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2020

Scorecard on State Health System Performance

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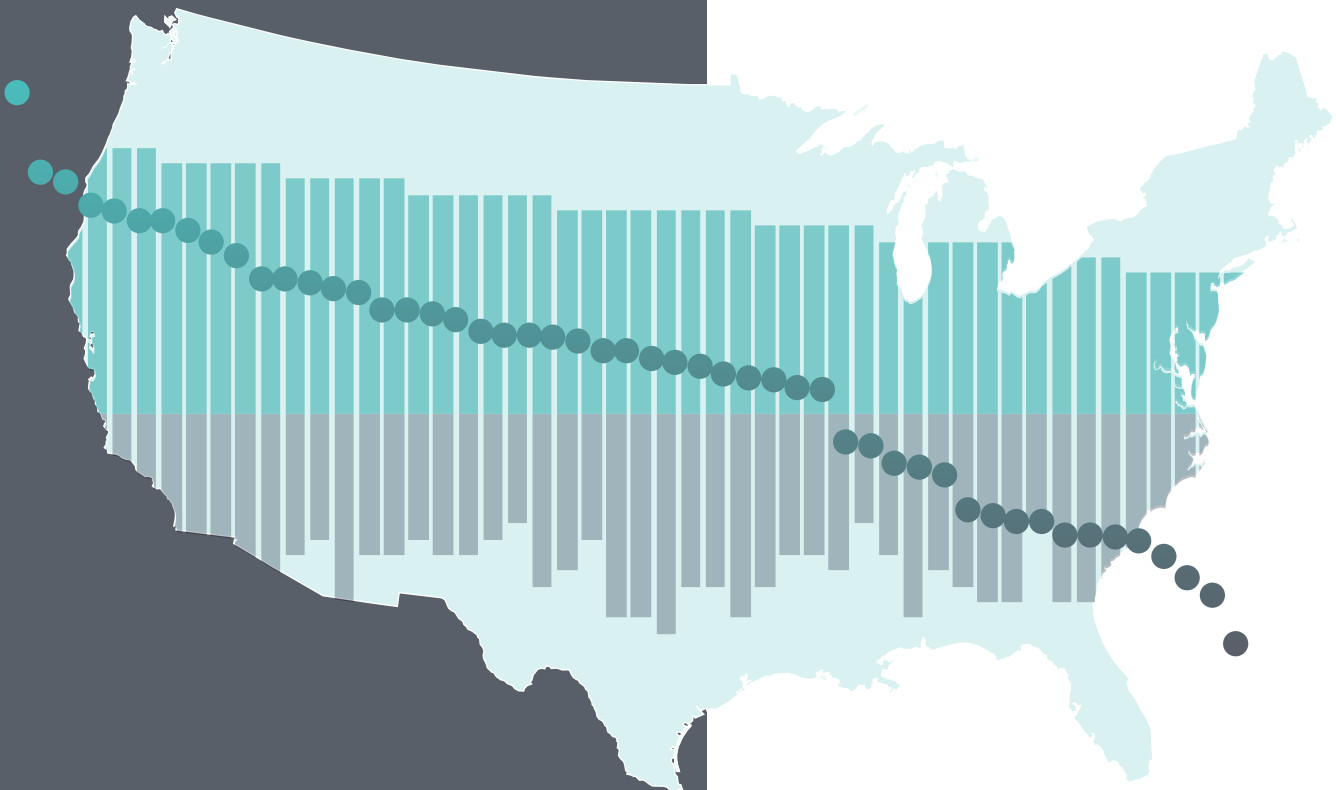
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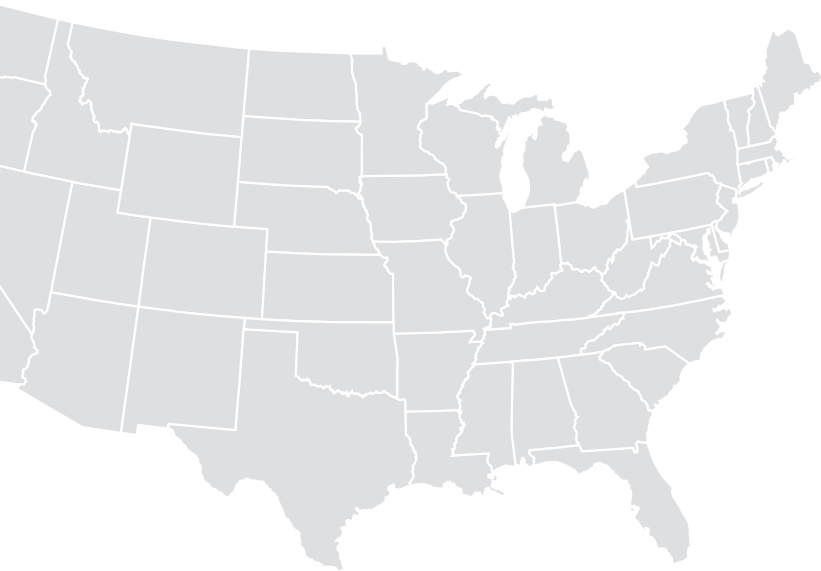
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2020

