINGS: Nearly all states improved more than they worsened between 2013 and 2015. The biggest gains were in health insurance coverage and the ability to access care when needed, with states that had expanded their Medicaid programs under the Affordable Care Act experiencing the most improvement. There were also widespread state improvements on key indicators of treatment quality and patient safety; hospital patient readmissions also fell in many states. However, premature deaths crept up in almost two-thirds of states, reversing a long period of decline. Wide variations in performance across states persisted, as did disparities experienced by vulnerable populations within states.

CONCLUSION: If every state achieved the performance of top-ranked states, their residents and the country as a whole would realize dramatic gains in health care access, quality, efficiency, and health outcomes.

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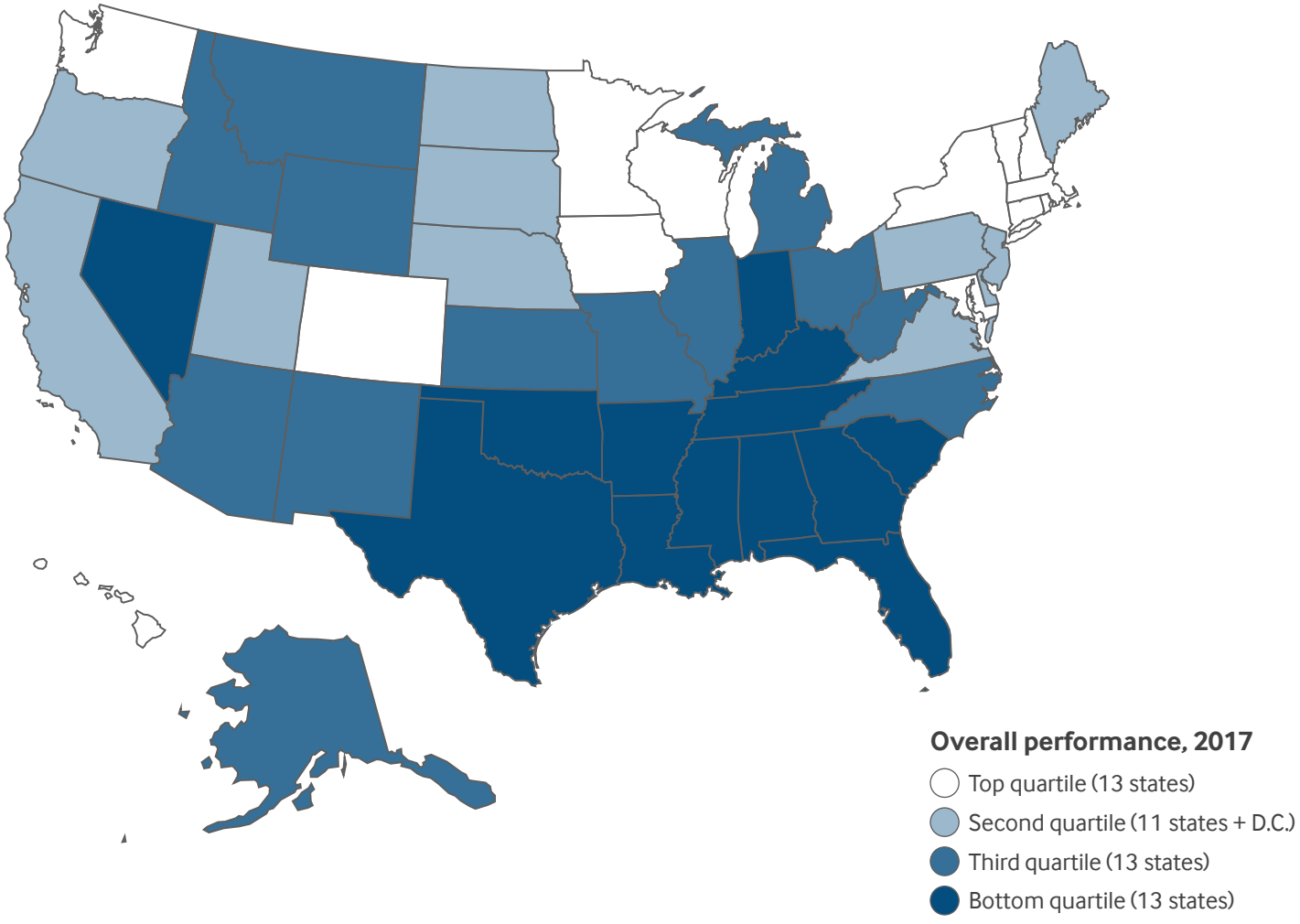
HIGHLIGHTS FROM THE SCORECARD

The 2017 edition of the *Commonwealth Fund Scorecard on State Health System Performance* finds that nearly all state health systems improved on a broad array of health indicators between 2013 and 2015. During this period, which coincides with implementation of the Affordable Care Act's major coverage expansions, uninsured rates dropped and more people were able to access needed care, particularly those in states that expanded their Medicaid programs. On a less positive note, between 2011–12 and 2013–14, premature death rates rose slightly following a long decline. The *Scorecard* points to a constant give-and-take in efforts to improve health and health care, reminding us that there is still more to be done.

Overall State Health System Performance

Scorecard Ranking, 2017



Vermont was the top-ranked state overall in this year's *Scorecard*, followed by Minnesota, Hawaii, Rhode Island, and Massachusetts (Exhibit 1). California, Colorado, Kentucky, New York, and Washington made the biggest jumps in ranking, with New York moving into the top-performing group for the first time. Kentucky also stood out for having improved on more measures than any other state.

Using the most recent data available, the *Scorecard* ranks states on more than 40 measures of health system performance in five broad areas: health care access, quality, avoidable hospital use and costs, health outcomes, and health care equity. In reviewing the data, four key themes emerged:

- There was more improvement than decline in states' health system performance.
- States that expanded Medicaid saw greater gains in access to care.
- Premature death rates crept up in almost two-thirds of states.
- Across all measures, there was a threefold variation in performance, on average, between top- and bottom-performing states, signifying opportunities for improvement.

By 2015, fewer people in every state lacked health insurance. Across the country, more patients benefited from better quality of care in doctors' offices and hospitals, and Medicare beneficiaries were less frequently readmitted to the hospital. The most pervasive improvements in health system performance occurred where policymakers and health system leaders created programs, incentives, or collaborations to ensure access to care and improve the quality and efficiency of care. For example, the decline in hospital readmissions accelerated after the federal government began levying financial penalties on hospitals that had high rates of readmissions and created hospital improvement innovation networks to help spread best practices.[1]

Still, wide performance variation across states, as well as persistent disparities by race and economic status within states, are clear signals that our nation is a long way from offering everyone an equal opportunity for a long, healthy, and productive life. Looking forward, it is likely that states will be challenged to provide leadership on health policy as the federal government considers a new relationship with states in public financing of health care. To improve the health of their residents, states must find creative ways of addressing the causes of rising mortality rates while also working to strengthen primary and preventive care.

(See Scorecard Methods and Appendix for a complete description of how the *Scorecard* was developed and detail on indicators and measurement periods.)

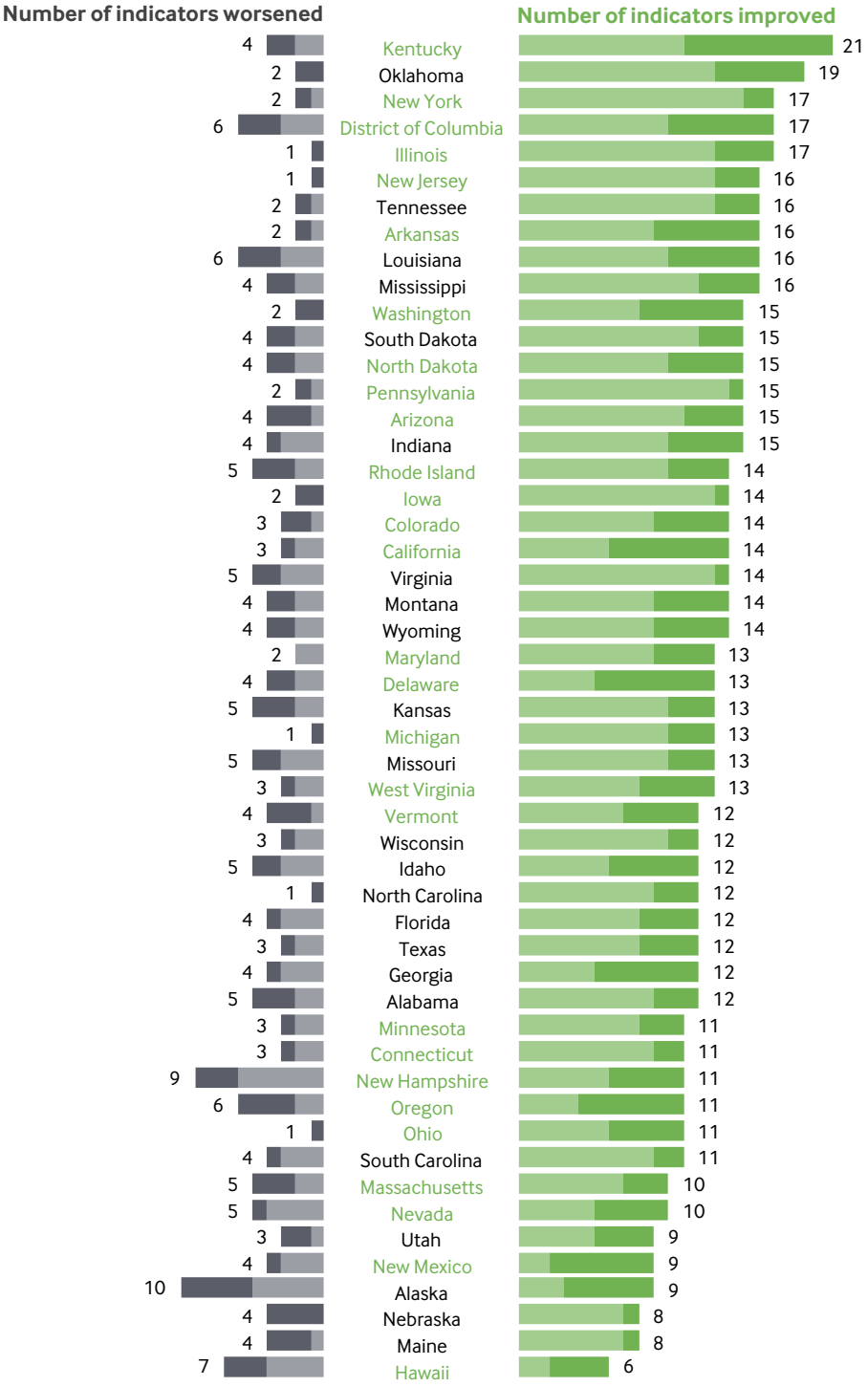
Exhibit 1. State Scorecard Summary of Health System Performance Across Dimensions

Overall performance

- Top quartile
- Second quartile
- Third quartile
- Bottom quartile

Note: States highlighted in green expanded their Medicaid programs under the Affordable Care Act as of Jan. 1 2015. The 2017 rankings are based on the most current year of data available, generally reflecting 2014 or 2015; the revised baseline rankings generally reflect the 2012 or 2013 data year. Note several measures have changed since our December 2015 *Scorecard* was published, and the ranks reported here are not strictly comparable to that report. See Scorecard Methods and Appendix and for more detail on *Scorecard* metrics and ranking methods.

Exhibit 2. Number of Indicators Improved or Worsened, by State



Notes: States highlighted in green expanded their Medicaid programs under the Affordable Care Act as of Jan. 1 2015. Based on trends for 39 of 44 total indicators; trend data are not available for all indicators. Bar length equals the total number of indicators with any improvement or worsening with an absolute value greater than 0.5 standard deviations of the state distribution. Lighter portion of bars represents the number of indicators with a change of 0.5-0.9 standard deviations between baseline and current time periods, darker portions represent indicators with 1.0 or greater standard deviation change. Ambulatory care–sensitive conditions among Medicare beneficiaries from two age groups are considered a single indicator in tallies of improvement.

MORE IMPROVEMENT THAN DECLINE IN STATES' HEALTH SYSTEM PERFORMANCE

Health system performance improved in more instances than it worsened from 2013 to 2015,[2] reversing states' performance trajectory coming out of the recession of 2007–09 (Exhibit 2).[3] All but four states (Alaska, Hawaii, New Hampshire, Oregon) improved on at least twice as many indicators as they worsened on. Kentucky and Oklahoma were "most improved"—meeting or exceeding the *Scorecard*'s threshold for improvement on 21 and 19 indicators respectively. All states and the District of Columbia worsened on at least one indicator.

Widespread and Unprecedented Gains in Access

Health System improvement over time is not a given. As documented previously in our *Scorecard* series, worsening or stagnating performance was pervasive across states in the first decade of the 2000s, particularly on indicators of health care access, as the number of uninsured adults continued to rise and more people skipped needed care.[4]

The implementation of the Affordable Care Act's major coverage expansions in 2014 led to a sharp reversal in these access trends. In this year's *Scorecard,* these expansions were associated with improvements on at least three indicators of access to care in the majority of states. Between 2013 and 2015, nearly all states and the District of Columbia met the *Scorecard*'s threshold for

improvement of at least a three-percentage-point decline in the uninsured rate for adults ages 19 to 64. More than half of states improved—at least a two-point reduction—in their uninsured rate for children. Three-quarters of states and the District of Columbia had a drop of at least two percentage points in the share of adults (age 18 and older) who reported not going to the doctor when they needed to because of costs (Exhibit 3).

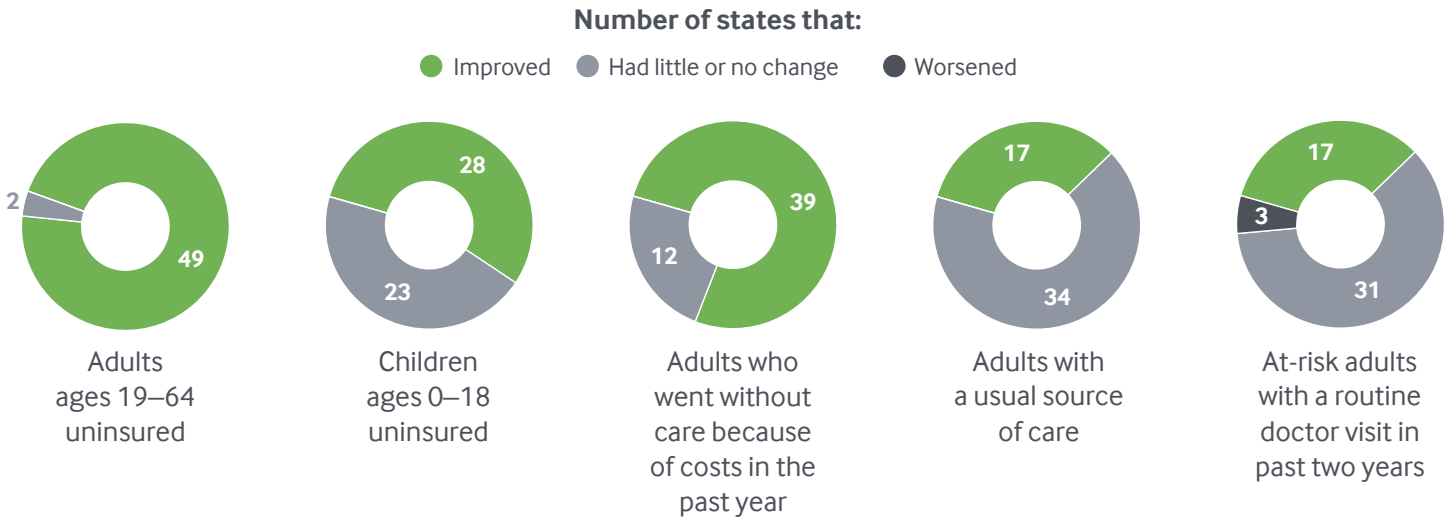
Research has shown that people with health insurance coverage are more likely than those without to have a usual source of care and to have had a recent health care visit.[5] In the first two years of the coverage expansions, about a third of states, along with the District of Columbia, saw jumps in the share of adults with a usual doctor or health care provider and in the share of "at risk" adults with a routine check-up in the past two years (Exhibit 3). At-risk adults are those age 50 or older, as well as younger adults with a chronic illness or in fair or poor health.

Read more about health care access across states.

Improvements Aided by Targeted Reforms

States made progress in other areas that were the target of concerted efforts to improve health system performance. For example, the Hospital Readmission Reduction Program, established by the Affordable Care Act, requires the Centers for Medicare and Medicaid Services (CMS) to reduce reimbursement to hospitals that have higher-than-expected readmissions of Medicare beneficiaries discharged from the hospital in the previous 30 days after being treated for certain conditions. The payment penalties began in October 2012; between 2012 and 2014, 33 states and the District of Columbia substantially lowered their all-cause readmission rate among Medicare beneficiaries. The largest reductions of 12 to 13 readmissions per 1,000 Medicare beneficiaries were in Kentucky, Illinois, and D.C., all of which had the highest rates at the outset (Exhibit 4).

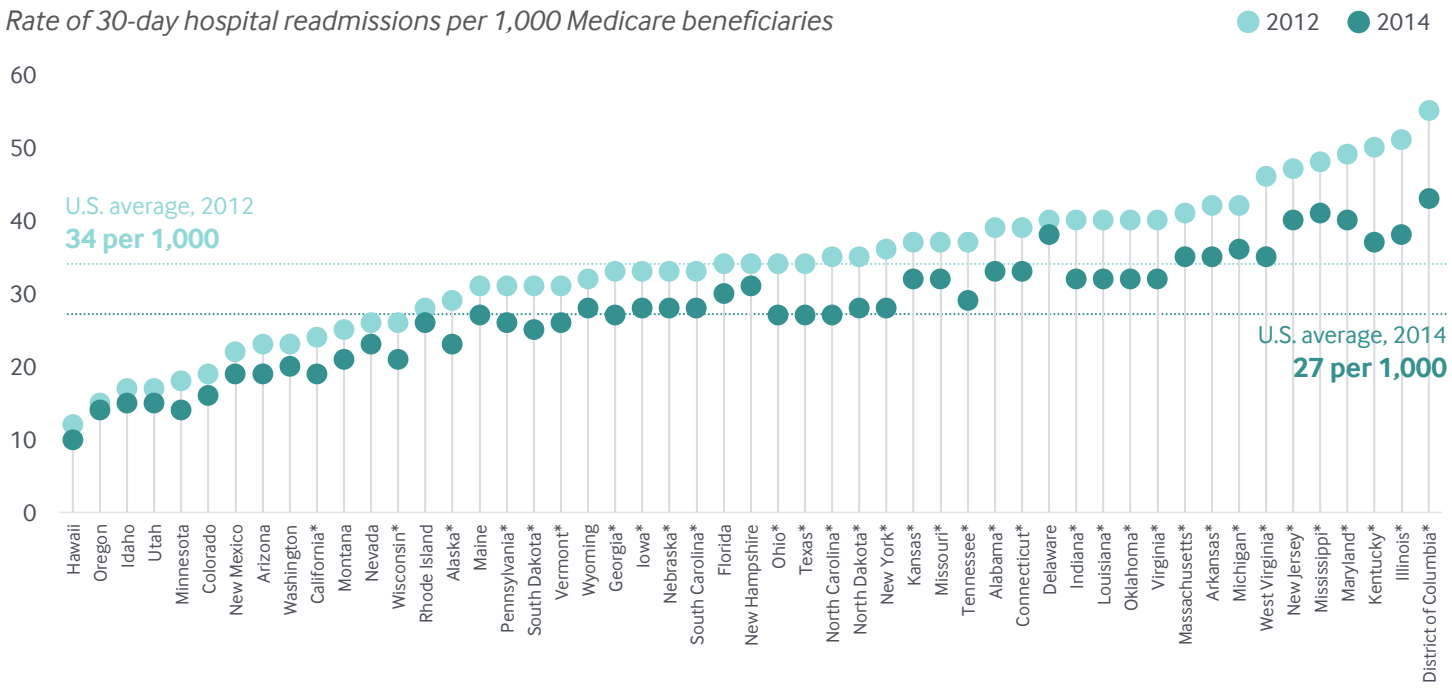
Exhibit 3. Widespread Gains in Access to Health Care, 2013–2015



Notes: For this exhibit, we count the District of Columbia as a state. "Improved" or "worsened" refers to a change between 2013 and 2015 of at least 0.5 standard deviations. "Little or no change" includes states with changes of less than 0.5 standard deviations as well as states with no change or without sufficient data to assess change. "Adults with a usual source of care" is an indicator in the *Scorecard*'s Prevention and Treatment dimension; it is included here because having a regular health care provider is associated with better access to care.

Data: Uninsured: U.S. Census Bureau, 2013 and 2015 1-Year American Community Surveys. Public Use Micro Sample (ACS PUMS). Cost Barriers, Doctor Visit, and Usual Source of Care: 2013 and 2015 Behavioral Risk Factor Surveillance System (BRFSS).

Exhibit 4. States with Highest Hospital Readmission Rates in 2012 Saw Large Improvements by 2014

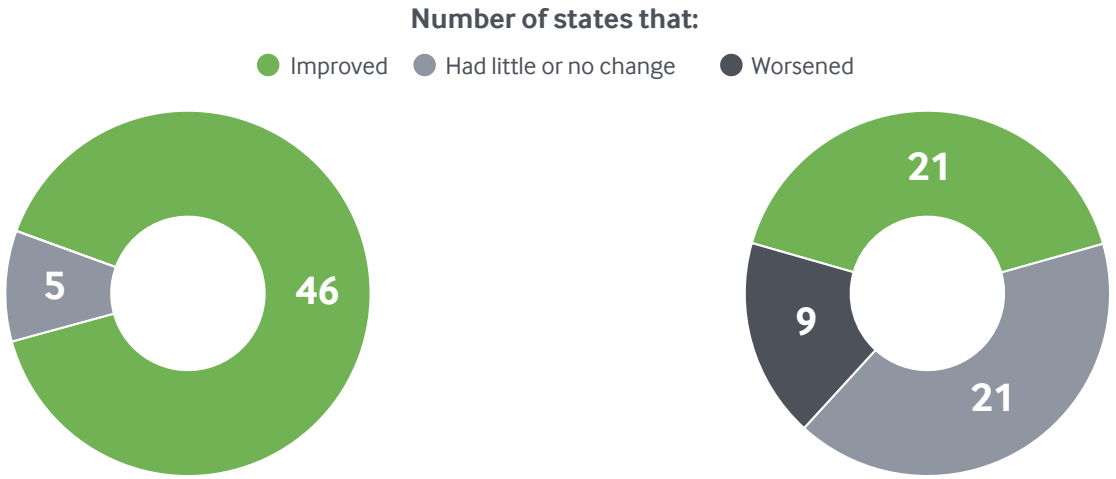


Notes: States are arranged in order (lowest to highest) of their readmission rate in 2012.

* Denotes states with at least -0.5 standard deviation change (at least 5 fewer readmissions per 1,000) between 2012 and 2014.

Data: Medicare claims via Feb. 2016 CMS Geographic Variation Public Use File.

Exhibit 5. Widespread Patient Safety Gains in Doctors' Offices and Hospitals



Elderly Medicare beneficiaries who received a high-risk prescription drug, 2012 to 2014

Central line-associated bloodstream infections (CLABSI), standardized infection ratio, 2013 to 2014

Notes: For this exhibit we count the District of Columbia as a state. "Improved" or "worsened" refers to a change between the baseline and current time periods of at least 0.5 standard deviations. "Little or no change" includes states with changes of less than 0.5 standard deviations as well as states with no change or without sufficient data to assess change.

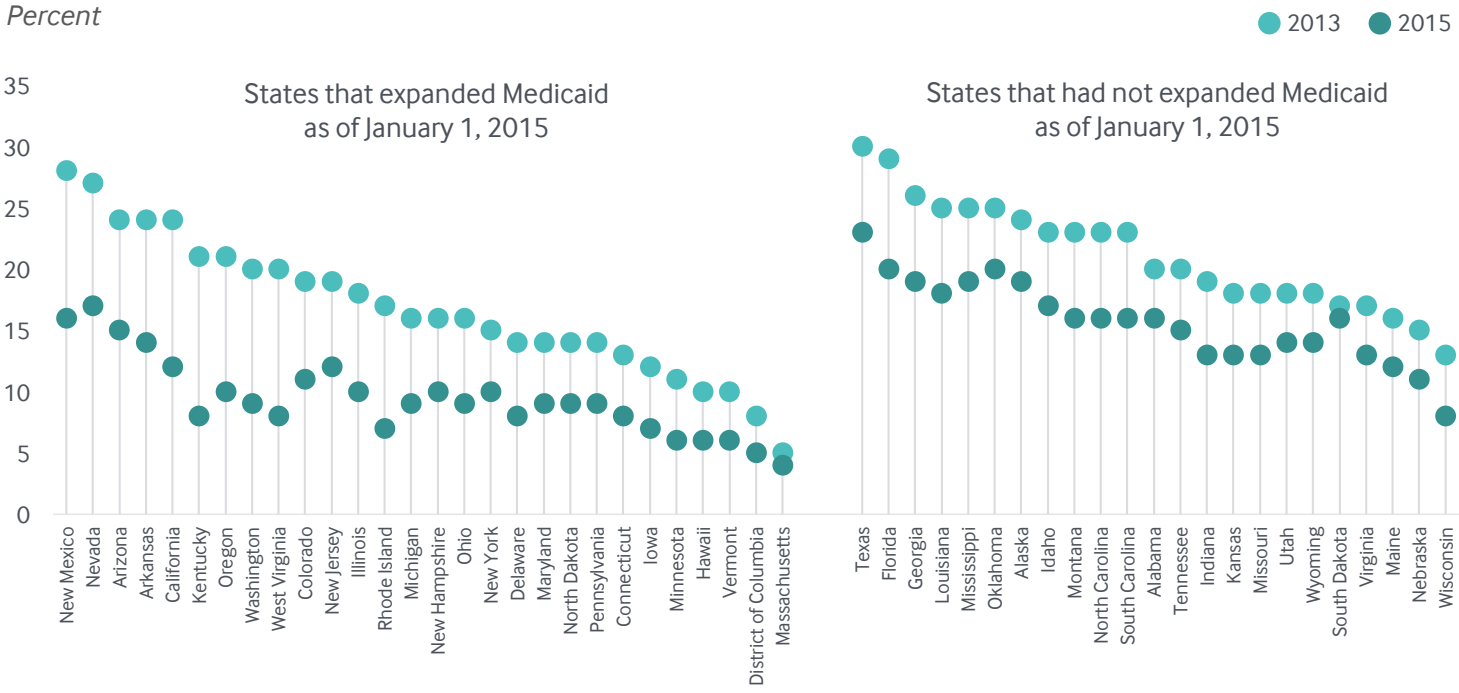
Data: High-Risk Prescription Drug Use: 2012 and 2014 Medicare Part D 5% Sample. Analysis by Y. Zhang, University of Pittsburgh. CLABSI: Centers for Disease Control and Prevention, 2013 and 2014 National and State Healthcare-Associated Infections Progress Report.

Public policies and private partnerships have also focused on improving patient safety across care settings. In recent years, there has been growing uptake of electronic prescribing and associated clinical decision support, aggressively encouraged by the federal government through incentives for implementing electronic health records.[6] This change may explain in part why Medicare beneficiaries in 46 states were less likely to be prescribed a high-risk medicine in 2014 than in 2012. In hospitals, progress is being made in reducing costly and potentially deadly central line-associated bloodstream infections (CLABSIs), as strategies for reducing their incidence are refined and implemented more widely. For the first time, the *Scorecard* can track state-level average CLABSI rates; it found notable declines relative to a national benchmark between 2013 and 2014 in 20 states and the District of Columbia (Exhibit 5).

States Expanding Medicaid Saw Greater Gains in Access

The *Scorecard* finds that states that accepted federal funding to expand their Medicaid programs under the Affordable Care Act outperformed states that did not expand Medicaid.[7] Expansion states typically ranked higher than nonexpansion states before and after the law's coverage expansions (Exhibit 1), but they also saw the greatest gains in health care access between 2013 and 2015. For example, states that achieved double-digit reductions in their uninsured rate for working-age adults between 2013 to 2015—Arkansas, California, Kentucky, Nevada, New Mexico, Oregon, Rhode Island, Washington, and West Virginia—all had expanded Medicaid as soon as federal resources became available in 2014 (Exhibit 6). Over the two-year period, Kentucky, followed by Arkansas and Oregon, experienced the biggest drops in the share of adults 18 and older who reported forgoing needed care because of costs (7 points, 5 points, and 5 points, respectively) (Appendix C2).

Exhibit 6. States that Expanded Medicaid Saw Greatest Reductions in Rates of Uninsured Working-Age Adults



Notes: States are arranged in rank order based on their uninsured rate in 2013. Alaska, Indiana, Louisiana, and Montana expanded their Medicaid programs after Jan. 1, 2015.
Data: U.S. Census Bureau, 2013 and 2015 One-Year American Community Surveys. Public Use Micro Sample (ACS PUMS).

Low-income people fared relatively better in Medicaid expansion states than their counterparts did in nonexpansion states. For example, the proportion of low-income working-age adults who were uninsured shrank more, on average, in states that had expanded Medicaid than in states that did not (Exhibit 7). In addition, Medicaid-expanding states saw a greater reduction in the share of low-income adults going without care because of costs or lacking a usual source of care.

The fact that nonexpansion states did not keep pace with expansion states in improving access and equity is reflected in the overall *Scorecard* rankings. Of the four nonexpansion states that were ranked in the top quartile of overall performance in the 2013 baseline period, only Wisconsin repeated its top quartile performance in the latest ranking[8] Maine, Nebraska, and Utah all fell and dropped from the top-performance quartile.

The five states that had the most dramatic upward shifts in overall rankings were Medicaid-expansion states: California moved up 12 places; Kentucky and New York each moved up eight places; Washington jumped six spots; and Colorado rose five places.

PREMATURE DEATH RATES CREPT UP IN ALMOST TWO-THIRDS OF STATES

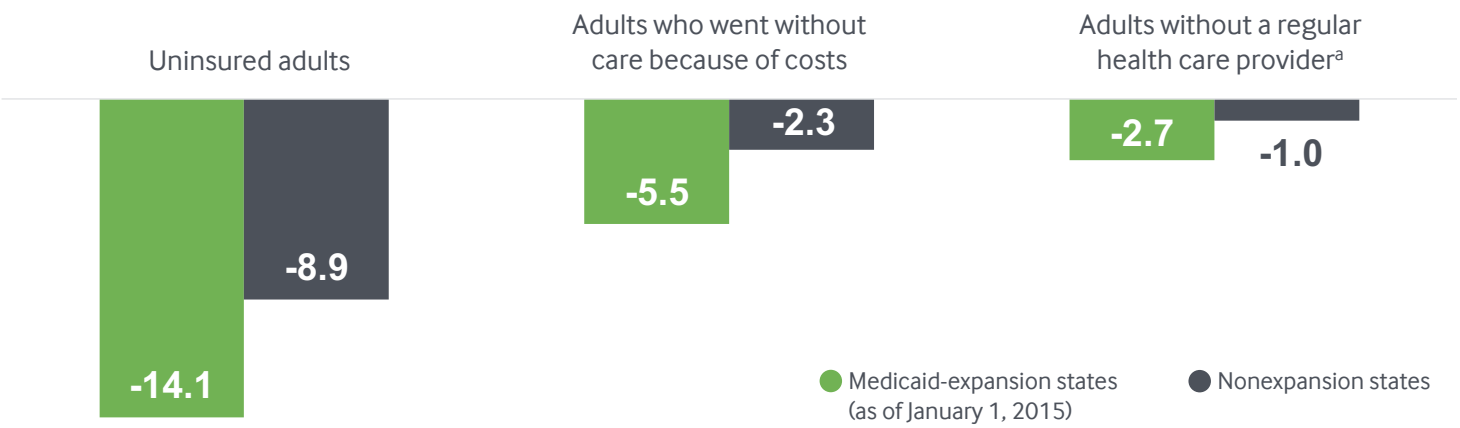
Recent headlines point to a troubling reality in the U.S.: Americans can expect to live a shorter life than they did a decade ago.[9,10] This is primarily the result of increased deaths from heart disease and other chronic conditions. But to a lesser extent, the trend is also attributable to what Princeton economist Anne Case has called "deaths of despair"—including fatalities from opioid and alcohol abuse.[11] Findings from the *Scorecard* reinforce these discouraging trends.

The *Scorecard* measures mortality by tracking premature death rates overall as well as by separately measuring deaths from two high-profile cancers, suicide, and infant mortality. It is important to note that mortality data reported in the *Scorecard* extend only through 2014, the latest year available, and include deaths that occurred before insurance coverage expansions.

Taking a closer look at deaths before age 75 that might have been prevented with accessible and effective health care, we find a decade-long decrease in mortality

Exhibit 7. States That Expanded Medicaid Experienced Greater Improvement in Health Care Access Among Low-Income Populations, 2013 and 2015

Average percentage-point change, 2013 to 2015



Notes: Alaska, Indiana, Louisiana, and Montana expanded their Medicaid programs after Jan. 1, 2015. [a] Adults with a usual source of care is reported elsewhere in the *Scorecard*, such that a higher value is favorable; for this exhibit, the share of "adults without a regular health care provider" is reported. Low income refers to household income <200% of the federal poverty level.

Data: Uninsured (ages 19–64): U.S. Census Bureau, 2013 and 2015 One-Year American Community Surveys. Public Use Micro Sample (ACS PUMS). Cost Barriers and Usual Source of Care (age 18 and older): 2013 and 2015 Behavioral Risk Factor Surveillance System (BRFSS).

reversed course in recent years as the rate rose slightly between 2011–12 and 2013–14 (Exhibit 8). There is also a significant racial disparity in premature death rates. Over the last decade, African Americans experienced a greater reduction in mortality amenable to health care than did other racial or ethnic groups. However, that reduction did not eliminate disparities for African Americans, who in all states (where data were available) remained more likely than whites or Hispanics to die before age 75 from treatable conditions in 2013–14. In 10 states and the District of Columbia, there was a more than twofold disparity in rates between blacks and both whites or Hispanics (Exhibit 9).

While these overarching trends in mortality are concerning, there is some good news. Deaths from breast and colon cancer fell between 2012 and 2014, as did adult smoking rates, a key risk factor for heart disease and lung cancer. The positive health effects likely to accrue from reduced rates of smoking may be outweighed, however, by the negative health effects of obesity (Appendix F2).[12]

The health care coverage and access gains noted earlier promote more regular access to primary care, which has been linked to earlier disease detection and greater adherence to treatment regimens, among other benefits.[13] But strengthening primary care is not enough. The social and other determinants of health must also be addressed to produce hoped-for gains in health outcomes.

CALIFORNIA JUMPS AHEAD

California improved the most of any state in the 2017 overall rankings, climbing up 12 spots, from 26th place in the baseline to 14th.

California met—and in some cases far exceeded—the *Scorecard*'s threshold for improvement on 14 of the 39 indicators for which we had trend data. The most dramatic shifts were in uninsured rates. Between 2013, the year before the Affordable Care Act's major coverage expansions took effect, and 2015, California sliced its uninsured rates for working-age adults and for children in half (from 24% to 12%, and 8% to 4%, respectively).

Between 2013 and 2015, the share of adults in California reporting that they went without needed care because of costs dropped by 4 percentage points, the share of adult Californians with a usual source of care jumped 6 percentage points (from 71% to 77%), and the share of at-risk adults without a recent routine doctor's visit improved by 3 percentage points.

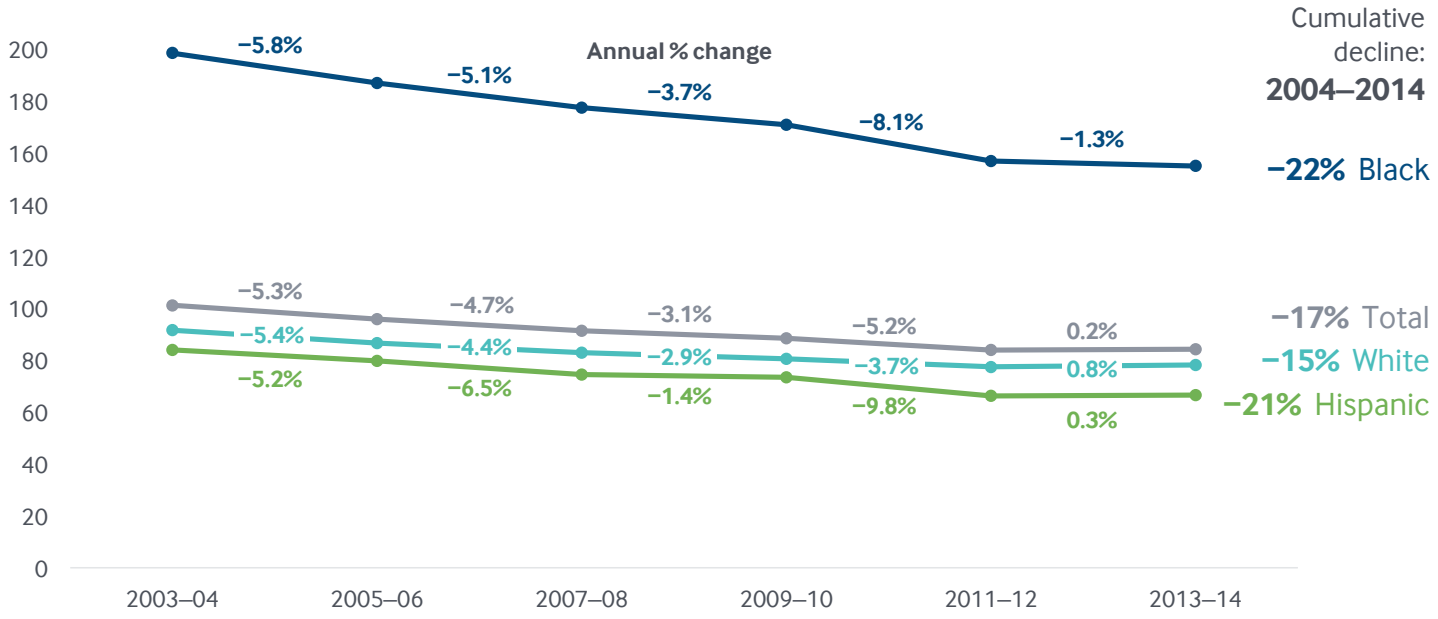
How did the nation's most populous state do it? "We were 'all in' in terms of the ACA, and it coincided with a strong economy here in California. I'm sure the two worked off of one another," says Chris Perrone, director of Improving Access at the California Health Care Foundation. Six months after the passage of the ACA in 2010, California became the first state to enact legislation to create its health insurance marketplace, Covered California, regarded as one of the most successful in the country. In the first three years, the average purchase price for plans on Covered California was less than the average offer price, suggesting enrollees chose lower-cost plans and prompting the authors of a research study to conclude: "Covered California demonstrates—straight out of Economics 101—if consumers have easy-to-understand, transparent information without being overwhelmed with too many choices, they will buy lower-premium products available on their tier."[14,15]

California also expanded eligibility for its Medicaid program under the ACA as soon as federal resources became available in January 2014. It also devoted significant resources to outreach and enrollment efforts for both marketplace and Medicaid managed care plans.

The state improved on indicators that spanned all age groups and care settings, including a substantial decrease in 30-day hospital readmissions among Medicare beneficiaries, which at the outset was already lower than in many other states.[16]

Exhibit 8. Premature Death Rates from Treatable Conditions Rose Slightly Among Whites and Hispanics Following Decade-Long Decline

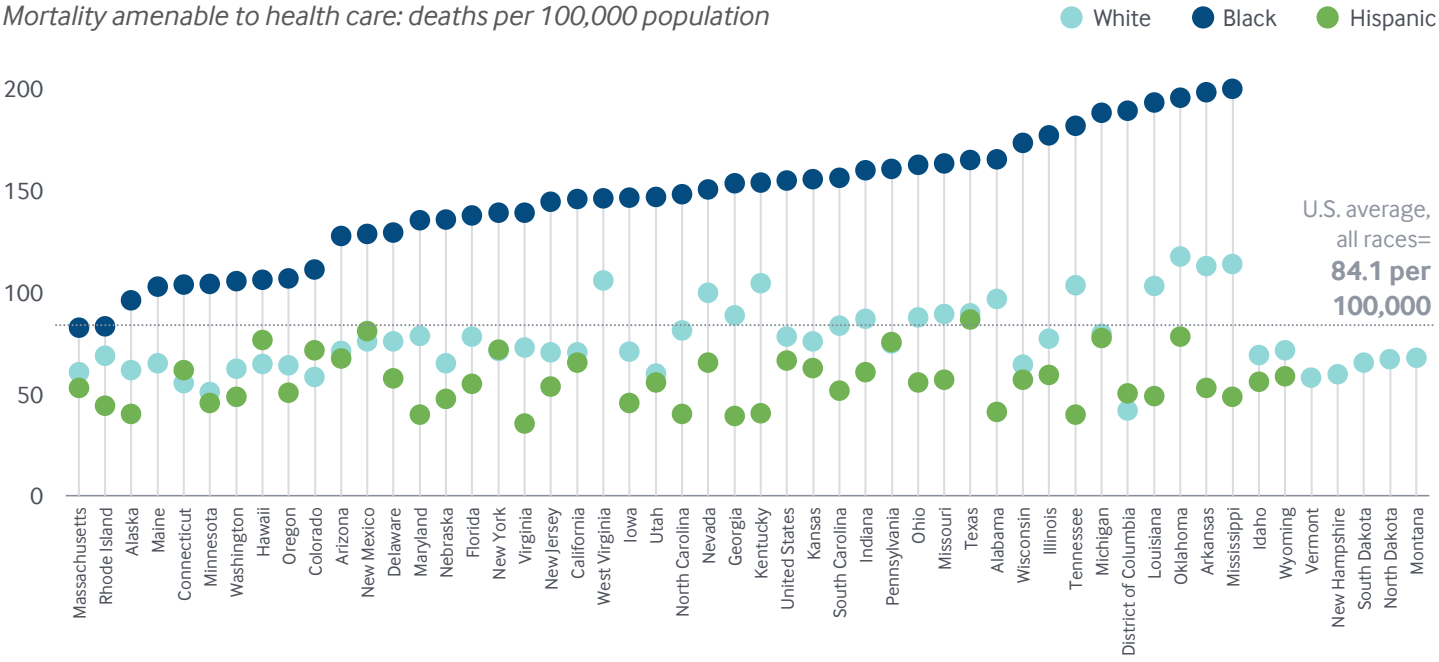
Mortality amenable to health care: deaths per 100,000 population



Data: 2003–2014 National Vital Statistics System (NVSS) Mortality All-County Micro Data Files.

Exhibit 9. In Every State, African Americans More Likely Than Whites to Die Early from Treatable Conditions, 2013–14

Mortality amenable to health care: deaths per 100,000 population

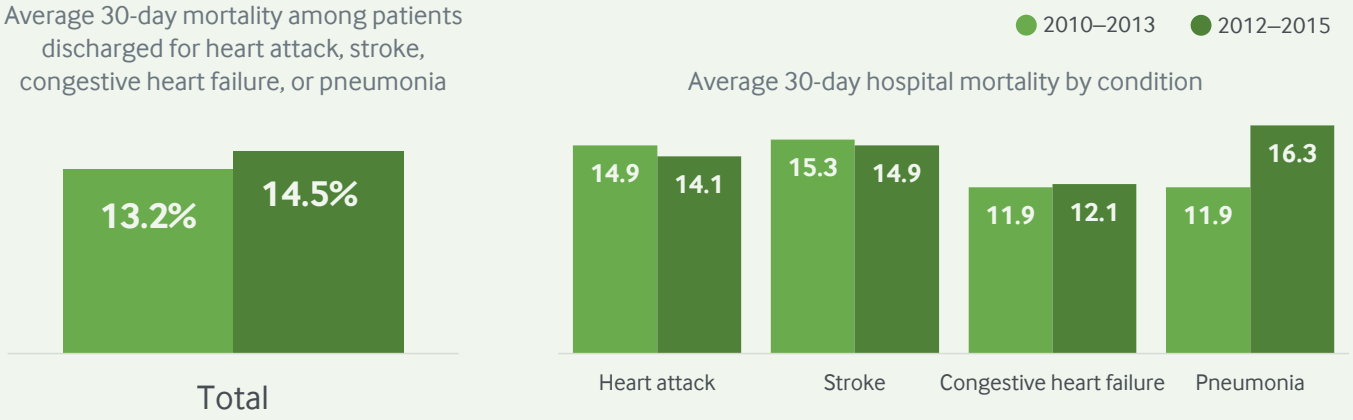


Notes: Data for black race not available for Idaho, Montana, New Hampshire, North Dakota, South Dakota, Vermont, or Wyoming. Data for Hispanic ethnicity not available for Maine, Montana, New Hampshire, North Dakota, South Dakota, Vermont, or West Virginia. States arranged in rank order based on black mortality.

Data: 2013 and 2014 National Vital Statistics System (NVSS) Mortality All-County Micro Data Files.

A CLOSER LOOK AT HOSPITAL MORTALITY

The *Scorecard* measures deaths within 30 days of hospital discharge among Medicare beneficiaries treated for four common conditions for which evidence-based treatment can promote better outcomes: heart attack, stroke, congestive heart failure, and pneumonia. Hospital 30-day mortality rates rose in nearly all states between the two measurement periods reported in the *Scorecard,* driving the national average from 13.2 percent to 14.5 percent. (CMS reports hospital mortality over a three-year timeframe.) The increase in this rate, which represents a reversal in the previous improvement trend, appears to be driven by a sharp uptick in mortality among pneumonia patients.