Scorecard on State Health System Performance

INTRODUCTION

The COVID-19 pandemic has disrupted health care around the globe. In the United States, where it has claimed the lives of more than 185,000 people, health systems in every state have been stretched — in some cases severely.

The novel coronavirus has exposed and exacerbated existing weaknesses that have long been the focus of the Commonwealth Fund's *Scorecard on State Health System Performance*. First, because most Americans get their health insurance through an employer, recent job losses have widened coverage gaps that existed prior to the crisis. The Urban Institute projects that 10 million people will lose their employer coverage by year's end, leaving 3.5 million uninsured.¹ The loss of job-based coverage has also brought into sharp relief the impact of states' decisions not to expand Medicaid eligibility for low-income residents; 12 states have yet to expand their programs as allowed under the Affordable Care Act (ACA).²

Second, Black, Latino, and other communities of color, already more likely to be uninsured, have been disproportionately burdened by COVID-19 and the related economic fallout. Systemic racial and ethnic inequities in health care access and quality have contributed to higher hospitalization and mortality rates from COVID-19 among Black, Latino, American Indian, and Alaska Native individuals, among others.

Third, the pandemic has exposed the vulnerability of health providers reliant on the fee-for-service payment system. Many are facing steep revenue losses and the threat of closure as social-distancing restrictions, fear, and a nose-diving economy have driven down both the supply and demand for routine and elective care.³

Finally, the country faces many unanswered questions on the extent to which COVID-19 and the ongoing economic fallout will contribute to suicides, deaths from alcohol and substance use, and further erosion of Americans' life expectancy.



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ABOUT THE 2020 STATE SCORECARD

The Commonwealth Fund's *2020 Scorecard on State Health System Performance* assesses all 50 states and the District of Columbia on 49 measures of access to health care, quality of care, service use and costs of care, health outcomes, and income-based health care disparities.

COVID-19. The 2020 Scorecard documents state-level variation in U.S. health care performance prior to COVID-19's emergence. The report draws on the most currently available, comprehensive, state-level data, which unfortunately lags in this rapidly evolving environment. Still, the report provides important state-specific context for discussing the pandemic's implications.

What's New? The 2020 Scorecard introduces new performance measures:

- State-based public health spending.
- Primary care spending among Medicare beneficiaries and those with employer coverage.

Also included are data on racial and ethnic inequity, focusing on the disparity between white people and communities of color for a subset of indicators spanning health care access, quality, and health outcomes. (These data are referenced throughout the report but are not used to calculate state rankings.)

For the first time, the 2020 Scorecard also reports price information for health services at a state level (not used in state rankings).

See "[Scorecard Methods](#)" for additional information on indicators and ranking approach.

SCORECARD HIGHLIGHTS

Hawaii, Massachusetts, Minnesota, Iowa, and Connecticut are the top-ranked states in the *2020 Scorecard on State Health System Performance*. See here for complete state rankings.

In the following sections, we examine three areas of concern that may be exacerbated by the pandemic:

— Insurance coverage gains associated with the Affordable Care Act (ACA) have stalled, and affordability and out-of-pocket costs are worsening.

— Increased prices for health care services are a major driver of overall spending growth, and this has led to higher costs for consumers in commercial plans.