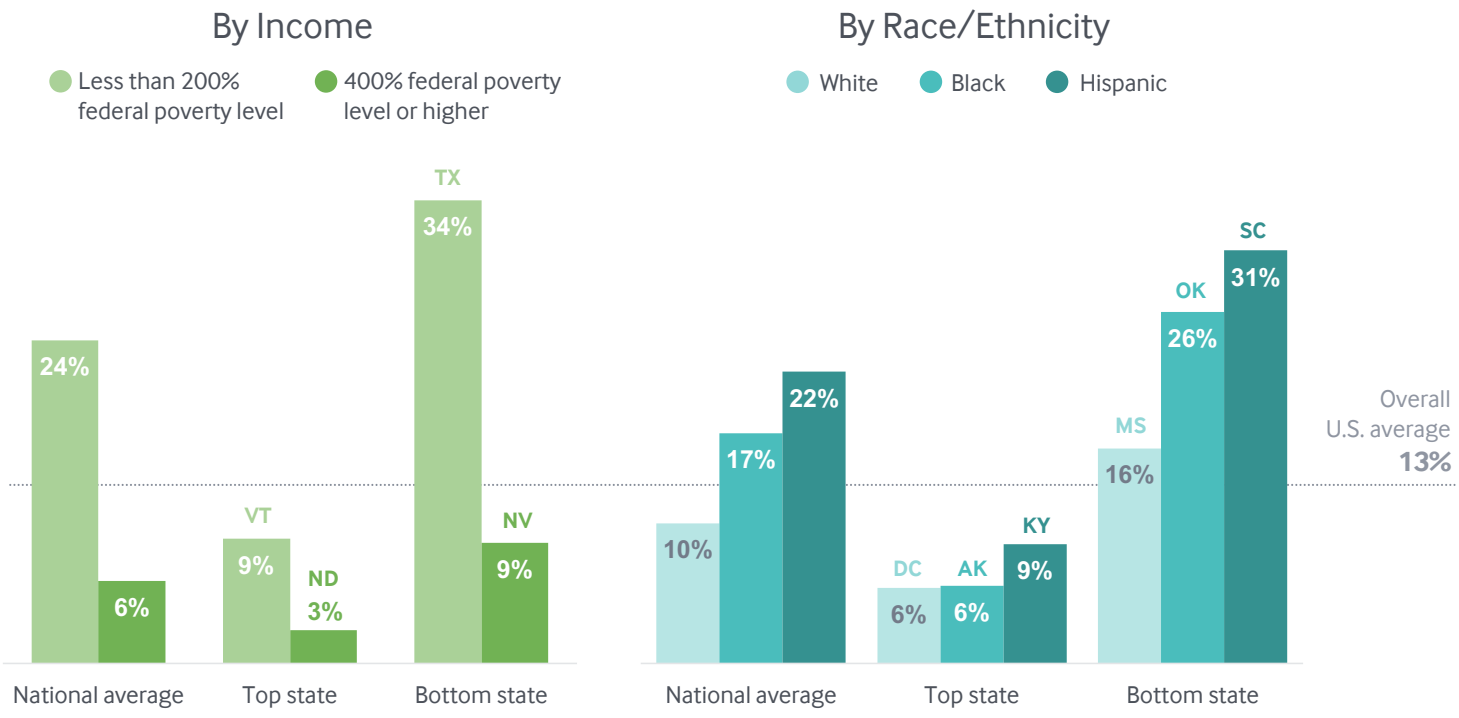
Data: CMS Hospital Compare, 2014 and 2016 4th Quarter, National-Level Summary Estimates.

THREEFOLD VARIATIONS ACROSS MEASURES BETWEEN TOP- AND BOTTOM-PERFORMING STATES

The *Scorecard* is a stark reminder that where you live affects your ability to access high-quality health care and your prospects for a healthy life. On average, performance in the highest-ranked state on a given indicator was three times better than in the lowest-ranked state, with even wider variation for some indicators. For example, there was an almost sixfold difference in uninsured rates among working-age adults (23% in Texas vs. 4% in Massachusetts) and a fourfold difference in rates of readmissions to the hospital among Medicare beneficiaries (10 per 1,000 in Hawaii vs. at least 40 per 1,000 in the District of Columbia, Maryland, Mississippi, and New Jersey).

The *Scorecard* also finds continuing disparities for those with low incomes and for members of racial and ethnic minority groups in most—but not all—states compared to national norms. For example, the share of low-income adults who skipped needed care because of cost was 21 percentage points higher than the overall U.S. average in Texas (34% vs. 13%), whereas it was four points lower than the overall U.S. average in Vermont (9%) (Exhibit 10). Similarly, rates of forgone care due to cost for racial and ethnic minority populations are much higher than the overall U.S. average in the worst-performing states: Oklahoma had the highest rate for blacks and South Carolina had the highest rate for Hispanics. Despite these disparities, recent trends are promising. As state performance improved overall for many indicators, state equity gaps also more often narrowed than widened for the majority of equity indicators tracked by the *Scorecard*. (Appendix G2).

Exhibit 10. Wide State Variations by Income and Race/Ethnicity in Percentage of Adults Who Went Without Care Because of Cost, 2015



Data: 2015 Behavioral Risk Factor Surveillance System (BRFSS).

ASSESSING STATE HEALTH SYSTEM EQUITY

Health care inequities result from disparities in access to and availability of care (e.g., the number of people who have insurance or who visit a dentist regularly), health outcomes (e.g., mortality), and risks (e.g., the number of people who are obese or are smokers) between various groups.

The *Scorecard*'s Equity dimension looks at two vulnerable populations: low-income people and those who belong to racial and ethnic minorities. A state's performance is based on gaps in equity—that is, the difference between the state's vulnerable population and the U.S. average for any given indicator. Improvement is defined as an improvement in the state's vulnerable group rate and a narrowing in the performance gap between the vulnerable group and the U.S. average.

Across the nation, health care equity remains an unfulfilled goal. The health insurance expansions brought about by the Affordable Care Act (assuming they are not reversed) offer the opportunity to close these gaps.

IMPLICATIONS

All states have the opportunity to improve, including those at the top. On certain indicators, states that ranked lower overall performed better than those at the top of the overall rankings, which suggests that states can learn from each other. If every state achieved the performance of the top-ranked state on each *Scorecard* indicator, their residents and the country as a whole would realize dramatic gains in access, quality, efficiency, and health outcomes (Exhibit 11).

States can take various steps to promote improvement. Examples include using value-based purchasing, establishing rules to ensure equitable access and competitive insurance markets, setting strategies for health information technology and exchange, and supporting public health and community-based organizations that address social determinants of health. Health systems with a stronger primary care orientation generally achieve better outcomes.[17] Promoting an adequate primary care workforce, especially in underserved areas, may require collaborating with other payers to support the development of effective primary care medical homes, among other actions.

States have unequal economic circumstances and resources to support improvement. The gains brought about by Medicaid expansion and marketplace subsidies in places like Kentucky highlight the role the federal government can play in helping to equalize opportunity. Efforts in California and elsewhere show how states can leverage federal reforms to achieve their own goals. These gains may be challenged by the proposed repeal and replacement of the Affordable Care Act, which could lead to widening inequality between and within states.

With the future uncertain, it will be more important than ever to track state health system performance as states assume greater responsibility for the future of health policy.

Exhibit 11. National Gains If All States Achieved Top Rates* of Performance

20 million	more adults and children insured, beyond those who already gained coverage through the ACA
14 million	fewer adults skipping care because of its cost
26 million	more adults with a usual source of care
12 million	more adults receiving recommended cancer screenings
513,000	more young children receiving all recommended vaccines
1 million	fewer Medicare beneficiaries receiving a high-risk prescription drug
124,000	fewer hospital readmissions among Medicare beneficiaries age 65 and older
1.4 million	fewer emergency room visits for nonemergency care or conditions treatable with primary care
90,000	fewer deaths before age 75 from treatable diseases

Note: * Performance benchmarks set at the level achieved by the top-performing state with available data for this indicator.

SCORECARD METHODS

The *Commonwealth Fund Scorecard on State Health System Performance, 2017,* evaluates 44 health care performance indicators grouped into four dimensions:

- **Access and Affordability (six indicators):** includes rates of insurance coverage for children and adults, as well as individuals' out-of-pocket expenses for medical care and cost-related barriers to receiving care.
- **Prevention and Treatment (18 indicators):** includes measures of receiving preventive care and the quality of care in ambulatory, hospital, and long-term care and postacute settings.
- **Potentially Avoidable Hospital Use and Cost (nine indicators; of these, hospital admissions for ambulatory care–sensitive conditions were reported separately for two distinct age groups):** includes indicators of hospital use that might have been reduced with timely and effective care and follow-up care, as well as estimates of per-person spending for Medicare beneficiaries and the cost of employer-sponsored insurance.
- **Healthy Lives (11 indicators):** includes measures of premature death and health risk behaviors.

EQUITY DIMENSION. The *Scorecard* evaluates differences in performance associated with patients' income level (19 indicators) or race or ethnicity (16 indicators) that span the other four dimensions of performance. The data available for some equity indicators, such as childhood vaccinations, may represent a different time point from that used in the corresponding main *Scorecard* indicator. For each state, performance on each equity indicator as it pertains to low-income populations (under 200% of the federal poverty level) and racial or ethnic minority groups (black or other race or Hispanic ethnicity) is compared with the national average. The resulting difference in performance is the "equity gap," which forms the basis of our state rankings for this domain. To support more comprehensive assessment of disparities, we expanded the number of indicators evaluated in the equity dimension starting with the 2015 State Scorecard; hence, the 2017 equity rankings are not strictly comparable to those published before the 2015 State Scorecard.

The following principles guided the development of the *Scorecard*:

PERFORMANCE METRICS. The 44 performance metrics selected for this report span the health care system and represent important dimensions of care. Where possible, indicators align with those used in previous state scorecards. Over time, several indicators have been dropped, either because all states improved to the point where no meaningful variations existed (e.g., hospital quality process-of-care measures) or the data to construct the measures were no longer available. Several new indicators were added to the *Scorecard* series since 2014, including

measures of premature death (years of potential life lost), out-of-pocket spending on medical care relative to income, CLABSI, per-enrollee spending among adults with employer-sponsored insurance, and potentially avoidable emergency department use.

MEASURING CHANGE OVER TIME. We were able to construct a time series for 39 of 44 indicators. Four *Scorecard* indicators derived from the National Survey of Children's Health could not be updated, because the survey is conducted only every four years.

There were generally one to two years between an indicator's baseline and current-year data observation, though the start and end points depended on data availability. We chose this short time horizon to capture the immediate effects of changes relative to the policy and delivery system environment, such as recent coverage expansions under the Affordable Care Act and other reforms. In this 2017 *Scorecard,* we compare state rankings between the current year and baseline periods; the baseline rankings generally reflect the period preceding the state rankings reported in our 2015 *Scorecard.*[18]

We considered a change in an indicator's value between the historical and current-year data points to be meaningful if it was at least one half (0.5) of a standard deviation larger than the indictor's combined distribution over the two time points—a common approach in social science research.

To assess change over time in the Equity dimension, we counted how often the equity gap narrowed across indicators for each state during the period measured by the *Scorecard.* We considered improvement to have occurred in an equity indicator only if the equity gap narrowed and health care for the state's most vulnerable group improved.

DATA SOURCES. Indicators were drawn from publicly available data sources, including government-sponsored surveys, registries, publicly reported quality indicators, vital statistics, mortality data, and administrative databases. The most current data available were used in this report whenever possible. Appendix H provides detail on the data sources and time frames.

SCORING AND RANKING METHODS. The scoring method follows previous state scorecards. States are first ranked from best to worst on each of the 44 performance indicators. We averaged rankings for indicators within each dimension to determine a state's dimension rank and then averaged dimension rankings to determine overall ranking. This approach gives each dimension equal weight, and within dimensions weights indicators equally. As in previous scorecards, if historical data were not available for a particular indicator in the baseline period, the most current year of data available was used as a substitute. This ensures that ranks in each period were based on the same number of indicators and were as similar as possible.

NOTES

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[2] The *Scorecard* evaluates change for 39 of the 44 performance indicators for which data were available over time. Performance measures are constructed from the most recently available data, generally reflecting the two-year period ending in 2014 or 2015, though this does vary somewhat by indicator. We identified instances of improvement or worsening that can be considered meaningful if there was at least 0.5 standard deviation change between the indicators' observed rates in the two periods. Refer to the Appendix for more detail on performance measures included here.

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[7] The *Scorecard* sets January 1, 2015, as the cutoff date for which a state would be considered an expansion state, because this date best aligns with the health insurance coverage data used in this analysis from the American Community Survey. Alaska, Indiana, Louisiana, and Montana implemented Medicaid expansion between February 2015 and July 2016 but are considered nonexpanding states in this *Scorecard*.

[8] Wisconsin is unique compared to other nonexpansion states in that it has higher Medicaid eligibility thresholds; for example, it provides coverage to childless adults with incomes up to 100 percent of the federal poverty level.

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[15] Ibid.

[16] In addition to the six indicators mentioned in the text, California improved on the following indicators: children ages 19–35 months who received all recommended doses of seven key vaccines; Medicare beneficiaries who received at least one drug that should be avoided in the elderly; Medicare beneficiaries with dementia, hip/pelvic fracture, or chronic renal failure who received a prescription drug that is contraindicated for that condition; hospitalized patients given information about what to do during their recovery at home; home health patients who get better at walking or moving around; long-stay nursing home residents with an antipsychotic medication; short-stay nursing home residents with a 30-day readmission to the hospital; and adults with poor health-related quality of life.

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[18] D. McCarthy, D. C. Radley, and S. L. Hayes, *Aiming Higher: Results from a Scorecard on State Health System Performance, 2015 Edition* (The Commonwealth Fund, Dec. 2015).

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APPENDIX A1. State Scorecard Data Years and Databases

	Indicator	Past year	Current year	Database
	Access and Affordability			
1	Adults ages 19–64 uninsured	2013	2015	ACS PUMS
2	Children ages 0–18 uninsured	2013	2015	ACS PUMS
3	Adults who went without care because of cost in past year	2013	2015	BRFSS
4	Individuals under age 65 with high out-of-pocket medical costs relative to their annual household income	—a	2014-15	CPS ASEC
5	At-risk adults without a routine doctor visit in past two years	2013	2015	BRFSS
6	Adults without a dental visit in past year	2012	2014	BRFSS
	Prevention and Treatment			
7	Adults with a usual source of care	2013	2015	BRFSS
8	Adults with age- and gender-appropriate cancer screenings	2012	2014	BRFSS
9	Adults with age-appropriate vaccines	2013	2015	BRFSS
10	Children with a medical home	—a	2011/12	NSCH
11	Children with a medical and dental preventive care visit in the past year	—a	2011/12	NSCH
12	Children with emotional, behavioral, or developmental problems who received needed mental health care in the past year	—a	2011/12	NSCH
13	Children ages 19–35 months who received all recommended doses of seven key vaccines	2013	2015	NIS
14	Medicare beneficiaries who received at least one drug that should be avoided in the elderly	2012	2014	5% Medicare enrolled in Part D
15	Medicare beneficiaries with dementia, hip/pelvic fracture, or chronic renal failure who received a prescription drug that is contraindicated for that condition	2012	2014	5% Medicare enrolled in Part D
16	Medicare fee-for-service patients whose health provider always listens, explains, shows respect, and spends enough time with them	2013	2014	CAHPS (via AHRQ National Healthcare Quality Report)
17	Risk-adjusted 30-day mortality among Medicare beneficiaries hospitalized for heart attack, heart failure, pneumonia, or stroke	07/2010 - 06/2013	07/2012 - 06/2015	CMS Hospital Compare
18	Central line-associated bloodstream infections (CLABSI), Standardized Infection Ratio	2013	2014	CDC HAI Progress Report
19	Hospitalized patients given information about what to do during their recovery at home	2013	2015	HCAHPS (via CMS Hospital Compare)
20	Hospitalized patients who reported hospital staff always managed pain well, responded when needed help to get to bathroom or pressed call button, and explained medicines and side effects	2013	2015	HCAHPS (via CMS Hospital Compare)
21	Home health patients who get better at walking or moving around	2013	2015	OASIS (via CMS Home Health Compare)
22	Home health patients whose wounds improved or healed after an operation	2013	2015	OASIS (via CMS Home Health Compare)
23	High-risk nursing home residents with pressure sores	2013 (Q2-Q4)	2015 (Q2-Q4)	MDS (via CMS Nursing Home Compare)
24	Long-stay nursing home residents with an antipsychotic medication	2013 (Q2-Q4)	2015 (Q2-Q4)	MDS (via CMS Nursing Home Compare)
	Avoidable Hospital Use and Cost			
25	Hospital admissions for pediatric asthma, per 100,000 children	2011	2013	HCUP (via AHRQ National Healthcare Quality Report)
26	Hospital admissions among Medicare beneficiaries for ambulatory care–sensitive conditions, ages 65–74, and 75 and older per 1,000 beneficiaries	2012	2014	CCW (via CMS Geographic Variation Public Use File)
27	Medicare 30-day hospital readmissions, rate per 1,000 beneficiaries	2012	2014	CCW (via CMS Geographic Variation Public Use File)
28	Short-stay nursing home residents readmitted within 30 days of hospital discharge to nursing home	2012	2014	MedPAR, MDS
29	Long-stay nursing home residents hospitalized within a six-month period	2012	2014	MedPAR, MDS
30	Home health patients also enrolled in Medicare with a hospital admission	2013	2015	OASIS (via CMS Home Health Compare)
31	Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries	2012	2014	Medicare SAF
32	Total reimbursements per enrollee (ages 18–64) with employer-sponsored insurance	2013	2014	Truven MarketScan
33	Total Medicare (Parts A & B) reimbursements per enrollee	2012	2014	CCW (via CMS Geographic Variation Public Use File)
	Healthy Lives			
34	Mortality amenable to health care, deaths per 100,000 population	2011-12	2013-14	CDC NVSS: Mortality Restricted Use File
35	Years of potential life lost before age 75	2012	2014	CDC NVSS: WISQARS
36	Breast cancer deaths per 100,000 female population	2012	2014	CDC NVSS: WONDER
37	Colorectal cancer deaths per 100,000 population	2012	2014	CDC NVSS: WONDER
38	Suicide deaths per 100,000 population	2012	2014	CDC NVSS: WONDER
39	Infant mortality, deaths per 1,000 live births	2012	2013	CDC NVSS: WONDER
40	Adults ages 18–64 who report fair/poor health or activity limitations because of physical, mental, or emotional problems	2013	2015	BRFSS
41	Adults who smoke	2013	2015	BRFSS
42	Adults ages 18–64 who are obese (BMI >= 30)	2013	2015	BRFSS
43	Children ages 10–17 who are overweight or obese (BMI >= 85th percentile)	—a	2011/12	NSCH
44	Adults ages 18–64 who have lost six or more teeth because of tooth decay, infection, or gum disease	2012	2014	BRFSS

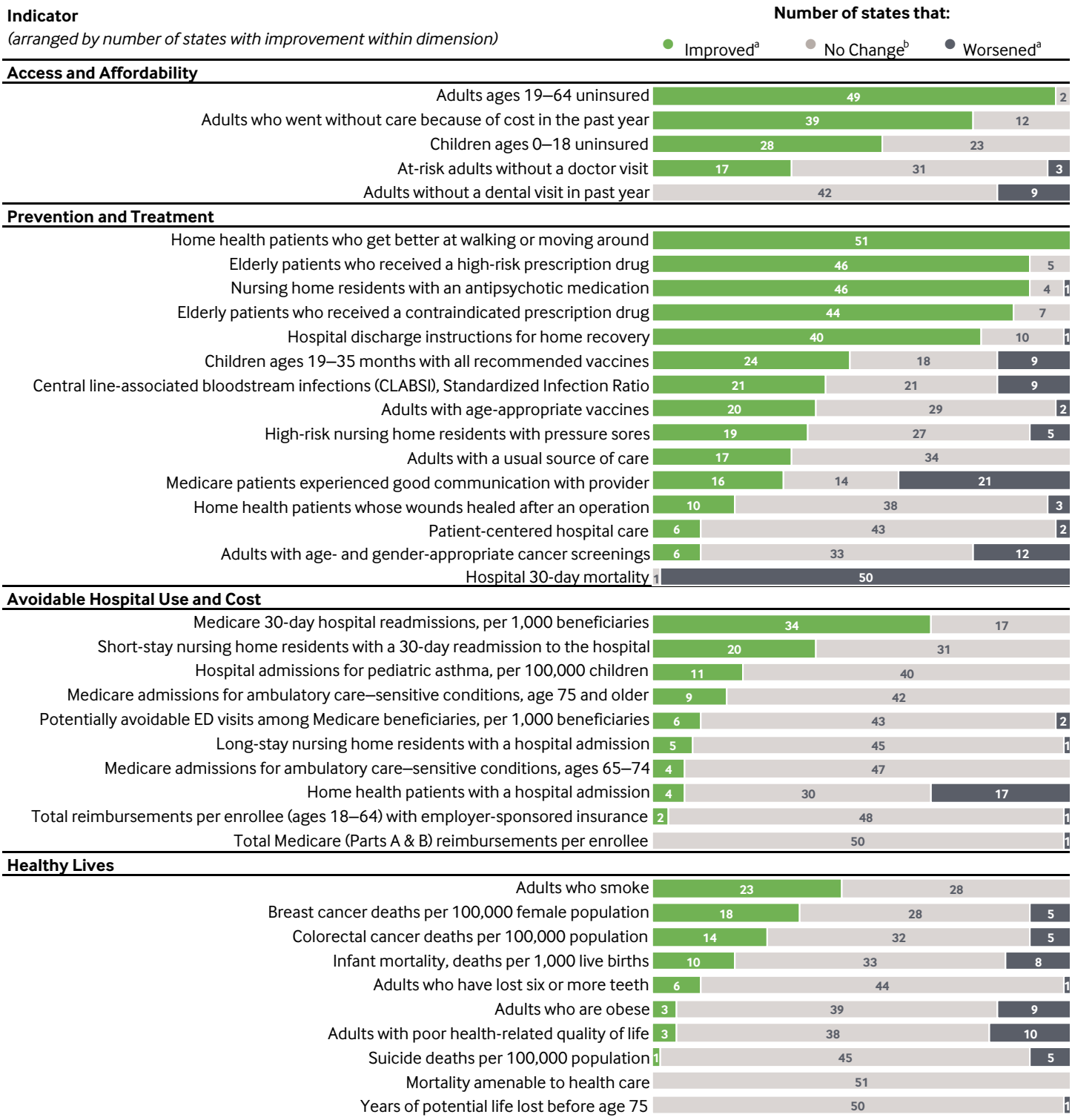
Note: (a) Previous data not available or its definition is not comparable over time.

APPENDIX A2. List of 44 Indicators in the State Scorecard on Health System Performance

	Indicator	Data years represented		U.S. average rate		Range of state performance		2017 Scorecard
		Baseline	2017 Scorecard	Baseline	2017 Scorecard	Baseline	2017 Scorecard	Best state(s)[a]
	Access and Affordability							
1	Adults ages 19–64 uninsured	2013	2015	20	13 *	5 - 30	4 - 23	MA
2	Children ages 0–18 uninsured	2013	2015	8	5 *	2 - 14	1 - 10	MA
3	Adults who went without care because of cost in the past year	2013	2015	16	13 *	7 - 22	7 - 19	IA
4	Individuals with high out-of-pocket medical spending	—b	2014-15	—b	14	—b	10 - 19	DC, DE, MD, MN, VT
5	At-risk adults without a doctor visit	2013	2015	14	13	7 - 23	6 - 24	DC, RI
6	Adults without a dental visit in past year	2012	2014	15	16	10 - 20	11 - 20	SD, VT
	Prevention and Treatment							
7	Adults with a usual source of care	2013	2015	76	78	65 - 88	65 - 89	MA
8	Adults with age- and gender-appropriate cancer screenings	2012	2014	69	68	60 - 79	60 - 77	MA
9	Adults with age-appropriate vaccines	2013	2015	36	38	28 - 47	29 - 51	SD
10	Children with a medical home	—b	2011/12	—b	54	—b	45 - 69	VT
11	Children with a medical and dental preventive care visit in the past year	—b	2011/12	—b	68	—b	56 - 81	VT
12	Children who received needed mental health care in the past year	—b	2011/12	—b	61	—b	40 - 86	ND
13	Children ages 19–35 months with all recommended vaccines	2013	2015	70	72	57 - 82	64 - 81	CT
14	Elderly patients who received a high-risk prescription drug	2012	2014	17	13 *	9 - 24	7 - 21	MN
15	Elderly patients who received a contraindicated prescription drug	2012	2014	21	18 *	13 - 28	10 - 23	VT
16	Medicare patients experienced good communication with provider	2013	2014	76	76	72 - 80	71 - 80	MN, VT
17	Hospital 30-day mortality	07/2010 - 06/2013	07/2012 - 06/2015	13.2	14.5 *	12.2 - 14.1	13.1 - 15.7	DE
18	Central line-associated bloodstream infections (CLABSI), Standardized Infection Ratio	2013	2014	0.54	0.5	0.19 - 0.77	0.23 - 0.87	HI
19	Hospital discharge instructions for home recovery	2013	2015	86	87 *	78 - 90	81 - 90	ID, NH, UT, VT, WI
20	Patient-centered hospital care	2013	2015	68	68	58 - 72	58 - 74	ID, SD
21	Home health patients who get better at walking or moving around	2013	2015	61	66 *	49 - 66	54 - 72	AL
22	Home health patients whose wounds healed after an operation	2013	2015	89	90	80 - 93	77 - 95	RI
23	High-risk nursing home residents with pressure sores	2013 (Q2-Q4)	2015 (Q2-Q4)	6	6	3 - 9	3 - 9	AK, ID, NH
24	Nursing home residents with an antipsychotic medication	2013 (Q2-Q4)	2015 (Q2-Q4)	21	17 *	11 - 27	8 - 22	HI
	Avoidable Hospital Use and Cost							
25	Hospital admissions for pediatric asthma, per 100,000 children	2011	2013	107	107	33 - 232	27 - 226	VT
26	Medicare admissions for ambulatory care–sensitive conditions, ages 65–74	2012	2014	29	27	13 - 51	12 - 46	HI
	Medicare admissions for ambulatory care–sensitive conditions, age 75 and older	2012	2014	70	66	41 - 100	35 - 92	HI
27	Medicare 30-day hospital readmissions, per 1,000 beneficiaries	2012	2014	34	27 *	12 - 55	10 - 43	HI
28	Short-stay nursing home residents with a 30-day readmission to the hospital	2012	2014	20	19	13 - 26	11 - 25	AK
29	Long-stay nursing home residents with a hospital admission	2012	2014	17	16	7 - 30	5 - 28	HI
30	Home health patients with a hospital admission	2013	2015	16	16.2	14 - 18	13.9 - 17.9	HI
31	Potentially avoidable ED visits among Medicare beneficiaries, per 1,000 beneficiaries	2012	2014	188	185	131 - 248	129 - 265	HI
32	Total reimbursements per enrollee (ages 18–64) with employer-sponsored insurance	2013	2014	$4,489	$4,569	3030 - 7733	3217 - 7982	AR
33	Total Medicare (Parts A & B) reimbursements per enrollee	2012	2014	$8,854	$8,819	5399 - 10868	5592 - 10616	HI
	Healthy Lives							
34	Mortality amenable to health care (deaths per 100,000 population)	2011-12	2013-14	83.9	84.2	55.3 - 132.6	54.3 - 140.8	MN
35	Years of potential life lost before age 75	2012	2014	6,412	6,447	4891.6 - 9609.6	4891.6 - 9917	MN
36	Breast cancer deaths per 100,000 female population	2012	2014	21.4	20.6	15.7 - 31.1	14.2 - 28.9	ND
37	Colorectal cancer deaths per 100,000 population	2012	2014	14.9	14.3	10.7 - 19.4	10.9 - 19.3	WY
38	Suicide deaths per 100,000 population	2012	2014	12.6	13.0	5.7 - 29.6	7.8 - 23.9	DC
39	Infant mortality, deaths per 1,000 live births	2012	2013	6.0	6.0	4.2 - 8.9	4.2 - 9.6	MA
40	Adults with poor health-related quality of life	2013	2015	26	26	20 - 34	20 - 34	MN, ND
41	Adults who smoke	2013	2015	18	17	10 - 27	9 - 26	UT
42	Adults who are obese	2013	2015	29	29	22 - 37	20 - 37	CO
43	Children who are overweight or obese	—b	2011/12	—b	31	—b	22 - 40	UT
44	Adults who have lost six or more teeth	2012	2014	10	10	6 - 23	6 - 22	UT

Notes: (a) Multiple states may be listed in the event of ties. (b) Previous data not available or its definition is not comparable over time.
* Indicates change between baseline and current time periods of at least 0.5 standard deviations (see Scorecard Methods).

APPENDIX A3. Change in State Health System Performance by Indicator



Notes: Only *Scorecard* indicators with trends are shown. Trend data generally reflect the two-year period ending in 2014 or 2015—refer to Appendix A1 for additional detail (trend data were not available for all indicators). ACS = ambulatory care–sensitive. ACS conditions among Medicare beneficiaries are displayed here separately for two age ranges, but counted as a single indicator in tallies of improvement.

(a) Improvement or worsening refers to a change between the baseline and current time periods of at least 0.5 standard deviations.

(b) Includes the number of states with no change or without sufficient data for this subpopulation to assess change over time.

APPENDIX A4. National Cumulative Impact If All States Acheived Top State Rate

Indicator	If all states improved their performance to the level of the best-performing state for this indicator, then:	
Insured adults	**17,382,605**	more adults (ages 19–64) would be covered by health insurance (public or private), and therefore would be more likely to receive health care when needed.
Insured children	**3,127,276**	more children (ages 0–18) would be covered by health insurance (public or private), and therefore would be more likely to receive health care when needed.
Went without care because of cost	**14,688,392**	fewer adults (age 18 and older) would go without needed health care because of cost.
High out-of-pocket medical spending	**10,852,878**	fewer individuals would be burdened by high out-of-pocket spending on medical care.
Adult usual source of care	**26,928,719**	more adults (age 18 and older) would have a usual source of care to help ensure that care is coordinated and accessible when needed.
Adult cancer screening	**12,936,498**	more adults would receive age- and gender-appropriate recommended cancer screenings, including tests for colon, breast, and cervical cancers.
Adult vaccines	**31,824,850**	more adults would receive age- appropriate recommended vaccines.
Children with a medical home	**11,109,293**	more children (ages 0–17) would have a medical home to help ensure that care is coordinated and accessible when needed.
Children vaccines	**513,139**	more children (ages 19–35 months) would receive all recommended vaccines.
Children with preventive medical and dental visits	**9,628,054**	more children (ages 0–17) would receive annual preventive medical and dental care visits each year.
Medicare received a high-risk drug	**1,066,097**	fewer Medicare beneficiaries would receive an inappropriately prescribed medication.
Preventable hospital admissions among children	**59,250**	fewer children (ages 2–17) would be hospitalized for asthma exacerbations.
Hospital readmissions	**124,833**	fewer hospital readmissions would occur among Medicare beneficiaries (age 65 and older).
Potentially avoidable emergency department visits	**1,476,533**	fewer emergency department visits for nonemergent or primary care–treatable conditions would occur among Medicare beneficiaries.
Mortality amenable to health care	**90,032**	fewer premature deaths (before age 75) might occur from causes that are potentially treatable or preventable with timely and appropriate health care.
Breast cancer deaths	**10,410**	fewer women would die from breast cancer.
Colon cancer deaths	**10,842**	fewer individuals would die from colon cancer.
Suicides	**16,581**	fewer individuals would take their own lives.
Infant mortality	**7,078**	more infants would live to see their first birthday.
Adults who smoke	**19,584,523**	fewer adults would smoke, reducing their risk of lung and heart disease.
Adults who are obese	**17,753,399**	fewer adults would be obese, with body weights that increase their risk for disease and long-term complications.
Children who are overweight or obese	**3,030,294**	fewer children (ages 10–17) would be overweight or obese, thus reducing the potential for poor health as they transition into adulthood.
Adults with tooth loss	**7,890,400**	fewer adults (ages 18–64) would have lost six or more teeth to decay, infection, or gum disease.

APPENDIX B1. Summary of State Rankings in Current and Previous Scorecards

State	2017 Scorecard rankings						Overall ranking in the baseline time period[a]	2015 Scorecard overall ranking[b]
	Overall ranking	Access and Affordability dimension	Prevention and Treatment dimension	Avoidable Use and Cost dimension	Healthy Lives dimension	Equity dimension		
Alabama	47	34	42	41	45	46	39	47
Alaska	36	41	49	12	34	30	34	32
Arizona	32	45	47	7	24	21	36	33
Arkansas	48	45	40	41	48	48	49	49
California	14	24	35	14	5	10	26	23
Colorado	6	23	14	7	5	8	11	8
Connecticut	8	5	5	39	1	8	7	5
Delaware	15	5	10	28	30	21	14	15
District of Columbia	20	5	19	32	33	13	22	20
Florida	39	41	44	45	20	33	39	37
Georgia	41	41	44	23	40	40	45	46
Hawaii	3	9	14	1	5	1	3	3
Idaho	26	45	29	2	14	28	20	25
Illinois	27	18	23	41	24	25	29	26
Indiana	44	33	34	36	42	48	45	43
Iowa	6	8	5	18	14	10	6	9
Kansas	28	26	20	30	30	31	27	28
Kentucky	39	18	29	50	45	43	47	40
Louisiana	49	41	42	48	48	44	48	48
Maine	15	21	7	20	27	18	9	11
Maryland	12	9	16	28	20	13	14	18
Massachusetts	5	2	2	39	3	4	4	4
Michigan	29	13	16	41	38	33	30	31
Minnesota	2	3	7	10	1	5	1	1
Mississippi	51	49	50	51	50	51	51	51
Missouri	37	31	32	32	41	33	34	36
Montana	29	37	35	5	29	33	30	28
Nebraska	15	28	18	14	18	16	9	13
Nevada	46	48	51	19	36	44	41	43
New Hampshire	8	9	4	27	13	6	5	5
New Jersey	22	16	20	45	9	16	22	20
New Mexico	29	37	47	7	34	15	30	33
New York	12	13	23	32	11	6	20	13
North Carolina	35	31	23	22	37	37	36	37
North Dakota	20	30	13	14	20	21	16	26
Ohio	32	16	20	32	38	37	30	33
Oklahoma	49	50	38	45	45	47	50	50
Oregon	22	28	35	3	16	25	24	15
Pennsylvania	22	12	10	30	27	28	16	20
Rhode Island	4	3	3	20	11	2	7	5
South Carolina	41	36	40	23	43	48	41	40
South Dakota	15	26	10	10	30	18	16	15
Tennessee	44	37	38	36	43	40	38	43
Texas	41	51	44	36	24	37	41	40
Utah	15	40	29	3	4	18	12	18
Vermont	1	1	1	12	5	2	1	1
Virginia	25	21	23	23	20	21	24	23
Washington	10	18	23	5	9	10	16	10
West Virginia	38	24	23	48	50	32	41	39
Wisconsin	11	13	7	14	16	27	12	11
Wyoming	32	34	32	23	18	40	28	28

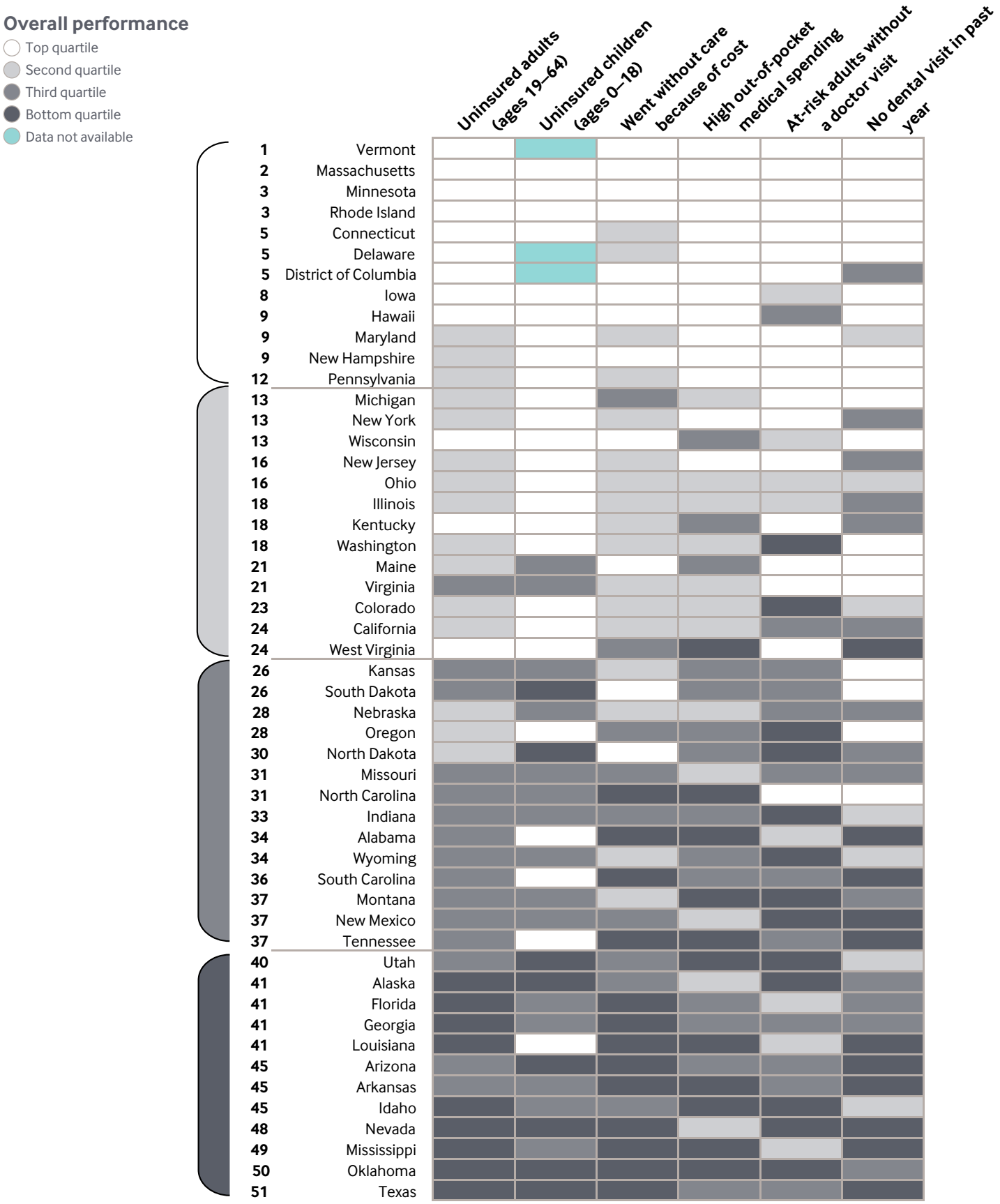
Notes: (a) The baseline period generally reflects two years prior to the time of observation for the latest year of data available. (b) The 2015 Scorecard Ranking is not based on the same set of indicators used to calculate the 2017 Scorecard and 2017 Scorecard Baseline rankings. Rather, it represents the time period evaluated in the 2015 *Scorecard,* generally encompassing the years 2013–2014.

APPENDIX B2. Summary of Indicator Rankings by State

Overall ranking	State	No. of indicators scored (of 44)	Top 5 states	Top quartile	2nd quartile	3rd quartile	Bottom quartile	Bottom 5 states	No. of indicators with trend (of 39)	No. of indicators improved	No. of indicators worsened	Net change
47	Alabama	43	2	4	4	15	20	11	38	12	5	7
36	Alaska	43	6	8	11	6	18	15	36	9	10	-1
32	Arizona	44	2	6	14	12	12	5	39	15	4	11
48	Arkansas	44	2	6	4	10	24	15	39	16	2	14
14	California	44	6	15	12	12	5	2	39	14	3	11
6	Colorado	44	7	19	18	4	3	0	39	14	3	11
8	Connecticut	44	10	24	12	3	5	1	39	11	3	8
15	Delaware	42	5	14	11	15	2	2	37	13	4	9
20	District of Columbia	42	13	17	6	7	12	8	35	17	6	11
39	Florida	44	1	3	9	19	13	9	39	12	4	8
41	Georgia	44	1	4	6	20	14	6	39	12	4	8
3	Hawaii	44	19	29	8	4	3	3	37	6	7	-1
26	Idaho	43	9	16	12	6	9	5	38	12	5	7
27	Illinois	44	2	9	12	17	6	2	39	17	1	16
44	Indiana	44	0	0	11	22	11	1	39	15	4	11
6	Iowa	44	9	15	22	6	1	0	39	14	2	12
28	Kansas	44	1	3	20	16	5	2	39	13	5	8
39	Kentucky	44	1	7	7	13	17	10	39	21	4	17
49	Louisiana	44	2	6	2	11	25	22	39	16	6	10
15	Maine	43	8	17	13	10	3	1	38	8	4	4
12	Maryland	43	5	14	14	12	3	3	38	13	2	11
5	Massachusetts	44	18	26	7	9	2	0	39	10	5	5
29	Michigan	44	2	12	8	13	11	1	39	13	1	12
2	Minnesota	44	18	33	5	3	3	1	39	11	3	8
51	Mississippi	43	3	5	1	6	31	29	38	16	4	12
37	Missouri	44	0	4	7	25	8	1	39	13	5	8
29	Montana	44	4	13	9	13	9	3	39	14	4	10
15	Nebraska	44	6	14	16	9	5	4	39	8	4	4
46	Nevada	44	0	5	8	11	20	12	39	10	5	5
8	New Hampshire	43	8	20	15	6	2	1	38	11	9	2
22	New Jersey	44	7	17	10	7	10	7	39	16	1	15
29	New Mexico	43	2	6	11	15	11	6	38	9	4	5
12	New York	44	4	12	17	9	6	3	39	17	2	15
35	North Carolina	44	1	7	13	17	7	1	39	12	1	11
20	North Dakota	44	11	15	12	10	7	2	38	15	4	11
32	Ohio	44	0	4	20	10	10	2	39	11	1	10
49	Oklahoma	44	1	3	6	10	25	13	39	19	2	17
22	Oregon	44	7	16	13	8	7	6	39	11	6	5
22	Pennsylvania	44	2	13	18	11	2	1	39	15	2	13
4	Rhode Island	42	12	24	9	7	2	0	38	14	5	9
41	South Carolina	43	0	3	10	17	13	7	38	11	4	7
15	South Dakota	44	10	19	10	10	5	4	39	15	4	11
44	Tennessee	44	0	2	10	16	16	6	39	16	2	14
41	Texas	44	1	6	9	12	17	9	39	12	3	9
15	Utah	44	14	17	11	7	9	4	39	9	3	6
1	Vermont	42	17	27	11	2	2	0	37	12	4	8
25	Virginia	44	0	5	22	14	3	2	39	14	5	9
10	Washington	44	5	19	14	7	4	0	39	15	2	13
38	West Virginia	44	3	9	5	10	20	14	39	13	3	10
11	Wisconsin	44	10	17	18	4	5	1	39	12	3	9
32	Wyoming	43	8	13	12	8	10	9	38	14	4	10

Notes: Improvement or worsening refers to a change between the baseline and current time periods of at least 0.5 standard deviations. Ambulatory care–sensitive conditions among Medicare beneficiaries are displayed here separately for two age ranges, but counted as a single indicator in tallies of improvement.