— Premature deaths from treatable conditions and deaths from suicide, alcohol, and drug overdose continue to impact life expectancy.

Previous Insurance Coverage Gains Have Stalled; Affordability a Major Concern

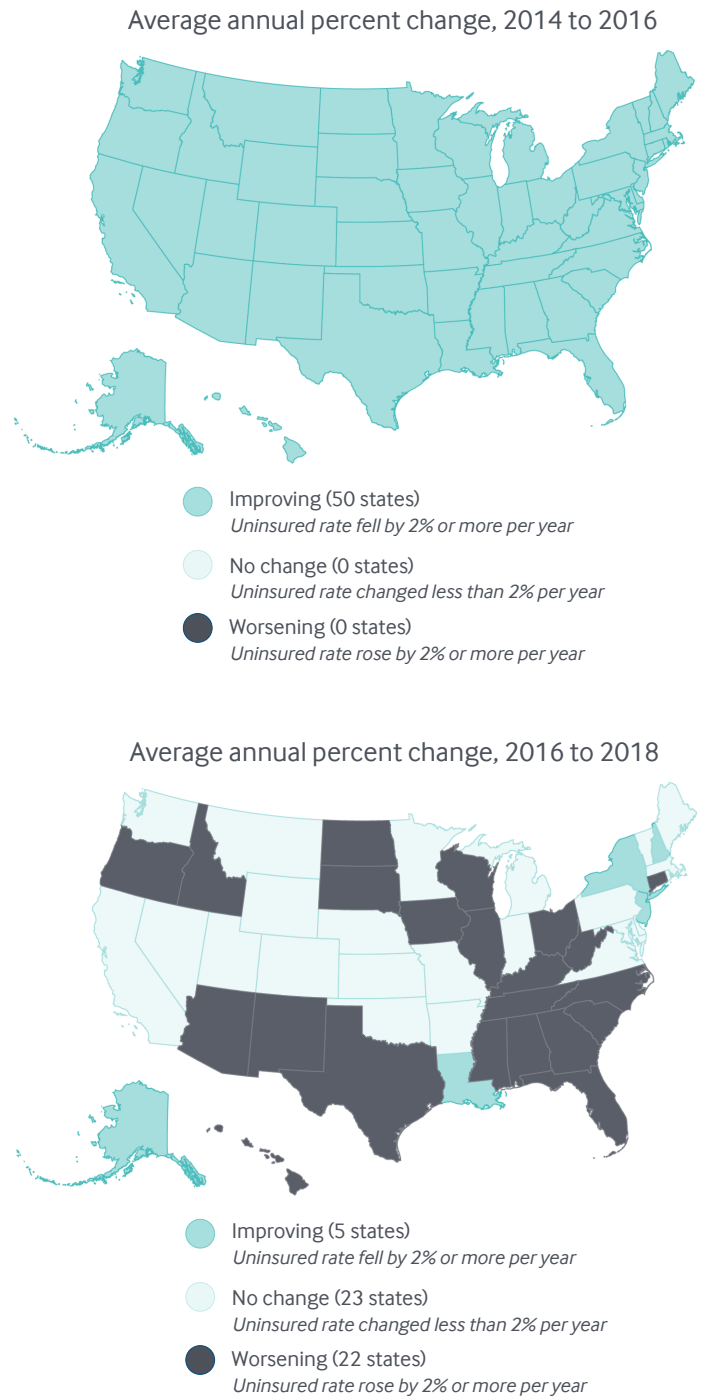
Health insurance in the United States is built around employment, and most Americans under age 65 (around 159 million people) get their insurance through their own job or the job of a family member.⁴ The ACA's subsidized coverage expansions were designed to fill the gap for people without access to employer health plans, including those who lose their benefits because of job loss. The economic collapse triggered by the coronavirus pandemic is the first recession in which these provisions have been in place to stem job-related coverage losses.

Below we describe the state of coverage before the pandemic, what is known about the number of people who lost employer coverage in the downturn, and the degree to which people found insurance through the ACA's expansions.

Trends in coverage and access. Federal data indicate more than 30 million people were uninsured in 2018, about 30 million fewer than the Congressional Budget Office (CBO) had predicted prior to the ACA's major coverage reforms.⁵ The biggest post-ACA coverage gains in all states occurred between 2014 and 2016. After 2016, gains stalled in 23 states and even began to erode in 22 states (Exhibit 1). The five states whose uninsured rates fell after 2016 had all expanded Medicaid eligibility; they include Alaska and Louisiana, which expanded Medicaid in 2015 and 2016, respectively.

The primary purpose of health insurance is to enable timely access to health care through the reduction of cost barriers. In most states, access improvements post-ACA enactment followed a pattern similar to what was seen for insurance coverage. The share of adults who reported going without care because of cost declined in a majority of states between 2014 and 2016. But after 2016, adults in 21 states experienced little or no improvement on this access measure, and 15 states saw a rise in the share of adults going without care because of cost (Exhibit 2).

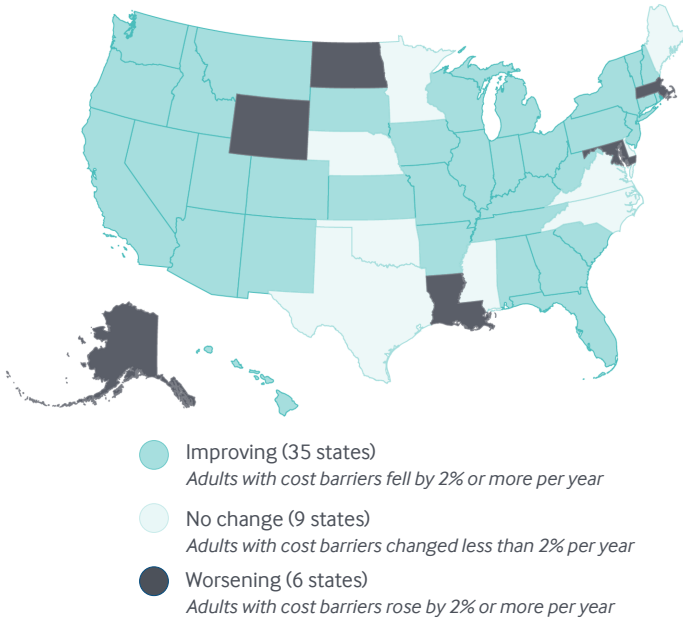
Exhibit 1. Gains in uninsured rates flattened, and even changed direction, after 2016



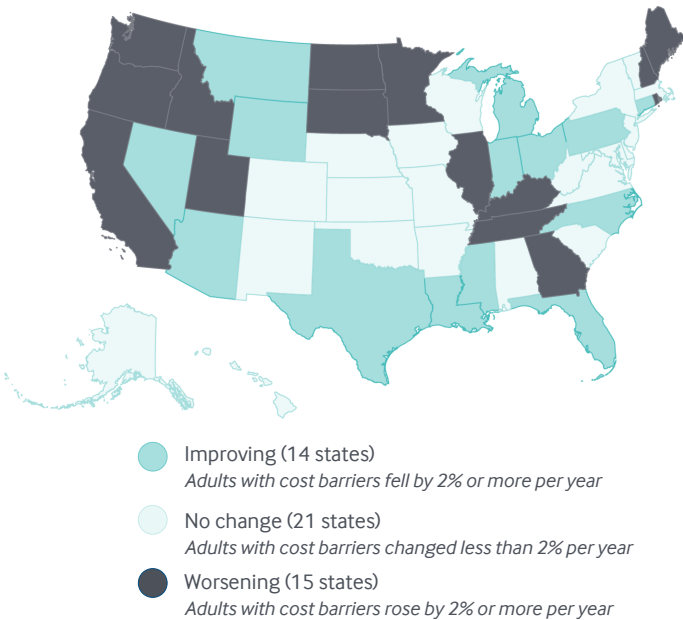
Notes: Nonelderly adults ages 19–64. District of Columbia not included in legend counts.
Data: U.S. Census Bureau, 2014–2018 One-Year American Community Survey, Public Use Microdata Sample (ACS PUMS).

Exhibit 2. Adults in 15 states were more likely to avoid care because of cost concerns after 2016

Average annual percent change, 2014 to 2016



Average annual percent change, 2016 to 2018



Notes: Adults age 18 and older. District of Columbia not included in legend counts.