APPENDIX C1. Access & Affordability: Dimension and Indicator Ranking

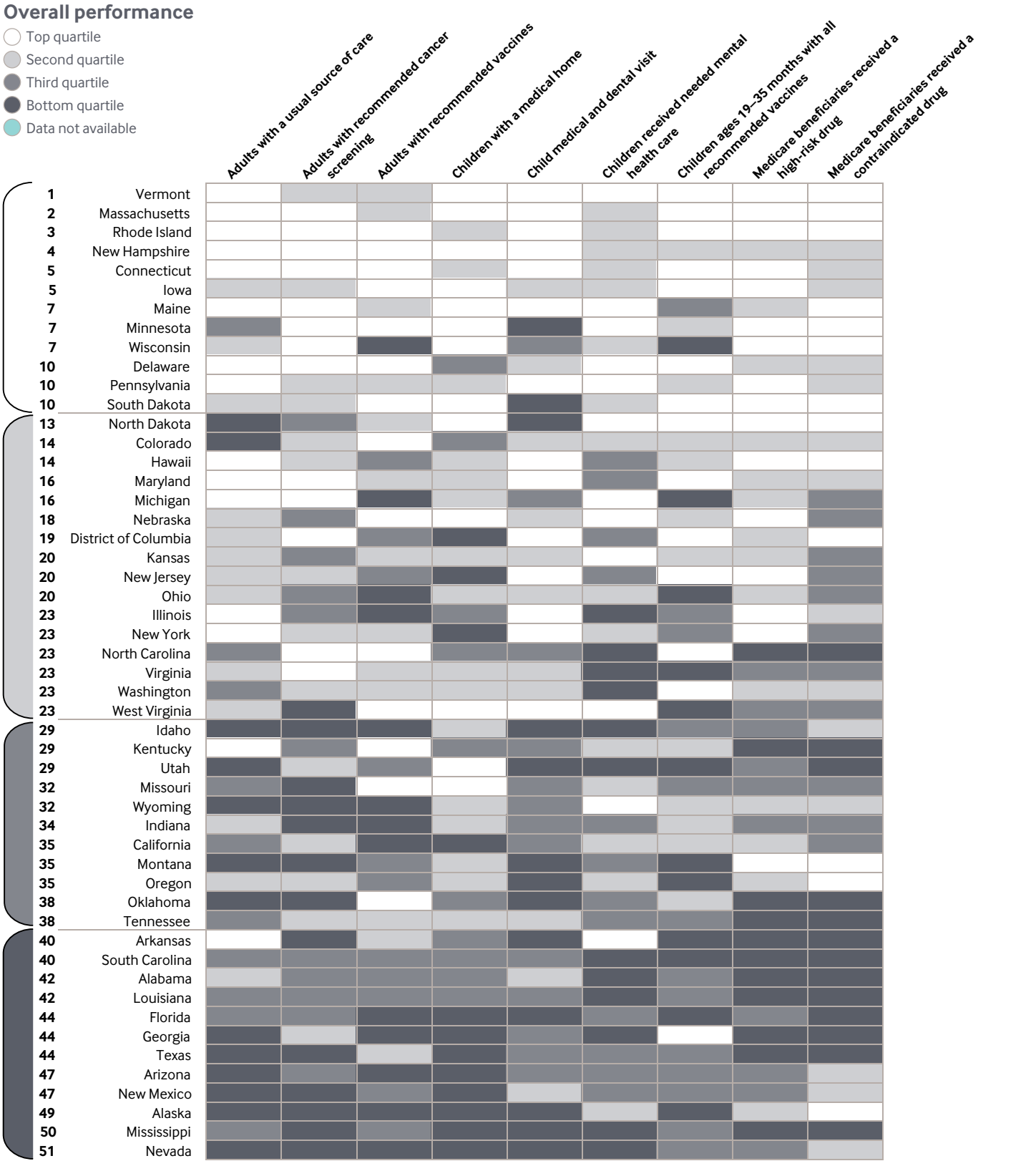


APPENDIX C2. Access & Affordability: Dimension Ranking and Indicator Rates

	Adults ages 19–64 uninsured		Children ages 0–18 uninsured		Adults who went without care because of cost in the past year		Individuals with high out-of-pocket medical spending	At-risk adults without a doctor visit		Adults without a dental visit in past year	
	2013	2015	2013	2015	2013	2015	2014-15	2013	2015	2012	2014
United States	20%	13% **	8%	5% **	16%	13% *	14%	14%	13%	15%	16%
Alabama	20	16 *	5	3 *	16	17	17	12	12	18	18
Alaska	24	19 *	12	9 **	14	14	13	23	24	14	16 *
Arizona	24	15 **	13	9 **	17	15 *	15	19	16 *	17	18
Arkansas	24	14 **	6	5	21	16 **	19	18	15 *	19	18
California	24	12 **	8	4 **	16	12 **	13	17	14 *	16	17
Colorado	19	11 **	9	4 **	15	12 *	14	18	17	16	15
Connecticut	13	8 *	4	4	12	11	11	10	10	11	12
Delaware	14	8 **	5	—	12	11	10	9	9	12	14 *
District of Columbia	8	5 *	—	—	11	9 *	10	9	6 *	16	16
Florida	29	20 **	12	7 **	21	17 **	15	14	12 *	18	17
Georgia	26	19 **	10	7 **	20	16 **	15	14	14	16	17
Hawaii	10	6 *	3	2	9	8	12	14	15	15	14
Idaho	23	17 **	9	6 **	16	14 *	18	21	20	13	15 *
Illinois	18	10 **	5	3 *	14	11 *	14	14	12 *	15	16
Indiana	19	13 **	9	7 *	16	14 *	15	17	17	15	15
Iowa	12	7 *	5	4	10	7 *	12	14	12 *	12	13
Kansas	18	13 *	7	5 *	14	11 *	16	14	15	13	13
Kentucky	21	8 **	6	4 *	19	12 **	15	15	11 **	16	16
Louisiana	25	18 **	6	4 *	20	16 **	18	10	13 *	20	20
Maine	16	12 *	5	6	10	9	16	12	11	13	13
Maryland	14	9 *	5	4	13	11 *	10	10	8 *	13	15 *
Massachusetts	5	4	2	1	9	9	11	7	7	11	12
Michigan	16	9 **	5	3 *	15	13 *	13	13	11 *	14	14
Minnesota	11	6 *	6	3 **	10	8 *	10	12	11	11	13 *
Mississippi	25	19 **	8	5 **	22	19 *	18	15	12 *	19	20
Missouri	18	13 *	7	6	16	14 *	13	16	15	15	16
Montana	23	16 **	11	7 **	14	11 *	18	19	18	17	16
Nebraska	15	11 *	6	5	13	12	13	18	16 *	15	16
Nevada	27	17 **	14	8 **	17	15 *	14	15	17 *	20	19
New Hampshire	16	10 **	4	4	12	9 *	12	11	10	10	12 *
New Jersey	19	12 **	6	4 *	15	12 *	12	10	8 *	15	16
New Mexico	28	16 **	9	5 **	18	14 **	14	17	18	18	18
New York	15	10 *	4	3	15	12 *	11	10	11	15	16
North Carolina	23	16 **	6	5	18	15 *	17	12	11	15	14
North Dakota	14	9 *	8	9	7	8	15	17	17	15	16
Ohio	16	9 **	5	4	15	11 **	14	13	12	14	15
Oklahoma	25	20 *	11	8 **	17	15 *	18	21	17 **	18	17
Oregon	21	10 **	7	4 **	18	13 **	16	20	18 *	15	14
Pennsylvania	14	9 *	5	4	12	12	12	12	11	13	14
Rhode Island	17	7 **	6	3 **	14	10 **	11	10	6 **	12	12
South Carolina	23	16 **	7	4 **	19	16 *	16	16	15	18	18
South Dakota	17	16	7	8	10	8 *	16	14	14	11	11
Tennessee	20	15 *	6	4 *	18	16 *	18	11	14 *	17	18
Texas	30	23 **	13	10 **	19	18	15	15	16	18	20 *
Utah	18	14 *	9	8	15	13 *	17	19	19	16	15
Vermont	10	6 *	—	—	9	8	10	11	11	11	11
Virginia	17	13 *	6	5	15	12 *	14	12	11	12	14 *
Washington	20	9 **	7	3 **	15	11 **	14	17	17	14	14
West Virginia	20	8 **	5	3 *	18	14 **	17	12	10 *	18	20 *
Wisconsin	13	8 *	5	4	12	9 *	15	13	13	12	12
Wyoming	18	14 *	7	7	14	12 *	16	21	21	15	15
Change		49		28		39			20		9
States Improved		49		28		39			17		0
States Worsened		0		0		0			3		9

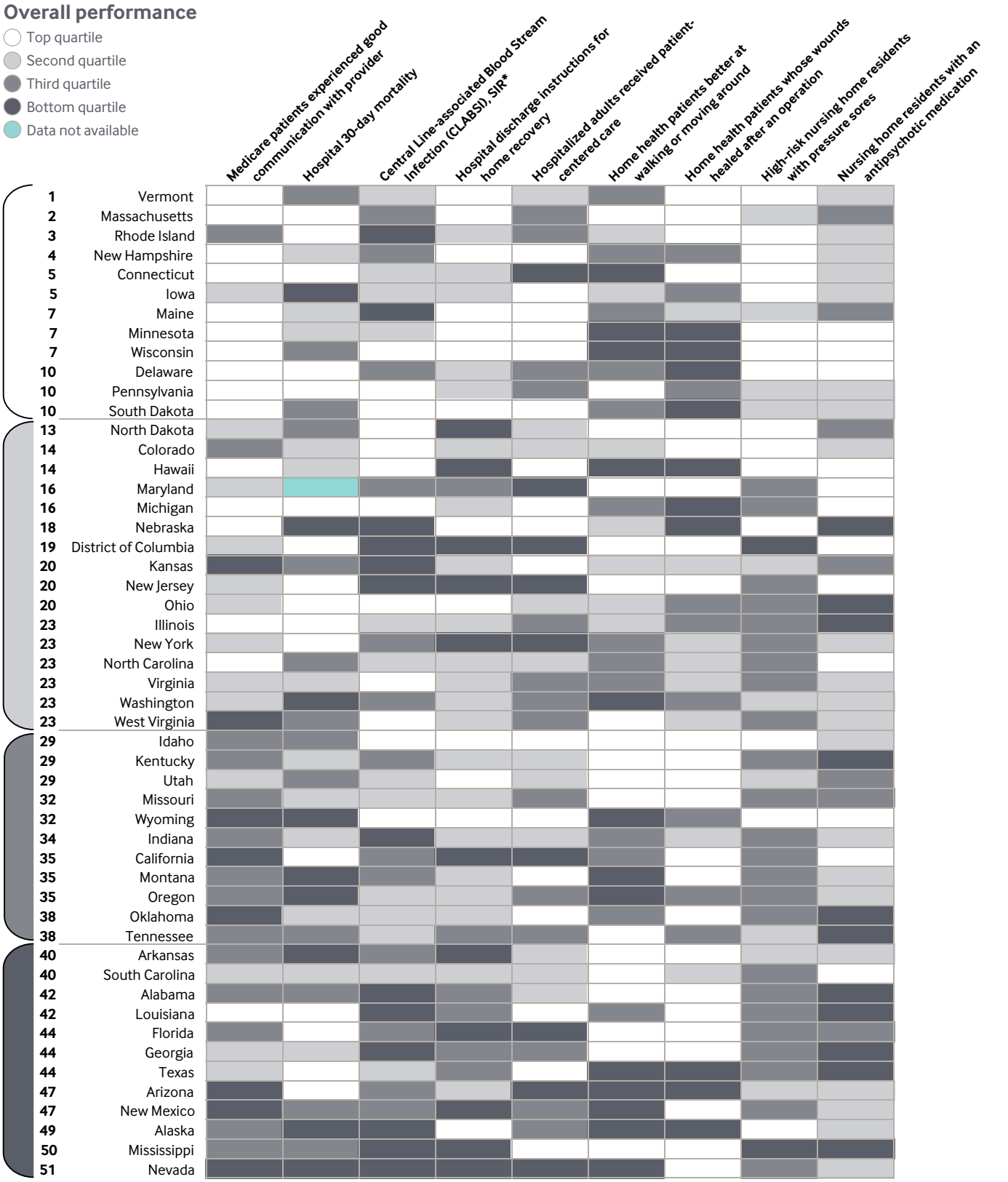
Notes: * Denotes a change of at least 0.5 standard deviations. ** Denotes a change of 1.0 standard deviation or more. — Indicates that estimates are not available.

APPENDIX D1. Prevention & Treatment: Dimension and Indicator Ranking



Notes: * SIR = Standardized Infection Ratio.

APPENDIX D1. Prevention & Treatment: Dimension and Indicator Ranking (continued)



Notes: (*) SIR is Standardized Infection Ratio

APPENDIX D2. Prevention & Treatment: Dimension Ranking and Indicator Rates

	Adults with a usual source of care		Adults with age- and gender-appropriate cancer screenings		Adults with age-appropriate vaccines		Children with a medical home	Children with a medical and dental preventive care visit in the past year	Children who received needed mental health care in the past year	Children ages 19–35 months with all recommended vaccines	
	2013	2015	2012	2014	2013	2015	2011/12	2011/12	2011/12	2013	2015
United States	**76%**	**78%**	**69%**	**68%**	**36%**	**38%**	**54%**	**68%**	**61%**	**70%**	**72%**
Alabama	78	79	68	67	38	38	54	70	54	77	71 **
Alaska	67	65	63	62	33	34	52	59	63	64	66
Arizona	68	72 *	63	66 *	31	32	46	65	60	65	72 **
Arkansas	77	83 **	61	63 *	37	40 *	55	62	67	57	67 **
California	71	77 **	73	70 *	34	35	45	65	63	69	75 **
Colorado	76	76	69	68	42	43	55	70	65	69	75 **
Connecticut	85	85	75	75	37	43 **	58	79	65	78	81 *
Delaware	86	85	75	72 *	43	43	56	72	67	72	79 **
District of Columbia	76	80 *	75	73 *	36	39 *	50	77	59	77	76
Florida	73	78 *	68	67	28	29	50	60	58	70	67 *
Georgia	72	72	72	70 *	32	34	52	65	53	70	76 **
Hawaii	85	85	70	70	43	38 **	57	73	58	67	74 **
Idaho	72	73	61	60	32	33	57	59	56	70	72
Illinois	80	83 *	67	66	34	35	56	74	55	67	71 *
Indiana	80	81	63	62	33	36 *	58	69	58	69	75 **
Iowa	81	81	71	70	44	47 *	67	70	66	78	78
Kansas	78	80	68	66 *	40	41	59	70	72	69	75 **
Kentucky	78	83 *	65	67 *	38	43 **	56	68	66	73	73
Louisiana	74	77 *	67	67	39	37	56	67	40	69	71
Maine	87	88	73	73	41	41	63	73	78	68	72 *
Maryland	79	85 **	75	73 *	42	41	57	73	59	76	77
Massachusetts	88	89	79	77 *	47	42 **	63	79	65	79	79
Michigan	83	85	71	71	33	34	59	68	68	70	68
Minnesota	73	77 *	73	72	44	45	61	60	72	74	73
Mississippi	77	78	63	64	35	38 *	49	60	53	75	71 *
Missouri	79	78	66	64 *	40	43 *	62	65	63	68	71 *
Montana	70	74 *	60	63 *	37	39	58	61	60	65	68 *
Nebraska	79	80	66	67	43	45	61	70	71	79	74 **
Nevada	65	67	63	63	29	31	45	56	49	61	71 **
New Hampshire	88	88	75	72 *	39	44 **	67	79	66	75	74
New Jersey	81	82	69	69	34	37 *	53	76	58	73	77 *
New Mexico	69	71	63	63	36	38	48	70	58	66	70 *
New York	81	83	72	70 *	35	40 **	53	73	64	72	72
North Carolina	73	78 *	71	72	44	45	55	67	54	72	76 *
North Dakota	73	73	64	66 *	39	42 *	62	61	86	72	80 **
Ohio	81	82	67	66	38	36	57	71	66	62	68 **
Oklahoma	74	75	61	60	41	44 *	56	62	61	63	75 **
Oregon	74	79 *	67	68	33	38 **	57	63	66	67	67
Pennsylvania	86	87	69	68	37	41 *	59	73	69	76	73 *
Rhode Island	84	88 *	76	75	42	46 *	60	76	66	82	77 **
South Carolina	76	78	68	67	37	37	54	64	50	67	68
South Dakota	76	79 *	68	69	47	51 *	62	59	64	74	76
Tennessee	77	78	67	68	42	40	60	70	60	69	70
Texas	67	67	66	64 *	34	41 **	52	68	59	73	71
Utah	72	74	68	68	35	38 *	64	61	49	75	68 **
Vermont	87	88	73	70 *	42	42	69	81	78	67	76 **
Virginia	76	79 *	72	71	41	42	57	70	53	69	64 **
Washington	72	77 *	69	69	39	42 *	59	72	54	71	77 **
West Virginia	77	79	66	65	42	44	61	74	74	66	65
Wisconsin	81	81	71	73 *	35	36	66	68	65	73	69 *
Wyoming	69	69	61	60	32	34	59	65	67	70	73 *
Change		**17**		**18**		**22**					**33**
States Improved		17		6		20					24
States Worsened		0		12		2					9

Notes: * Denotes a change of at least 0.5 standard deviations. ** Denotes a change of 1.0 standard deviation or more. — Indicates that estimates are not available.

APPENDIX D2. Prevention & Treatment: Dimension Ranking and Indicator Rates (continued)

	Medicare beneficiaries received a high-risk drug		Medicare beneficiaries received a contraindicated drug		Medicare patients experienced good communication with provider		Hospital 30-day mortality		Central line-associated bloodstream infections (CLABSI), Standardized Infection Ratio		Hospital discharge instructions for home recovery	
	2012	2014	2012	2014	2013	2014	07/2010 - 06/2013	07/2012 - 06/2015	2013	2014	2013	2015
United States	**17%**	**13% ****	**21%**	**18% ***	**76%**	**76%**	**13.2%**	**14.5% ****	**0.54**	**0.50**	**86%**	**87% ***
Alabama	24	18 **	28	23 **	74	74	13.7	15.0 **	0.67	0.71	85	86 *
Alaska	17	12 **	17	12 **	76	75 *	13.7	15.4 **	0.28	0.65 **	88	89 *
Arizona	17	13 **	18	15 *	74	71 **	13.1	14.2 **	0.64	0.53 *	86	87 *
Arkansas	17	16	23	21 *	72	74 **	14.1	15.5 **	0.55	0.56	83	84 *
California	16	11 **	21	18 *	74	73 *	13.0	14.0 **	0.52	0.51	84	85 *
Colorado	16	12 **	18	16 *	76	75 *	12.9	14.5 **	0.49	0.41 *	88	88
Connecticut	13	10 *	15	14	77	77	13.0	13.9 **	0.56	0.45 *	85	87 *
Delaware	16	11 **	17	16	79	77 **	12.2	13.1 **	0.71	0.55 **	85	87 *
District of Columbia	13	12	20	13 **	79	76 **	12.4	13.6 **	0.70	0.60 *	78	81 **
Florida	16	14 *	21	19 *	76	75 *	13.1	14.2 **	0.59	0.51 *	83	85 *
Georgia	21	16 **	21	19 *	76	76	13.4	14.7 **	0.72	0.64 *	84	86 *
Hawaii	21	9 **	18	13 **	77	77	13.4	14.7 **	0.25	0.23	85	83 *
Idaho	16	13 *	22	16 **	74	74	13.6	15.0 **	0.29	0.35 *	88	90 *
Illinois	13	10 *	18	16 *	77	78 *	12.9	14.1 **	0.47	0.43	86	87 *
Indiana	17	13 **	21	18 *	76	75 *	13.4	14.6 **	0.69	0.61 *	87	88 *
Iowa	12	9 *	17	14 *	75	76 *	13.4	15.1 **	0.54	0.46 *	88	88
Kansas	15	12 *	20	17 *	75	73 **	13.0	14.9 **	0.58	0.61	86	88 *
Kentucky	23	17 **	24	20 **	77	75 **	13.3	14.7 **	0.67	0.55 *	86	87 *
Louisiana	24	21 *	23	21 *	80	78 **	13.3	14.2 **	0.69	0.60 *	86	86
Maine	12	12	13	12	77	78 *	13.4	14.4 **	0.66	0.87 **	89	89
Maryland	15	12 *	18	16 *	76	76	12.8	—	0.51	0.53	85	86 *
Massachusetts	9	9	15	13 *	77	79 **	12.4	13.2 **	0.51	0.50	87	89 *
Michigan	14	12 *	19	17 *	75	77 **	13.0	14.2 **	0.44	0.40	87	88 *
Minnesota	10	7 *	15	13 *	78	80 **	12.8	14.3 **	0.44	0.45	88	89 *
Mississippi	22	19 *	26	23 *	78	75 **	13.4	14.9 **	0.77	0.76	83	85 *
Missouri	16	14 *	21	18 *	77	74 **	13.2	14.5 **	0.42	0.48 *	87	88 *
Montana	13	10 *	17	13 **	77	74 **	13.2	15.2 **	0.63	0.56 *	85	87 *
Nebraska	13	10 *	21	18 *	79	77 **	13.3	15.3 **	0.71	0.72	88	89 *
Nevada	17	13 **	18	15 *	73	73	13.8	15.2 **	0.63	0.58	84	84
New Hampshire	13	11 *	19	14 **	78	77 *	13.3	14.4 **	0.35	0.55 **	88	90 *
New Jersey	15	10 **	18	17	76	76	12.7	13.7 **	0.61	0.59	82	84 *
New Mexico	18	13 **	21	16 **	73	72 *	13.3	14.8 **	0.49	0.55 *	84	84
New York	12	9 *	17	17	75	76 *	13.1	14.2 **	0.56	0.50 *	84	85 *
North Carolina	20	15 **	21	19 *	76	77 *	13.7	14.9 **	0.53	0.42 *	87	87
North Dakota	11	8 *	14	11 *	73	76 **	12.7	14.9 **	0.37	0.39	82	82
Ohio	17	12 **	20	17 *	76	76	12.9	14.0 **	0.42	0.40	87	89 *
Oklahoma	22	18 **	26	21 **	76	73 **	13.2	14.7 **	0.39	0.43	85	87 *
Oregon	16	11 **	17	13 **	74	74	13.9	15.3 **	0.30	0.48 **	86	88 *
Pennsylvania	13	10 *	18	15 *	78	78	12.9	14.1 **	0.49	0.41 *	86	87 *
Rhode Island	11	9 *	13	13	77	75 **	13.2	13.7 *	0.67	0.61 *	86	87 *
South Carolina	20	17 *	22	21	77	76 *	13.5	14.6 **	0.58	0.49 *	86	87 *
South Dakota	10	8 *	15	12 *	77	77	13.1	15.0 **	0.19	0.25 *	87	89 *
Tennessee	21	16 **	24	21 *	75	75	13.5	15.0 **	0.49	0.48	85	86 *
Texas	19	16 *	22	19 *	75	76 *	13.0	14.2 **	0.51	0.47	86	86
Utah	18	13 **	23	20 *	75	76 *	13.5	14.8 **	0.66	0.45 **	90	90
Vermont	11	9 *	14	10 **	75	80 **	13.8	14.9 **	0.25	0.45 **	88	90 *
Virginia	17	13 **	20	17 *	75	76 *	13.5	14.5 **	0.50	0.39 *	86	88 *
Washington	16	12 **	17	14 *	74	76 **	13.9	15.2 **	0.54	0.51	87	88 *
West Virginia	17	14 *	20	18 *	73	73	13.2	14.8 **	0.35	0.38	85	87 *
Wisconsin	11	9 *	15	13 *	78	79 *	13.5	14.9 **	0.48	0.35 **	89	90 *
Wyoming	13	12	22	14 **	74	72 **	13.0	15.7 **	0.53	0.37 **	88	89 *
Change		**46**		**44**		**37**		**50**		**30**		**41**
States Improved		46		44		16		0		21		40
States Worsened		0		0		21		50		9		1

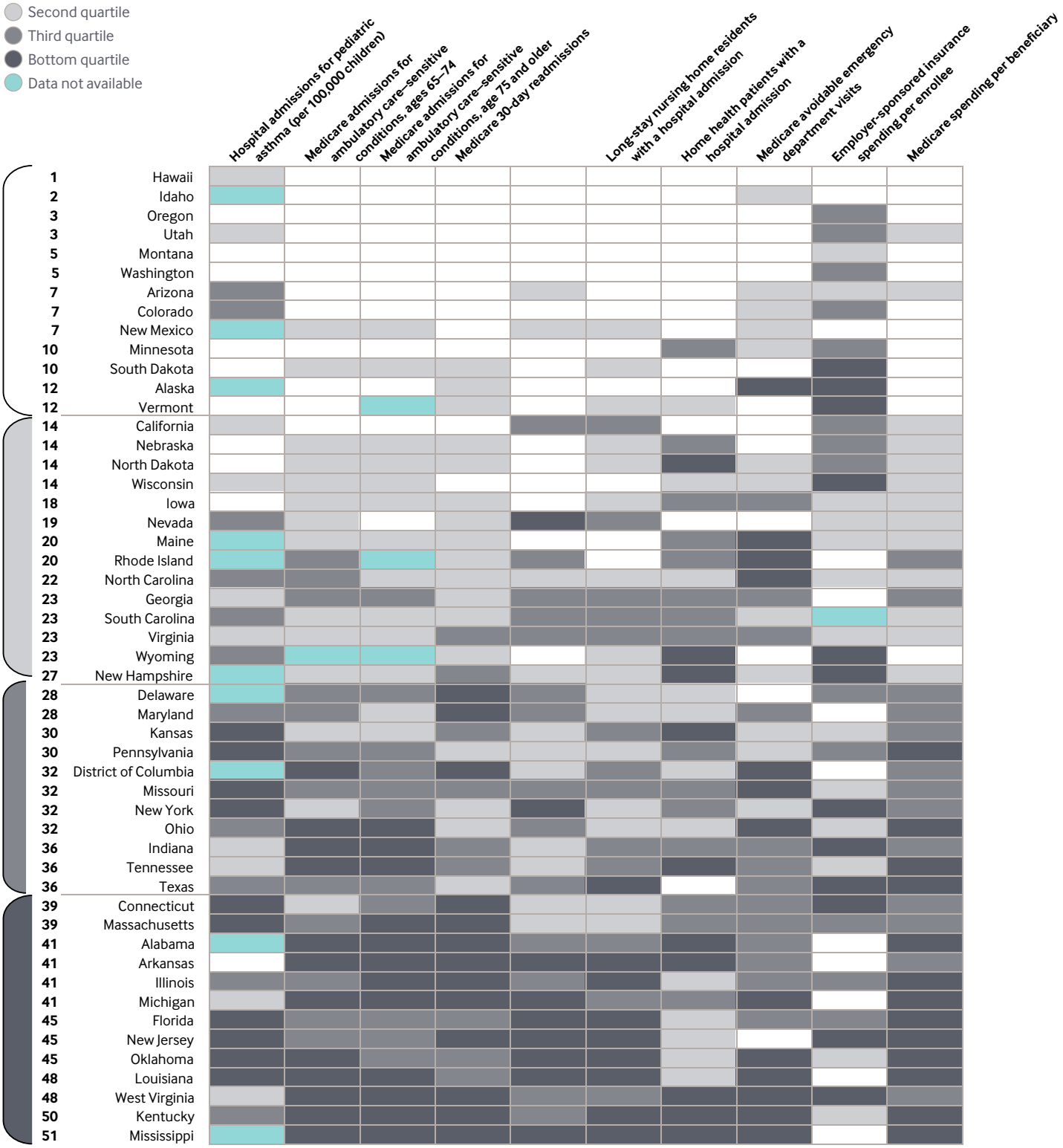
Notes: * Denotes a change of at least 0.5 standard deviations. ** Denotes a change of 1.0 standard deviation or more. — Indicates that estimates are not available.

APPENDIX D2. Prevention & Treatment: Dimension Ranking and Indicator Rates (continued)

	Hospitalized adults received patient-centered care		Home health patients who get better at walking or moving around		Home health patients whose wounds healed after an operation		High-risk nursing home residents with pressure sores		Nursing home residents with an antipsychotic medication	
	2013	2015	2013	2015	2013	2015	2013 (Q2-Q4)	2015 (Q2-Q4)	2013 (Q2-Q4)	2015 (Q2-Q4)
United States	**68%**	**68%**	**61%**	**66% ****	**89%**	**90%**	**6%**	**6%**	**21%**	**17% ****
Alabama	69	69	65	72 **	91	91	5	6 *	22	20 *
Alaska	70	67 **	49	54 **	80	77 **	6	3 **	13	15 *
Arizona	66	66	58	62 *	86	86	6	5 *	20	17 *
Arkansas	68	69	61	70 **	90	91	6	5 *	24	17 **
California	64	64	59	65 **	91	92	6	6	17	13 **
Colorado	70	69	62	67 **	90	91	5	4 *	17	16
Connecticut	65	65	59	63 *	90	91	4	4	21	17 **
Delaware	67	67	58	66 **	82	84 *	6	4 **	17	13 **
District of Columbia	58	58	60	70 **	90	94 **	9	9	16	14 *
Florida	63	64	65	69 *	92	92	6	6	22	18 **
Georgia	66	67	61	68 **	90	91	7	7	22	20 *
Hawaii	69	70	55	61 **	83	83	3	4 *	11	8 *
Idaho	70	74 **	63	68 **	91	91	4	3 *	20	16 **
Illinois	67	68	61	67 **	88	89	7	6 *	25	21 **
Indiana	69	69	59	66 **	89	90	7	6 *	21	17 **
Iowa	69	71 *	62	67 **	88	88	5	4 *	20	17 *
Kansas	70	70	61	67 **	88	90 *	5	5	22	19 *
Kentucky	69	69	64	70 **	91	91	7	7	22	20 *
Louisiana	72	73	60	66 **	92	91	9	7 **	27	22 **
Maine	72	71	62	66 *	88	90 *	5	5	21	18 *
Maryland	61	62	63	68 **	89	91 *	7	7	16	14 *
Massachusetts	67	67	63	68 **	92	93	5	5	22	19 *
Michigan	68	70 *	61	66 **	87	87	6	6	15	13 *
Minnesota	71	71	57	62 **	85	85	4	4	16	13 *
Mississippi	70	70	64	71 **	92	94 *	8	8	25	21 **
Missouri	67	67	62	68 **	90	91	6	6	24	19 **
Montana	67	70 **	56	63 **	92	92	5	6 *	18	15 *
Nebraska	72	72	59	67 **	83	82	4	4	23	20 *
Nevada	64	62 *	60	64 *	91	91	7	7	21	17 **
New Hampshire	69	70	59	65 **	87	88	4	3 *	21	17 **
New Jersey	63	63	63	69 **	90	91	8	7 *	16	13 *
New Mexico	66	67	59	64 **	93	92	6	6	19	16 *
New York	63	63	59	66 **	89	90	8	7 *	19	16 *
North Carolina	69	69	61	66 **	90	90	7	7	16	14 *
North Dakota	70	69	56	69 **	87	91 **	4	4	19	19
Ohio	68	69	61	67 **	88	88	6	6	23	20 *
Oklahoma	70	70	60	66 **	91	92	8	7 *	23	20 *
Oregon	68	68	56	61 **	89	89	6	7 *	18	17
Pennsylvania	67	67	63	68 **	87	89 *	6	5 *	19	17 *
Rhode Island	67	68	63	67 *	93	95 *	5	4 *	18	17
South Carolina	69	69	64	68 *	92	90 *	6	7 *	17	14 *
South Dakota	72	74 *	58	66 **	88	83 **	5	5	19	17 *
Tennessee	68	68	63	68 **	90	89	5	5	24	20 **
Texas	69	70	56	60 *	88	87	7	6 *	27	21 **
Utah	70	69	66	71 **	92	91	5	5	25	18 **
Vermont	69	69	60	66 **	88	91 **	4	4	20	17 *
Virginia	66	67	63	66 *	90	90	6	6	20	17 *
Washington	66	67	56	62 **	88	88	6	5 *	19	16 *
West Virginia	67	67	63	70 **	91	90	7	7	18	16 *
Wisconsin	71	71	59	64 **	87	87	4	4	16	13 *
Wyoming	69	71 *	58	61 *	88	88	5	4 *	18	13 **
Change		**8**		**51**		**13**		**24**		**47**
States Improved		6		51		10		19		46
States Worsened		2		0		3		5		1

Notes: * Denotes a change of at least 0.5 standard deviations. ** Denotes a change of 1.0 standard deviation or more. — Indicates that estimates are not available.

APPENDIX E1 . Avoidable Hospital Use & Cost: Dimension and Indicator Ranking



APPENDIX E2. Avoidable Hospital Use & Cost: Dimension Ranking and Indicator Rates

	Hospital admissions for pediatric asthma, per 100,000 children		Medicare admissions for ambulatory care–sensitive conditions, ages 65–74		Medicare admissions for ambulatory care–sensitive conditions, age 75 and older		Medicare 30-day hospital readmissions, per 1,000 beneficiaries		Short-stay nursing home residents with a 30-day readmission to the hospital	
	2011	2013	2012	2014	2012	2014	2012	2014	2012	2014
United States	**107**	**107**	**29**	**27**	**70**	**66**	**34**	**27 ***	**20%**	**19%**
Alabama	—	—	38	35	82	75 *	39	33 *	22	20 *
Alaska	46	—	—	16	52	48	29	23 *	—	11
Arizona	106	91	20	17	51	47	23	19	20	19
Arkansas	64	54	35	32	83	77	42	35 *	25	23 *
California	87	88	21	18	55	50	24	19 *	22	20 *
Colorado	143	117 *	16	15	50	46	19	16	16	14 *
Connecticut	144	126	26	24	75	69	39	33 *	20	19
Delaware	—	—	27	29	68	69	40	38	20	20
District of Columbia	—	—	37	35	—	67	55	43 **	—	19
Florida	145	157	28	29	68	72	34	30	22	22
Georgia	88	87	31	29	73	70	33	27 *	21	20
Hawaii	52	66	13	12	41	35	12	10	—	12
Idaho	—	—	17	15	45	42	17	15	14	14
Illinois	117	110	31	28	73	73	51	38 **	23	20 *
Indiana	105	78 *	35	32	77	73	40	32 *	20	18 *
Iowa	69	56	24	22	64	59	33	28 *	17	16
Kansas	144	128	27	26	71	65	37	32 *	19	18
Kentucky	167	117 **	51	46 *	100	92 *	50	37 **	22	20 *
Louisiana	232	145 **	44	41	97	90 *	40	32 *	26	25
Maine	72	—	26	25	65	60	31	27	17	16
Maryland	132	123	29	29	69	65	49	40 **	22	20 *
Massachusetts	182	126 **	30	28	80	77	41	35 *	19	19
Michigan	97	88	34	34	73	74	42	36 *	23	21 *
Minnesota	70	57	20	19	55	53	18	14	17	16
Mississippi	—	—	42	40	91	91	48	41 *	24	22 *
Missouri	150	127 *	31	30	73	69	37	32 *	22	20 *
Montana	65	53	21	18	—	51	25	21	13	13
Nebraska	58	43	24	23	63	58	33	28 *	16	15
Nevada	98	107	25	22	60	55	26	23	23	22
New Hampshire	—	—	23	22	64	65	34	31	16	17
New Jersey	149	151	27	27	73	69	47	40 *	24	22 *
New Mexico	—	—	23	21	59	56	22	19	18	18
New York	221	226	29	25 *	73	66 *	36	28 *	23	21 *
North Carolina	109	112	29	28	67	64	35	27 *	20	18 *
North Dakota	—	48	24	22	65	61	35	28 *	16	14 *
Ohio	143	125	38	36	82	75 *	34	27 *	21	20
Oklahoma	139	136	38	34 *	80	72 *	40	32 *	23	21 *
Oregon	40	39	17	17	48	45	15	14	17	16
Pennsylvania	187	166 *	31	28	74	69	31	26 *	21	19 *
Rhode Island	139	—	27	28	66	—	28	26	21	20
South Carolina	138	124	27	26	65	61	33	28 *	20	20
South Dakota	72	46 *	22	21	—	60	31	25 *	15	14
Tennessee	98	69 *	37	34	84	77 *	37	29 *	21	19 *
Texas	104	90	31	30	76	72	34	27 *	22	20 *
Utah	80	68	17	15	42	39	17	15	14	14
Vermont	33	27	—	20	65	—	31	26 *	16	15
Virginia	107	87 *	27	24	71	62 *	40	32 *	21	20
Washington	77	62	18	17	49	46	23	20	17	16
West Virginia	110	86 *	50	42 **	98	81 **	46	35 **	23	20 *
Wisconsin	78	73	22	21	60	57	26	21 *	17	16
Wyoming	92	99	—	—	—	—	32	28	15	14
Change		**11**		**4**		**9**		**34**		**20**
States Improved		11		4		9		34		20
States Worsened		0		0		0		0		0

Notes: * Denotes a change of at least 0.5 standard deviations. ** Denotes a change of 1.0 standard deviation or more. Spending estimates exclude prescription drug costs and are adjusted for regional wage differences; Medicare estimates reflect only the age 65+ fee-for-service Medicare population. — Indicates that estimates are not available.

APPENDIX E2. Avoidable Hospital Use & Cost: Dimension Ranking and Indicator Rates (continued)

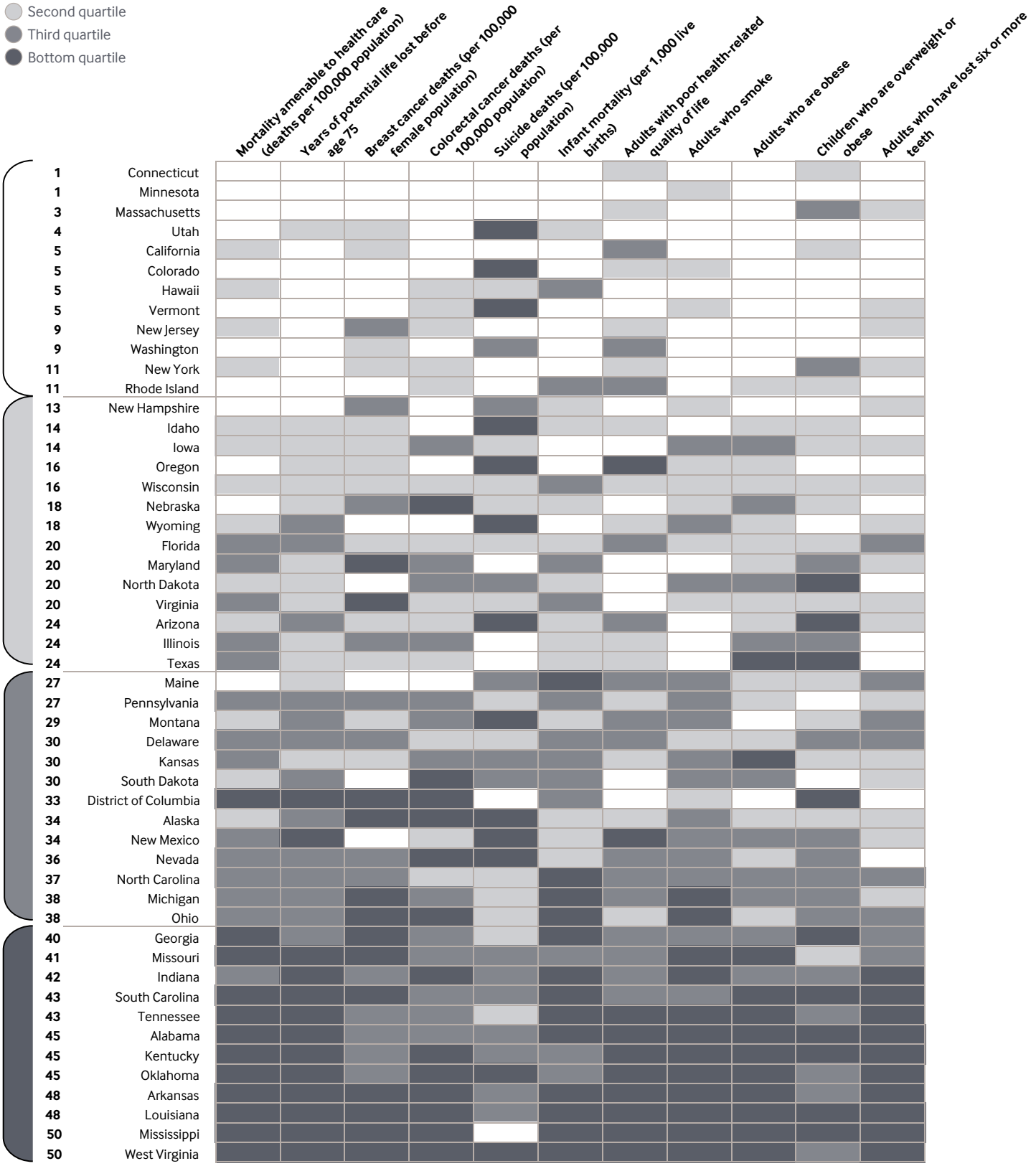
	Long-stay nursing home residents with a hospital admission		Home health patients with a hospital admission		Potentially avoidable ED visits among Medicare beneficiaries, per 1,000 beneficiaries		Total reimbursements per enrollee (ages 18–64) with employer-sponsored insurance		Total Medicare (Parts A & B) reimbursements per enrollee	
	2012	2014	2013	2015	2012	2014	2013	2014	2012	2014
United States	**17%**	**16%**	**16**	**16**	**188**	**185**	**$4,489**	**$4,569**	**$8,854**	**$8,819**
Alabama	21	19	17	18 *	192	187	3,634	3,677	9,344	9,228
Alaska	—	11	14	14	205	204	7,733	7,982	5,399	6,110 *
Arizona	9	8	15	15	178	173	4,267	4,226	7,998	7,912
Arkansas	26	24	17	17	185	189	3,030	3,217	8,619	8,652
California	20	19	15	15	167	163	4,752	4,616	8,310	8,346
Colorado	10	9	14	15 **	173	171	4,457	4,689	7,460	7,415
Connecticut	16	14	16	17 *	189	193	5,209	5,246	8,936	9,014
Delaware	19	16 *	16	16	159	166	4,439	4,388	8,514	8,753
District of Columbia	—	19	18	16 **	248	265 *	3,576	3,630	8,887	8,633
Florida	23	22	15	16 *	179	185	4,459	4,523	10,597	10,434
Georgia	19	17	16	17 *	201	192	4,761	3,310 **	8,743	8,665
Hawaii	—	5	14	14	131	129	3,031	3,513 *	5,408	5,592
Idaho	11	12	14	14	162	170	3,702	3,734	7,198	7,365
Illinois	22	20	16	16	192	188	4,489	4,649	9,219	9,118
Indiana	19	17	16	17 *	200	195	4,826	4,946	9,045	8,991
Iowa	15	15	16	17 **	184	185	3,817	4,035	7,496	7,638
Kansas	20	19	17	18 *	173	175	3,965	4,052	8,586	8,697
Kentucky	24	21 *	18	18 *	219	223	4,015	4,326	9,167	9,075
Louisiana	30	27 *	16	16	236	228	3,852	3,874	10,868	10,616
Maine	12	12	16	17 **	233	219 *	4,261	4,333	7,606	7,769
Maryland	17	16	17	16 **	193	187	3,603	3,638	8,472	8,772
Massachusetts	14	13	16	17 **	209	195 *	4,439	4,522	9,041	8,892
Michigan	18	17	16	16	214	213	3,852	3,837	9,565	9,551
Minnesota	7	7	16	17 *	181	175	4,450	4,609	7,225	7,497
Mississippi	29	28	17	17	231	226	3,795	3,413 *	10,046	9,885
Missouri	20	19	16	16	197	199	4,002	3,933	8,698	8,735
Montana	12	12	15	16 *	158	162	4,291	4,333	6,585	6,672
Nebraska	16	16	16	17 **	153	150	4,379	4,517	8,062	8,172
Nevada	20	19	15	16 *	165	159	4,048	4,017	8,328	8,404
New Hampshire	14	14	17	17	192	180 *	5,121	5,189	7,618	7,686
New Jersey	21	20	16	16	170	164	4,750	4,822	9,556	9,560
New Mexico	13	15	15	15	170	178	3,996	3,920	6,791	6,938
New York	17	14 *	17	17	173	168	5,057	5,019	8,977	8,959
North Carolina	18	16	16	16	197	205	4,346	4,201	8,158	8,271
North Dakota	15	14	15	17 **	187	172 *	4,126	4,438	7,529	7,724
Ohio	15	13	16	16	219	218	4,235	4,333	9,492	9,326
Oklahoma	24	23	16	16	211	216	4,159	4,230	9,182	9,229
Oregon	8	9	14	15 **	162	158	4,469	4,743	6,300	6,510
Pennsylvania	16	14	17	17	187	180	4,303	4,520	9,391	9,202
Rhode Island	10	9	15	16 **	188	200 *	3,869	3,929	8,557	8,620
South Carolina	20	19	16	16	176	174	—	—	8,529	8,457
South Dakota	15	16	17	16 **	168	149 *	4,741	4,918	7,204	7,418
Tennessee	22	19 *	17	17	200	193	4,039	3,969	9,197	9,019
Texas	23	21	15	15	186	188	4,917	5,014	10,135	10,142
Utah	11	11	14	14	147	145	4,252	4,343	8,011	7,980
Vermont	15	14	16	16	187	166 *	4,897	4,821	6,816	6,898
Virginia	20	18	17	17	193	183	4,085	4,142	8,000	7,925
Washington	13	11	15	15	157	162	4,524	4,357	7,106	7,125
West Virginia	19	17	18	18	226	230	5,273	5,073	8,637	8,521
Wisconsin	12	12	16	16	182	182	5,678	5,785	7,615	7,640
Wyoming	13	16 *	17	17	169	165	5,724	5,746	6,818	6,866
Change		**6**		**21**		**8**		**3**		**1**
States Improved		5		4		6		2		0
States Worsened		1		17		2		1		1

Notes: * Denotes a change of at least 0.5 standard deviations. ** Denotes a change of 1.0 standard deviation or more. Spending estimates exclude prescription drug costs and are adjusted for regional wage differences; Medicare estimates reflect only the age 65+ fee-for-service Medicare population. — Indicates that estimates are not available.

APPENDIX F1. Healthy Lives: Dimension and Indicator Ranking

Overall performance

- Top quartile
- Second quartile
- Third quartile
- Bottom quartile



APPENDIX F2. Healthy Lives: Dimension Ranking and Indicator Rates

	Mortality amenable to health care		Years of potential life lost before age 75		Breast cancer deaths per 100,000 female population		Colorectal cancer deaths per 100,000 population		Suicide deaths per 100,000 population	
	2011-12	2013-14	2012	2014	2012	2014	2012	2014	2012	2014
United States	**84.0**	**84.2**	**6,412**	**6,447**	**21.4**	**20.6**	**14.9**	**14.3**	**12.6**	**13.0**
Alabama	109.7	110.7	9,324	9,361	22.9	20.9 *	16.7	15.5 *	14.7	14.5
Alaska	72.0	72.4	7,194	7,408	17.6	23.8 **	15.6	15.8	23.1	22.0
Arizona	72.4	73.1	6,609	6,623	19.1	19.1	13.1	13.2	17.3	18.0
Arkansas	117.8	121.5	8,928	8,984	23.3	22.6	17.7	16.3 *	16.3	17.3
California	72.4	70.9	5,108	5,022	21.1	20.0	13.6	13.0	10.0	10.5
Colorado	61.0	61.5	5,538	5,625	20.3	18.4 *	12.6	12.4	19.7	19.9
Connecticut	62.0	59.7	5,146	4,986	19.2	17.6 *	12.1	11.5	9.9	9.8
Delaware	84.6	84.4	7,204	6,817	22.7	21.3 *	13.4	13.5	13.2	13.2
District of Columbia	123.3	125.2	7,831	7,601	31.1	28.9 *	12.8	18.9 **	5.7	7.8 *
Florida	80.3	80.3	6,556	6,575	20.6	19.7	13.8	13.3	14.3	13.9
Georgia	99.3	102.7	6,966	7,278	21.6	22.7	15.1	15.7	11.7	12.6
Hawaii	71.4	76.1	5,445	5,369	16.3	16.7	13.6	13.9	13.1	13.8
Idaho	64.8	67.9	5,809	6,112	15.8	20.4 **	14.2	12.8 *	19.0	20.0
Illinois	88.7	87.2	6,161	6,125	23.0	21.9	16.0	15.0 *	9.8	10.5
Indiana	92.0	91.5	7,342	7,528	21.8	21.0	16.4	16.2	14.3	14.3
Iowa	72.0	72.0	5,747	5,701	20.3	19.3	15.9	15.5	12.7	12.9
Kansas	77.9	79.0	6,643	6,541	23.0	19.1 **	14.7	15.1	17.5	15.7
Kentucky	107.9	106.0	8,869	8,844	23.4	20.9 **	17.1	17.4	16.2	16.0
Louisiana	120.3	126.6	8,952	9,192	24.4	24.2	17.7	18.1	12.4	14.3 *
Maine	61.7	64.6	6,128	6,251	17.3	16.8	14.2	11.9 **	14.5	15.7
Maryland	89.1	90.2	6,244	6,268	23.7	22.9	15.0	14.6	9.5	9.8
Massachusetts	61.2	60.3	4,892	5,283	19.5	17.9 *	13.4	12.6	8.7	8.2
Michigan	91.9	92.2	6,977	7,039	22.3	22.4	14.5	14.6	12.5	13.3
Minnesota	56.5	54.3	4,910	4,892	18.1	17.1	13.2	12.7	12.0	12.2
Mississippi	132.6	140.8	9,610	9,917	25.3	23.8 *	19.4	19.3	14.0	12.5
Missouri	95.5	95.4	7,487	7,506	22.5	22.1	16.6	14.7 **	14.9	16.3
Montana	67.9	71.8	6,963	6,640	20.7	19.3 *	14.3	14.6	22.6	23.9
Nebraska	64.6	66.8	5,701	5,966	21.2	21.6	16.0	16.1	12.5	13.4
Nevada	91.9	94.7	6,658	6,854	22.2	22.0	17.7	16.4 *	18.2	19.5
New Hampshire	58.4	58.5	5,097	5,700 *	19.0	21.2 *	13.7	12.7 *	14.1	17.8 *
New Jersey	76.7	74.3	5,325	5,286	22.7	21.6	15.9	14.2 *	7.4	8.3
New Mexico	78.5	80.4	7,998	8,349	18.0	18.8	13.9	13.7	21.3	21.0
New York	79.9	78.5	5,237	5,131	20.8	19.2 *	14.4	13.5 *	8.3	8.1
North Carolina	92.9	92.4	7,029	7,084	21.5	21.0	14.5	14.4	12.7	13.0
North Dakota	68.5	71.3	6,473	6,099	16.9	14.2 **	13.2	14.9 *	15.2	17.8 *
Ohio	95.1	94.8	7,282	7,404	22.8	22.6	16.4	15.9	13.0	12.6
Oklahoma	115.9	123.0	8,915	9,101	23.4	22.0 *	18.1	16.5 *	17.6	19.1
Oregon	62.3	63.4	5,799	5,905	20.3	20.4	13.8	13.0	17.8	18.6
Pennsylvania	83.5	82.4	6,726	6,577	22.6	20.8 *	16.0	15.2	12.4	13.3
Rhode Island	72.0	66.7	5,549	5,570	18.1	18.6	14.4	13.6	9.5	10.0
South Carolina	99.4	99.8	7,962	8,039	22.3	23.0	15.4	14.7	13.7	15.1
South Dakota	75.8	73.8	6,873	6,824	19.5	18.3 *	16.4	17.5 *	16.8	17.1
Tennessee	109.4	112.3	8,464	8,599	22.9	21.6 *	16.9	15.3 *	14.6	14.1
Texas	92.4	94.8	6,457	6,538	21.1	19.8 *	14.8	14.1	11.9	12.2
Utah	61.1	61.2	5,719	5,876	20.4	20.3	10.7	11.8 *	21.0	20.5
Vermont	55.3	57.5	5,102	5,517	19.4	18.1 *	13.5	13.6	13.1	18.7 **
Virginia	82.0	81.0	5,965	5,921	21.3	22.7 *	14.5	14.0	12.6	12.9
Washington	62.7	62.7	5,399	5,394	17.9	20.4 **	13.2	11.9 *	14.5	15.3
West Virginia	105.5	105.7	9,474	9,536	22.6	22.4	17.5	18.8 *	17.1	18.1
Wisconsin	70.0	70.3	5,696	5,764	20.4	19.3	13.8	13.7	12.3	13.1
Wyoming	71.1	71.7	7,046	7,350	15.7	14.6	15.8	10.9 **	29.6	20.6 **
Change		**0**		**1**		**23**		**19**		**6**
States Improved		0		0		18		14		1
States Worsened		0		1		5		5		5

Notes: * Denotes a change of at least 0.5 standard deviations. ** Denotes a change of 1.0 standard deviation or more.

APPENDIX F2. Healthy Lives: Dimension Ranking and Indicator Rates (continued)

	Infant mortality, deaths per 1,000 live births		Adults with poor health-related quality of life		Adults who smoke		Adults who are obese		Children who are overweight or obese	Adults who have lost six or more teeth	
	2012	2013	2013	2015	2013	2015	2013	2015	2011/12	2012	2014
United States	**6.0**	**6.0**	**26%**	**26%**	**18%**	**17%**	**29%**	**29%**	**31%**	**10%**	**10%**
Alabama	8.9	8.6	31	32	21	21	33	37 **	35	17	17
Alaska	5.1	5.8 *	24	24	23	19 **	28	29	30	9	9
Arizona	5.8	5.3	24	28 **	16	14 *	28	30 *	37	10	9
Arkansas	7.1	7.9 *	33	33	26	25	37	36	34	17	17
California	4.5	4.8	29	27 *	12	11	25	25	30	7	7
Colorado	4.6	5.1	23	24	18	16 *	22	20 *	23	7	7
Connecticut	5.3	4.8	21	23 *	16	13 *	25	25	30	8	8
Delaware	7.6	6.4 **	25	26	20	17 *	31	30	32	10	11
District of Columbia	7.9	6.7 **	21	21	19	16 *	23	21 *	35	7	7
Florida	6.1	6.1	28	26 *	17	16	27	27	28	11	11
Georgia	6.2	7.0 *	27	26	19	18	31	31	35	13	12
Hawaii	4.9	6.4 **	20	22 *	13	14	23	24	27	6	7
Idaho	5.4	5.6	23	25 *	17	14 *	30	29	28	9	8
Illinois	6.5	6.0	22	23	18	15 *	30	31	34	9	8
Indiana	6.7	7.2	26	28 *	22	21	32	32	31	13	14
Iowa	5.3	4.3 *	22	21	19	18	32	32	28	9	10
Kansas	6.3	6.5	23	24	20	18 *	31	35 **	30	10	9
Kentucky	7.2	6.4 *	32	32	26	26	34	36 *	36	16	18 *
Louisiana	8.1	8.7 *	30	29	24	22 *	33	37 **	40	17	14 *
Maine	7.0	7.1	25	27 *	20	19	29	30	30	14	13
Maryland	6.4	6.6	22	21	16	15	29	29	32	9	9
Massachusetts	4.2	4.2	22	24 *	17	14 *	24	24	31	9	10
Michigan	6.9	7.1	28	27	21	21	32	32	33	11	10
Minnesota	5.0	5.1	20	20	18	16 *	26	26	27	7	7
Mississippi	8.9	9.6 *	31	31	25	22 *	37	37	40	18	19
Missouri	6.6	6.5	28	28	22	22	31	33 *	28	12	13
Montana	5.9	5.6	25	26	19	19	25	24	29	11	11
Nebraska	4.7	5.2	22	21	18	17	30	31	29	8	8
Nevada	4.9	5.3	25	27 *	19	18	27	28	33	11	8 *
New Hampshire	4.2	5.6 **	22	22	16	16	27	26	26	10	10
New Jersey	4.4	4.5	22	23	16	14 *	27	25 *	25	9	10
New Mexico	6.8	5.3 **	29	29	19	18	28	31 *	33	10	10
New York	5.0	4.9	25	25	17	15 *	25	25	32	10	9
North Carolina	7.4	7.0	27	26	20	19	30	31	31	13	13
North Dakota	6.3	6.0	20	20	21	19 *	31	31	36	9	7 *
Ohio	7.5	7.3	26	24 *	23	22	31	30	31	13	13
Oklahoma	7.5	6.7 *	30	30	24	22 *	34	35	34	14	14
Oregon	5.4	4.9	26	31 **	17	17	27	30 *	26	10	8 *
Pennsylvania	7.1	6.7	24	24	21	18 *	30	30	26	11	10
Rhode Island	6.5	6.5	25	26	17	15 *	27	27	28	9	7 *
South Carolina	7.5	6.9 *	28	28	22	20 *	33	33	39	15	15
South Dakota	8.3	6.5 **	21	22	20	20	30	31	27	9	10
Tennessee	7.2	6.8	31	30	23	22	35	35	34	18	16 *
Texas	5.8	5.8	24	25	16	15	32	33	37	8	7
Utah	4.8	5.2	20	21	10	9	24	24	22	6	6
Vermont	4.3	4.4	22	22	17	16	25	25	25	11	10
Virginia	6.5	6.2	23	22	19	17 *	27	29 *	30	11	10
Washington	5.3	4.5 *	28	27	16	15	27	26	26	8	8
West Virginia	7.2	7.6	34	34	27	26	37	37	34	23	22
Wisconsin	5.7	6.3 *	24	23	19	17 *	29	30	29	11	10
Wyoming	5.6	4.8 *	23	25 *	21	19 *	29	30	27	11	10
Change		**18**		**13**		**23**		**12**			**7**
States Improved		10		3		23		3			6
States Worsened		8		10		0		9			1

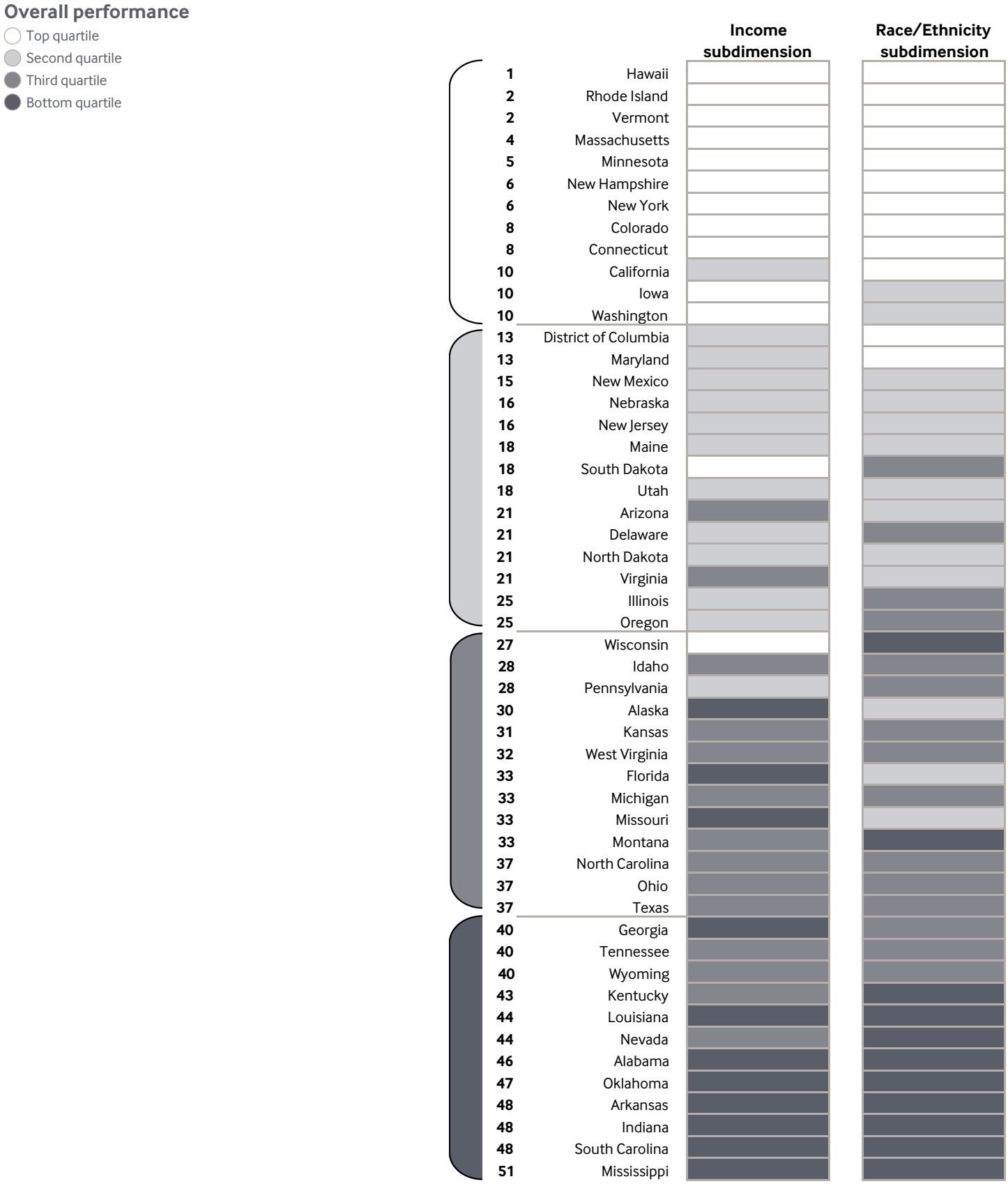
Notes: * Denotes a change of at least 0.5 standard deviations. ** Denotes a change of 1.0 standard deviation or more.

APPENDIX F3. Mortality Amenable to Health Care by Race, Deaths per 100,000 population, 2011–12 & 2013–14

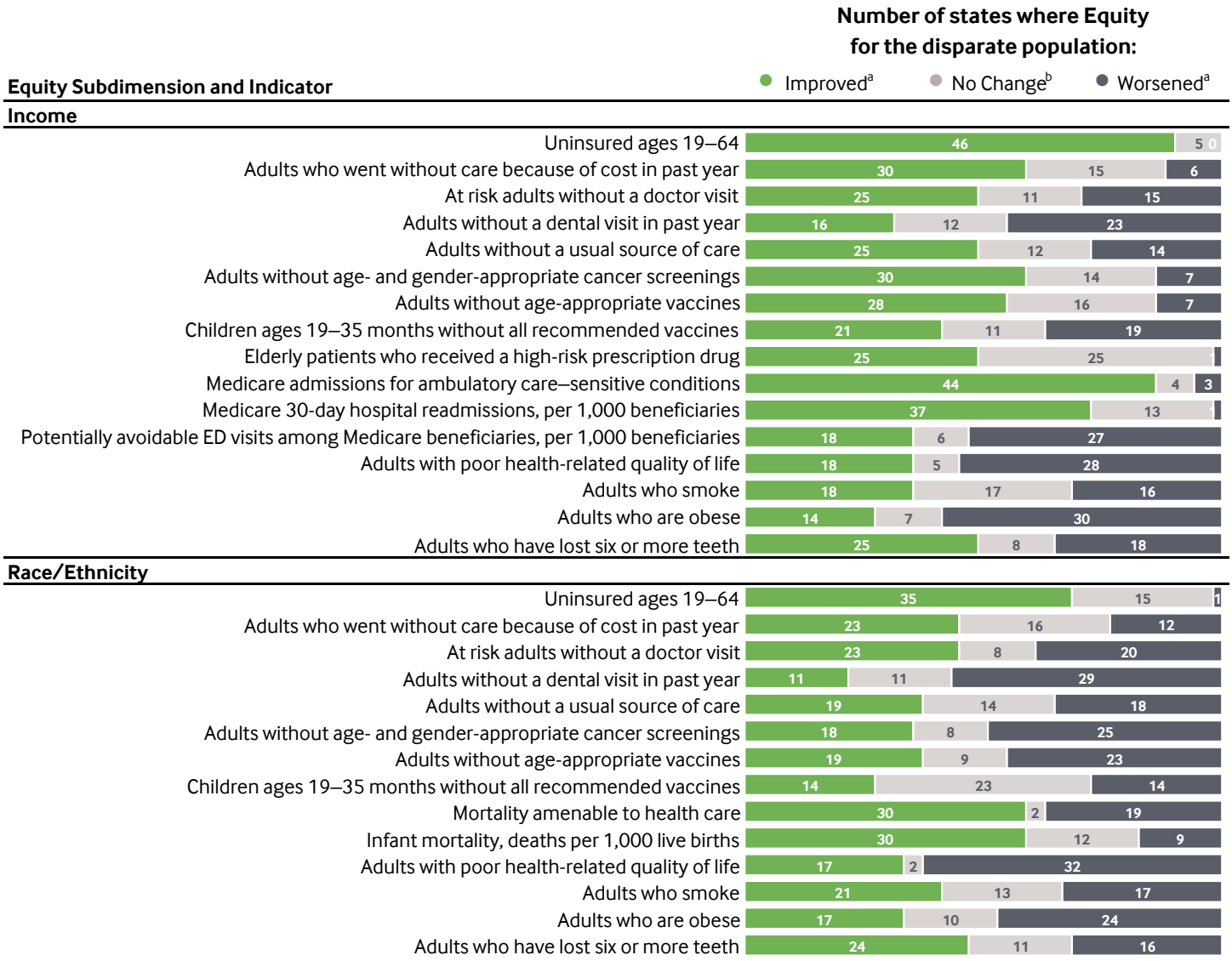
	White				Black				Hispanic			
	2011-12	2013-14	Change in rate	2017 ranking	2011-12	2013-14	Change in rate	2017 ranking	2011-12	2013-14	Change in rate	2017 ranking
United States	**77.6**	**78.2**	**0.6**	**—**	**157.0**	**155.0**	**-2.0**	**—**	**66.3**	**66.5**	**0.2**	**—**
Alabama	95.1	96.7	1.6	43	166.2	165.4	-0.8	35	46.5	41.3	-5.2	8
Alaska	63.7	61.8	-1.9	9	87.1	95.9	8.8	3	—	40.2	—	6
Arizona	69.6	71.0	1.4	23	127.8	127.5	-0.3	11	67.7	67.6	-0.1	36
Arkansas	109.3	112.7	3.4	49	199.6	198.3	-1.3	43	53.8	52.9	-0.9	19
California	71.8	70.6	-1.2	22	151.5	145.9	-5.6	20	65.4	65.3	-0.1	34
Colorado	57.4	58.4	1.0	5	121.6	111.3	-10.3	10	70.7	71.6	0.9	37
Connecticut	57.7	55.4	-2.3	3	108.7	103.7	-5.0	5	61.8	61.7	-0.1	32
Delaware	76.2	75.9	-0.3	31	130.7	129.3	-1.4	13	43.9	57.8	13.9	28
District of Columbia	42.7	41.8	-0.9	1	183.6	189.1	5.5	40	39.5	50.4	10.9	16
Florida	77.4	78.2	0.8	33	138.6	137.6	-1.0	16	55.9	55.2	-0.7	22
Georgia	84.7	88.5	3.8	40	152.6	153.5	0.9	26	38.0	39.3	1.3	2
Hawaii	58.7	64.9	6.2	13	74.1	106.3	32.2	8	94.1	76.5	-17.6	40
Idaho	65.7	69.0	3.3	20	—	—	—	—	44.1	56.1	12.0	25
Illinois	77.6	77.3	-0.3	32	182.4	177.0	-5.4	37	60.6	59.4	-1.2	30
Indiana	88.2	87.0	-1.2	38	156.8	159.9	3.1	30	62.4	60.7	-1.7	31
Iowa	71.0	71.0	0.0	23	152.3	146.4	-5.9	22	42.9	45.4	2.5	10
Kansas	75.3	75.8	0.5	29	141.8	155.7	13.9	28	59.7	62.7	3.0	33
Kentucky	105.6	104.3	-1.3	47	161.7	153.8	-7.9	27	41.3	40.6	-0.7	7
Louisiana	99.4	103.2	3.8	45	183.6	193.3	9.7	41	34.6	49.0	14.4	15
Maine	62.1	65.0	2.9	14	67.1	102.7	35.6	4	—	—	—	—
Maryland	75.1	78.5	3.4	34	138.3	135.2	-3.1	14	37.9	39.8	1.9	3
Massachusetts	59.9	60.6	0.7	8	98.1	82.6	-15.5	1	56.1	53.1	-3.0	20
Michigan	78.7	79.4	0.7	35	188.7	188.0	-0.7	39	76.1	77.7	1.6	41
Minnesota	54.5	51.0	-3.5	2	94.3	104.2	9.9	6	44.0	45.5	1.5	11
Mississippi	104.3	113.9	9.6	50	195.8	199.7	3.9	44	45.7	48.6	2.9	14
Missouri	88.3	89.3	1.0	41	173.4	163.4	-10.0	33	50.8	57.1	6.3	27
Montana	63.5	67.8	4.3	18	—	—	—	—	56.5	—	—	—
Nebraska	62.3	65.1	2.8	15	137.0	135.7	-1.3	15	40.9	47.8	6.9	12
Nevada	96.1	99.8	3.7	44	148.7	150.6	1.9	25	59.7	65.3	5.6	34
New Hampshire	59.7	59.6	-0.1	6	—	—	—	—	—	—	—	—
New Jersey	72.1	70.3	-1.8	21	147.6	144.4	-3.2	19	58.4	53.6	-4.8	21
New Mexico	72.0	75.8	3.8	29	120.4	128.7	8.3	12	82.2	80.9	-1.3	43
New York	71.8	71.1	-0.7	25	142.4	138.9	-3.5	17	74.3	71.9	-2.4	38
North Carolina	80.4	81.1	0.7	36	153.8	148.2	-5.6	24	37.5	40.1	2.6	5
North Dakota	63.6	67.0	3.4	17	—	—	—	—	—	—	—	—
Ohio	87.5	87.8	0.3	39	168.8	162.4	-6.4	32	57.6	55.8	-1.8	24
Oklahoma	111.4	117.5	6.1	51	184.0	195.6	11.6	42	83.4	78.2	-5.2	42
Oregon	63.3	64.0	0.7	11	119.7	106.6	-13.1	9	45.9	50.7	4.8	17
Pennsylvania	76.0	74.9	-1.1	28	166.7	160.7	-6.0	31	67.8	75.6	7.8	39
Rhode Island	72.1	68.7	-3.4	19	116.4	83.1	-33.3	2	49.8	44.4	-5.4	9
South Carolina	82.9	83.5	0.6	37	156.6	156.2	-0.4	29	41.7	51.7	10.0	18
South Dakota	68.2	65.4	-2.8	16	—	—	—	—	—	—	—	—
Tennessee	100.7	103.4	2.7	46	177.3	181.7	4.4	38	45.7	40.0	-5.7	4
Texas	86.6	89.7	3.1	42	167.0	165.0	-2.0	34	83.9	86.7	2.8	44
Utah	60.1	60.0	-0.1	7	132.7	146.7	14.0	23	56.4	55.6	-0.8	23
Vermont	55.5	58.1	2.6	4	—	—	—	—	—	—	—	—
Virginia	72.2	72.8	0.6	27	141.2	139.1	-2.1	18	37.4	35.5	-1.9	1
Washington	62.1	62.4	0.3	10	109.8	105.3	-4.5	7	49.6	48.5	-1.1	13
West Virginia	104.4	105.7	1.3	48	174.3	146.0	-28.3	21	—	—	—	—
Wisconsin	65.0	64.3	-0.7	12	160.8	173.3	12.5	36	47.8	57.0	9.2	26
Wyoming	69.5	71.4	1.9	26	—	—	—	—	72.8	58.8	-14.0	29

Notes: — Indicates that estimates are not available.

APPENDIX G1. Equity: Dimension and Subdimension Ranking



APPENDIX G2. Equity: Change in Equity Dimension Performance by Indicator



Notes: Selected indicators only. Trend data generally reflect the two-year period ending in 2014 or 2015—refer to Appendix A1 for additional detail. (a) Improvement indicates that the equity gap between states' vulnreable population and the U.S. average narrowed and that the rate among the states' vulnerable population improved. Worsening indicates that the equity gap between states' vulnerable population and the U.S. average widened and that the rate among the states' vulnerable population got worse. (b) Includes the number of states with no change or without sufficient data for this subpopulation to assess change over time.

APPENDIX G3. Equity: Summary of Indicator Change Over Time

	Total			Race/Ethnicity			Income		
	Number of indicators improved	Number of indicators with data	Percent of indicators improved	Number of indicators improved	Number of indicators with data	Percent of indicators improved	Number of indicators improved	Number of indicators with data	Percent of indicators improved
Alabama	11	29	38%	4	13	31%	7	16	44%
Alaska	12	30	40%	4	14	29%	8	16	50%
Arizona	18	31	58%	8	14	57%	10	17	59%
Arkansas	19	31	61%	10	14	71%	9	17	53%
California	20	31	65%	10	14	71%	10	17	59%
Colorado	17	30	57%	7	13	54%	10	17	59%
Connecticut	16	30	53%	6	14	43%	10	16	63%
Delaware	13	30	43%	5	14	36%	8	16	50%
District of Columbia	16	30	53%	7	14	50%	9	16	56%
Florida	15	31	48%	9	14	64%	6	17	35%
Georgia	18	31	58%	7	14	50%	11	17	65%
Hawaii	11	29	38%	4	13	31%	7	16	44%
Idaho	14	28	50%	5	12	42%	9	16	56%
Illinois	15	31	48%	7	14	50%	8	17	47%
Indiana	15	30	50%	6	13	46%	9	17	53%
Iowa	16	30	53%	8	13	62%	8	17	47%
Kansas	13	31	42%	6	14	43%	7	17	41%
Kentucky	17	30	57%	6	13	46%	11	17	65%
Louisiana	15	29	52%	4	12	33%	11	17	65%
Maine	4	27	15%	1	11	9%	3	16	19%
Maryland	17	31	55%	8	14	57%	9	17	53%
Massachusetts	14	30	47%	6	13	46%	8	17	47%
Michigan	15	31	48%	7	14	50%	8	17	47%
Minnesota	14	30	47%	4	13	31%	10	17	59%
Mississippi	12	30	40%	4	14	29%	8	16	50%
Missouri	14	30	47%	8	13	62%	6	17	35%
Montana	15	30	50%	9	14	64%	6	16	38%
Nebraska	11	31	35%	4	14	29%	7	17	41%
Nevada	10	31	32%	2	14	14%	8	17	47%
New Hampshire	16	26	62%	6	10	60%	10	16	63%
New Jersey	16	31	52%	8	14	57%	8	17	47%
New Mexico	10	30	33%	3	14	21%	7	16	44%
New York	22	31	71%	8	14	57%	14	17	82%
North Carolina	18	31	58%	7	14	50%	11	17	65%
North Dakota	14	29	48%	7	13	54%	7	16	44%
Ohio	10	30	33%	4	13	31%	6	17	35%
Oklahoma	19	31	61%	10	14	71%	9	17	53%
Oregon	18	30	60%	7	13	54%	11	17	65%
Pennsylvania	11	30	37%	2	14	14%	9	16	56%
Rhode Island	20	30	67%	9	14	64%	11	16	69%
South Carolina	13	31	42%	5	14	36%	8	17	47%
South Dakota	14	31	45%	6	14	43%	8	17	47%
Tennessee	14	28	50%	4	11	36%	10	17	59%
Texas	13	31	42%	6	14	43%	7	17	41%
Utah	11	28	39%	4	11	36%	7	17	41%
Vermont	12	24	50%	4	8	50%	8	16	50%
Virginia	18	31	58%	8	14	57%	10	17	59%
Washington	15	31	48%	5	14	36%	10	17	59%
West Virginia	14	29	48%	3	12	25%	11	17	65%
Wisconsin	11	30	37%	3	13	23%	8	17	47%
Wyoming	11	28	39%	6	12	50%	5	16	31%

APPENDIX H. State Scorecard Indicator Descriptions and Source Notes

1. Percent of adults ages 19–64 uninsured: Authors' analysis of 2013 and 2015 1-year American Community Survey (ACS) Public Use Micro Sample (PUMS) (U.S. Census Bureau, ACS PUMS 2013, 2015).

2. Percent of children ages 0–18 uninsured: Authors' analysis of 2013 and 2015 1-year American Community Survey (ACS) Public Use Micro Sample (PUMS) (U.S. Census Bureau, ACS PUMS 2013, 2015).

3. Percent of adults who went without care because of cost in the past year: Percent of adults age 18 and older who reported a time in the past 12 months when they needed to see a doctor but could not because of cost. Authors' analysis of 2013 and 2015 Behavioral Risk Factor Surveillance System (CDC, BRFSS 2013, 2015).

4. Percent of individuals under age 65 with high out-of-pocket medical costs relative to their annual household income: Out-of-pocket medical expenses equaled 10 percent or more of income, or 5 percent or more of income if low-income (under 200% of federal poverty level), not including health insurance premiums. Ougni Chakraborty, Robert F. Wagner School of Public Service, New York University, analysis of 2014 and 2016 Current Population Survey (representing respondents' experiences in 2013 and 2015), Annual Social and Economic Supplement (U.S. Census Bureau, CPS ASES 2014, 2016).

5. Percent of at-risk adults without a routine doctor visit in the past two years: Percent of adults age 50 and older, or in fair or poor health, or ever told they have diabetes or pre-diabetes, acute myocardial infarction, heart disease, stroke, or asthma who did not visit a doctor for a routine checkup in the past two years. Authors' analysis of 2013 and 2015 Behavioral Risk Factor Surveillance System (CDC, BRFSS 2013, 2015).

6. Percent of adults without a dental visit in the past year: Percent of adults age 18 and older who did not visit a dentist or dental clinic within the past year. Authors' analysis of 2012 and 2014 Behavioral Risk Factor Surveillance System (CDC, BRFSS 2012, 2014).

7. Percent of adults with a usual source of care: Percent of adults age 18 and older who have one (or more) person they think of as their personal health care provider. Authors' analysis of 2013 and 2015 Behavioral Risk Factor Surveillance System (CDC, BRFSS 2013, 2015).

8. Percent of adults with age- and gender-appropriate cancer screenings: Percent of adults ages 50–74 who received sigmoidoscopy or colonoscopy in the past 10 years or a fecal occult blood test in the past two years; a mammogram in the past two years (women ages 50–74 only); and a Pap smear in the past three years (women ages 25–64 only). Authors' analysis of 2012 and 2014 Behavioral Risk Factor Surveillance System (CDC, BRFSS 2012, 2014).

9. Percent of adults with age-appropriate vaccines: Percent of adults age 18 and older who have received a flu shot in the past year and a pneumonia vaccine ever if age 65 and older. Authors' analysis of 2013 and 2015 Behavioral Risk Factor Surveillance System (CDC, BRFSS 2013, 2015).

10. Percent of children with a medical home: Percent of children ages 0–17 who have a personal doctor or nurse, have a usual source for sick and well care, receive family-centered care, have no problems getting needed referrals, and receive effective care coordination when needed. For more information, see www.childhealthdata.org. Authors' analysis of 2011/12 National Survey of Children's Health (CAHMI, NSCH 2011/12).

11. Percent of children with a medical and dental preventive care visit in the past year: Percent of children ages 0–17 with a preventive medical visit and, if ages 1–17, a preventive dental visit in the past year. For more information, see www.childhealthdata.org. Authors' analysis of 2011/12 National Survey of Children's Health (CAHMI, NSCH 2011/12).

12. Percent of children with emotional, behavioral, or developmental problems who received needed mental health care in the past year: Percent of children ages 2–17 who had any kind of emotional, developmental, or behavioral problem that required treatment or counseling and who received treatment from a mental health professional (as defined) during the past 12 months. For more information, see www.childhealthdata.org. Authors' analysis of 2011/12 National Survey of Children's Health (CAHMI, NSCH 2011/12).

13. Percent of children ages 19–35 months who received all recommended doses of seven key vaccines: Percent of children ages 19–35 months who received at least 4 doses of diphtheria, tetanus, and accellular pertussis (DTaP/DT/DTP) vaccine; at least 3 doses of poliovirus vaccine; at least 1 dose of measles-containing vaccine (including mumps-rubella (MMR) vaccine); full series of Haemophilus influenza type b (Hib) vaccine (3 or 4 doses depending on product type); at least 3 doses of hepatitis B vaccine (HepB); at least 1 dose of varicella vaccine; and at least 4 doses of pneumococcal conjugate vaccine (PCV). Data from the 2013–2015 National Immunization Survey (NIS) Public Use Files (NCHS, NIS 2013, 2014, 2015) (2013 and 2014 data used for stratification by income and race/ethnicity for equity analysis).

14. Percent of Medicare beneficiaries who received at least one drug that should be avoided in the elderly: Percent of fee-for-service Medicare beneficiaries age 65 and older who received at least one drug from a list of 13 classes of high-risk prescriptions that should be avoided by the elderly. Y. Zhang, University of Pittsburgh, analysis of 2012 and 2014 5% sample of fee-for-service Medicare beneficiaries enrolled in stand-alone Medicare Part D plans.

15. Percent of Medicare beneficiaries with dementia, hip/pelvic fracture, or chronic renal failure who received a prescription drug in an ambulatory care setting that is contraindicated for that condition: Percent of fee-for-service Medicare beneficiaries age 67 and older with dementia, hip/pelvic fracture, or chronic

APPENDIX H. State Scorecard Indicator Descriptions and Source Notes (continued)

renal failure who received a prescription drug in an ambulatory care setting that is contraindicated for that condition. Y. Zhang, University of Pittsburgh, analysis of 2012 and 2014 5% sample of fee-for-service Medicare beneficiaries enrolled in stand-alone Medicare Part D plans.

16. Percent of fee-for-service Medicare patients whose health provider always listens, explains, shows respect, and spends enough time with them: Percent of fee-for-service Medicare patients who had a doctor's office or clinic visit in the last 12 months and who reported health providers always listened carefully, explained things clearly, respected what they had to say, and spent enough time with them. Data from 2012 and 2014 National Consumer Assessment of Healthcare Providers and Systems (CAHPS) Benchmarking Database (AHRQ, CAHPS n.d.).

17. Risk-adjusted 30-day mortality among Medicare beneficiaries hospitalized for heart attack, heart failure, pneumonia, or stroke: Risk-standardized, all-cause 30-day mortality rates for fee-for-service Medicare patients age 65 and older hospitalized with a principal diagnosis of heart attack, heart failure, pneumonia, or stroke between July 2010 and June 2013 and July 2012 and June 2015. All-cause mortality is defined as death from any cause within 30 days after the index admission, regardless of whether the patient dies while still in the hospital or after discharge. Authors' analysis of Medicare enrollment and claims data retrieved from 4th quarter 2016 and 4th quarter 2014 CMS Hospital Compare (DHHS n.d.).

18. Central line-associated bloodstream infections (CLABSI), Standardized Infection Ratio: All central line-associated bloodstream infections reported to the National Healthcare Safety Network (NHSN) from all applicable hospital locations, including intensive care units, neonatal intensive care units, and wards. The standardized infection ratio compares the observed number of CLABSI infections in hospitals within the state reported to NHSN to the predicted number of infections based on the referent period, adjusting for key risk factors. Data are from the Center for Disease Control and Prevention's 2013 and 2014 National and State Healthcare-Associated Infections Progress Reports (CDC n.d.).

19. Percent of hospitalized patients who were given information about what to do during their recovery at home: Authors' analysis of 2013 and 2015 Hospital Consumer Assessment of Healthcare Providers and Systems Survey data (HCAHPS n.d.), as administered to adults discharged from acute-care hospitals, retrieved from 4th quarter 2016 and 4th quarter 2014 CMS Hospital Compare (DHHS n.d.).

20. Percent of patients who reported hospital staff always managed pain well, responded when needed help to get to bathroom or pressed call button, and explained medicines and side effects: Authors' analysis of 2013 and 2015 Hospital Consumer Assessment of Healthcare Providers and Systems Survey data (HCAHPS n.d.), as administered to adults discharged from acute-care hospitals, retrieved from retrieved from 4th quarter 2016 and 4th quarter 2014 CMS Hospital Compare (DHHS n.d.).

21. Percent of home health patients who get better at walking or moving around: Percent of all home health episodes in which a person improved at walking or moving around compared to a prior assessment. Episodes for which the patient, at start or resumption of care, was able to ambulate independently are excluded. Authors' analysis of 2013 and 2015 Outcome and Assessment Information Set (CMS, OASIS n.d.) as reported in CMS Home Health Compare. Data retrieved from 3rd quarter 2016 and 2nd quarter 2014 CMS Home Health Compare (DHHS n.d.).

22. Percent of home health patients whose wounds improved or healed after an operation: Percent of all home health episodes in which a person's surgical wound is more fully healed compared to a prior assessment. Episodes for which the patient, at start or resumption of care, did not have any surgical wounds or had only a surgical wound that was unobservable are excluded. Authors' analysis of 2013 and 2015 Outcome and Assessment Information Set (CMS, OASIS n.d.) as reported in CMS Home Health Compare. Data retrieved from 3rd quarter 2016 and 2nd quarter 2014 CMS Home Health Compare (DHHS n.d.).

23. Percent of high-risk nursing home residents with pressure sores: Percent of long-stay nursing home residents impaired in bed mobility or transfer, comatose, or malnourished who have pressure sores (stages 1–4) on target assessment. Authors' analysis of 2013–2016 Minimum Data Set (CMS, MDS n.d.) as reported in CMS Nursing Home Compare. Data retrieved from June 1, 2016, and June 1, 2014, CMS Nursing Home Compare data files.

24. Percent of long-stay nursing home residents with an antipsychotic medication: Percent of long-stay nursing home residents that received an antipsychotic medication, excluding residents with schizophrenia, Tourette's syndrome, and Huntington's disease. Authors' analysis of 2013–2016 Minimum Data Set (CMS, MDS n.d.) as reported in CMS Nursing Home Compare. Data retrieved from June 1, 2016, and June 1, 2014, CMS Nursing Home Compare data files.

25. Hospital admissions for pediatric asthma, per 100,000 children (ages 2–17): Excludes patients with cystic fibrosis or anomalies of the respiratory system, and transfers from other institutions. Authors' analysis of 2011 and 2013 Healthcare Cost and Utilization Project State Inpatient Databases; not all states participate in HCUP. Estimates for total U.S. are from the Nationwide Inpatient Sample (AHRQ, HCUPT-SID 2011, 2013). Reported in the National Healthcare Quality Report (AHRQ 2011, 2013).

APPENDIX H. State Scorecard Indicator Descriptions and Source Notes (continued)

26. Hospital admissions among Medicare beneficiaries for ambulatory care-sensitive conditions, per 1,000 beneficiaries ages 65–74 and 75 and older: Hospital admissions of fee-for-service Medicare beneficiaries age 65–74 or age 75 and older (measure reported separately for each age group) for one of the following eight ambulatory care–sensitive (ACS) conditions: long-term diabetes complications, lower extremity amputation among patients with diabetes, asthma or chronic obstructive pulmonary disease, hypertension, congestive heart failure, dehydration, bacterial pneumonia, and urinary tract infection. Authors' analysis of 2012 and 2014 Chronic Conditions Warehouse (CCW) data, retrieved from the February 2016 CMS Geographic Variation Public Use File (CMS, Office of Information Products and Analytics (OPIDA) 2016).

27. Medicare 30-day hospital readmissions, rate per 1,000 beneficiaries: All hospital admissions among fee-for-service Medicare beneficiaries age 65 and older that were readmitted within 30 days of an acute hospital stay for any cause. A correction was made to account for likely transfers between hospitals. Authors' analysis of 2012 and 2014 Chronic Conditions Warehouse (CCW) data, retrieved from the February 2016 CMS Geographic Variation Public Use File (CMS, Office of Information Products and Analytics (OPIDA) 2016).

28. Percent of short-stay nursing home residents readmitted within 30 days of hospital discharge to the nursing home: Percent of newly admitted nursing home residents who are rehospitalized within 30 days of being discharged from a hospital to the nursing home. V. Mor, Brown University, analysis of 2012 and 2014 Medicare enrollment data and Medicare Provider and Analysis Review (CMS, MEDPAR 2012, 2014).

29. Percent of long-stay nursing home residents hospitalized within a six-month period: Percent of long-stay residents (residing in a nursing home for at least 90 consecutive days) who were hospitalized within six months of baseline assessment. V. Mor, Brown University, analysis of 2012 and 2014 Medicare enrollment data, Medicare Provider and Analysis Review File (CMS, MEDPAR 2012, 2014).

30. Home health patients also enrolled in Medicare with a hospital admission: Percent of home health episodes among fee-for-service Medicare beneficiaries during which the patient was admitted to an acute-care hospital. Authors' analysis of data from CMS Medicare claims data as reported in CMS Home Health Compare. Data retrieved from 4th quarter 2016 and 3rd quarter 2014 CMS Home Health Compare (DHHS n.d.), representing patient experiences in 2015 and 2013 respectively.

31. Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries: Potentially avoidable emergency department visits were those that, based on diagnoses recorded during the visit and the health care service the patient received, were considered to be either nonemergent (care was not needed within 12 hours), or emergent (care needed within 12 hours) but that could have been treated safely and effectively in a primary care setting. This definition excludes any emergency department visit that resulted in an admission, as well as emergency department visits where the level of care provided in the ED was clinically indicated. J. Zheng, Harvard University, analysis of 2012 and 2014 Medicare Enrollment and Claims Data 20% sample of fee-for-service Medicare beneficences age 65 and older, Chronic Conditions Warehouse (CMS, CCW 2012, 2014), using the New York University Center for Health and Public Service Research emergency department algorithm developed by John Billings.

32. Total reimbursements per enrollee (ages 18–64) with employer-sponsored insurance: Total per enrollee spending estimates from a sophisticated regression model include reimbursed costs for health care services from all sources of payment, including the health plan, enrollee, and any third-party payers incurred in 2013 and in 2014. Outpatient prescription drug charges are excluded. Enrollees with capitated plans and their associated claims are also excluded. Estimates for each state were adjusted for enrollees' age and sex, the interaction of age and sex, partial year enrollment, and regional wage difference. M. Chernew, Department of Health Care Policy, Harvard Medical School, analysis of the Truven Marketscan Database.

33. Total Medicare (Parts A&B) reimbursements per beneficiary: Total fee-for-service Medicare reimbursements include payments for both Part A and Part B but exclude Part D (prescription drug costs) and extra CMS payments for graduate medical education and for treating low-income patients. Reimbursements reflect only the age 65 and older fee-for-service Medicare population. Authors' analysis of 2012 and 2014 Chronic Conditions Warehouse (CCW) data, retrieved from the February 2016 CMS Geographic Variation Public Use File (CMS, Office of Information Products and Analytics (OPIDA) 2016).

34. Mortality amenable to health care, deaths per 100,000 population: Number of deaths before age 75 per 100,000 population that resulted from causes considered at least partially treatable or preventable with timely and appropriate medical care (see list), as described in Nolte and McKee (Nolte and McKee, *BMJ* 2003). Authors' analysis of mortality data from CDC restricted-use Multiple Cause-of-Death file and U.S. Census Bureau population data, 2011–2014 (NCHS, MCD n.d.).

Causes of death	Age
Intestinal infections	0–14
Tuberculosis	0–74
Other infections (diphtheria, tetanus, septicaemia, poliomyelitis)	0–74
Whooping cough	0–14
Measles	1–14

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Malignant neoplasm of colon and rectum	0–74
Malignant neoplasm of skin	0–74
Malignant neoplasm of breast	0–74
Malignant neoplasm of cervix uteri	0–74
Malignant neoplasm of cervix uteri and body of uterus	0–44
Malignant neoplasm of testis	0–74
Hodgkin's disease	0–74
Leukemia	0–44
Diseases of the thyroid	0–74
Diabetes mellitus	0–49
Epilepsy	0–74
Chronic rheumatic heart disease	0–74
Hypertensive disease	0–74
Cerebrovascular disease	0–74
All respiratory diseases (excluding pneumonia and influenza)	1–14
Influenza	0–74
Pneumonia	0–74
Peptic ulcer	0–74
Appendicitis	0–74
Abdominal hernia	0–74
Cholelithiasis and cholecystitis	0–74
Nephritis and nephrosis	0–74
Benign prostatic hyperplasia	0–74
Maternal death	All
Congenital cardiovascular anomalies	0–74
Perinatal deaths, all causes, excluding stillbirths	All
Misadventures to patients during surgical and medical care	All
Ischaemic heart disease: 50% of mortality rates included	0–74

35. Years of potential life lost before age 75: Robert Wood Johnson Foundation analysis of National Vital Statistics System Mortality Data, 2012 and 2014, using the Centers for Disease Control and Prevention (CDC) National Center for Injury Prevention and Control Web-based Injury Statistics Query and Reporting System (WISQARS). Retrieved October 2016 from Robert Wood Johnson Foundation National DataHub (NVSS 2012 and 2014).

36. Breast cancer deaths per 100,000 female population: Authors' analysis of NVSS–Mortality Data, 2012 and 2014 (NCHS, NVSS n.d.), retrieved using the CDC Wide-ranging OnLine Data for Epidemiologic Research (WONDER) (NVSS 2012 and 2014).

37. Colorectal cancer deaths per 100,000 population: Authors' analysis of NVSS–Mortality Data, 2012 and 2014 (NCHS, NVSS n.d.), retrieved using the CDC Wide-ranging OnLine Data for Epidemiologic Research (WONDER) (NVSS 2012 and 2014).

38. Suicide deaths per 100,000 population: Authors' analysis of NVSS–Mortality Data, 2012 and 2014 (NCHS, NVSS n.d.), retrieved using the CDC Wide-ranging OnLine Data for Epidemiologic Research (WONDER) (NVSS 2012 and 2014).

39. Infant mortality, deaths per 1,000 live births: Authors' analysis of National Vital Statistics System–Linked Birth and Infant Death Data, 2012 and 2013 (NCHS, NVSS), retrieved using the CDC Wide-ranging OnLine Data for Epidemiologic Research (WONDER) (NVSS 2012 and 2013).

40. Percent of adults ages 18–64 who report being in fair or poor health, or who have activity limitations because of physical, mental, or emotional problems: Authors' analysis of 2013 and 2015 Behavioral Risk Factor Surveillance System (CDC, BRFSS 2013, 2015).

41. Percent of adults who smoke: Percent of adults age 18 and older who ever smoked 100+ cigarettes (five packs) and currently smoke every day or some days. Authors' analysis of 2013 and 2015 Behavioral Risk Factor Surveillance System (CDC, BRFSS 2013, 2015).

42. Percent of adults ages 18–64 who are obese (Body Mass Index [BMI] ≥ 30): Authors' analysis of 2013 and 2015 Behavioral Risk Factor Surveillance System (CDC, BRFSS 2013, 2015).

43. Children ages 10–17 who are overweight or obese (BMI ≥ 85th percentile): Overweight is defined as an age- and gender-specific body mass index (BMI-for-age) between the 85th and 94th percentile of the CDC growth charts. Obese is defined as a BMI-for-age at or above the 95th percentile. BMI was calculated based on parent-reported height and weight. For more information, see www.nschdata.org. Data from the National Survey of Children's Health, assembled by the Child and Adolescent Health Measurement Initiative (CAHMI, NCHS 2011/2012).

44. Percent of adults ages 18–64 who have lost 6 or more teeth because of tooth decay, infection, or gum disease: Authors' analysis of 2012 and 2014 Behavioral Risk Factor Surveillance System (CDC, BRFSS 2012, 2014).

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