Data: 2014–2018 Behavioral Risk Factor Surveillance System (BRFSS).

Racial and ethnic inequities in coverage persist and are at risk of worsening.

Before the ACA, the uninsured were disproportionately people with low and moderate incomes and people of color. Research has found that the coverage expansions significantly narrowed both income and racial and ethnic inequities in coverage and access.⁶ However, these improvements largely stalled in most states after 2016. In 2018, the uninsured rate for both Black and Latino adults was at least five percentage points higher than it was for white adults in 17 states (Exhibit 3).

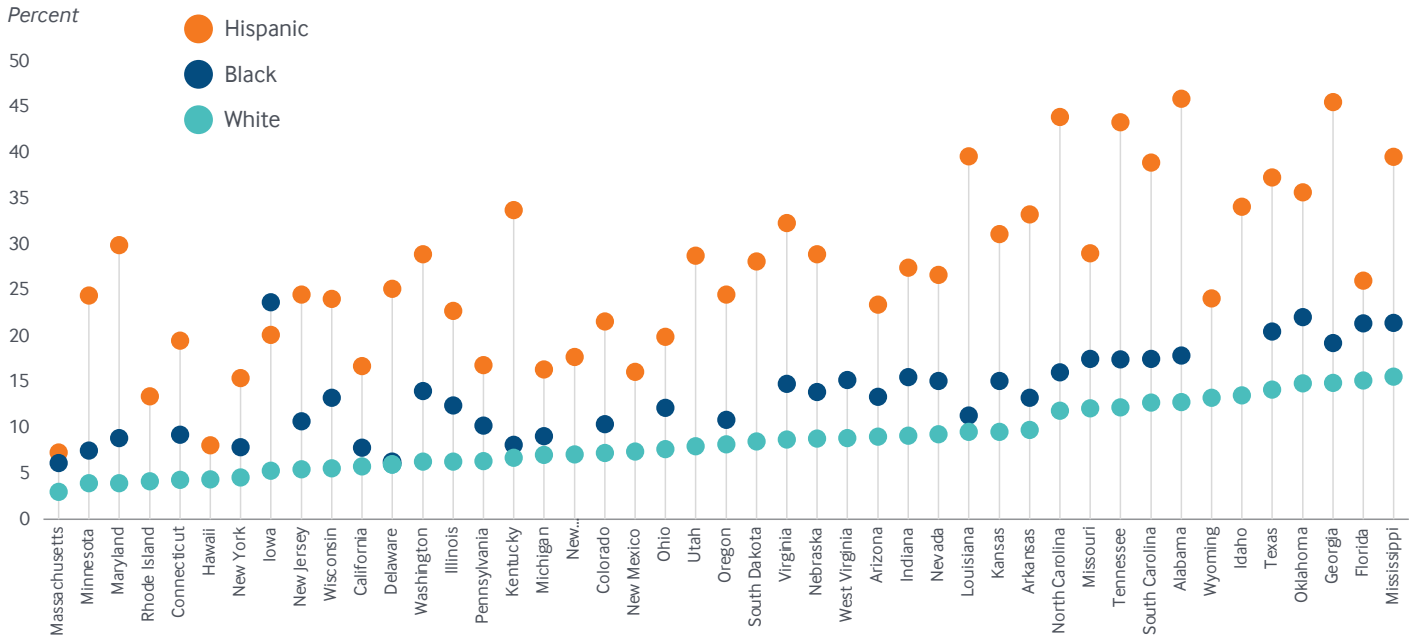
Four principal factors have driven the stalled gains and coverage erosion after 2016:

- Twelve states have yet to expand eligibility for Medicaid; uninsured rates in those states were among the highest in 2018 (Exhibit 4).
- In the individual market, premiums become less affordable as income rises, particularly over the subsidy threshold of 400 percent of the federal poverty level (\$49,960 for an individual and \$103,000 for a family of four in 2020) where people pay the full premium.
- Actions by Congress and the Trump administration related to the individual market and Medicaid programs, along with immigration policies, have reduced enrollment.
- Undocumented immigrants are ineligible for subsidized coverage under the ACA.

Implications of the pandemic for health insurance coverage.

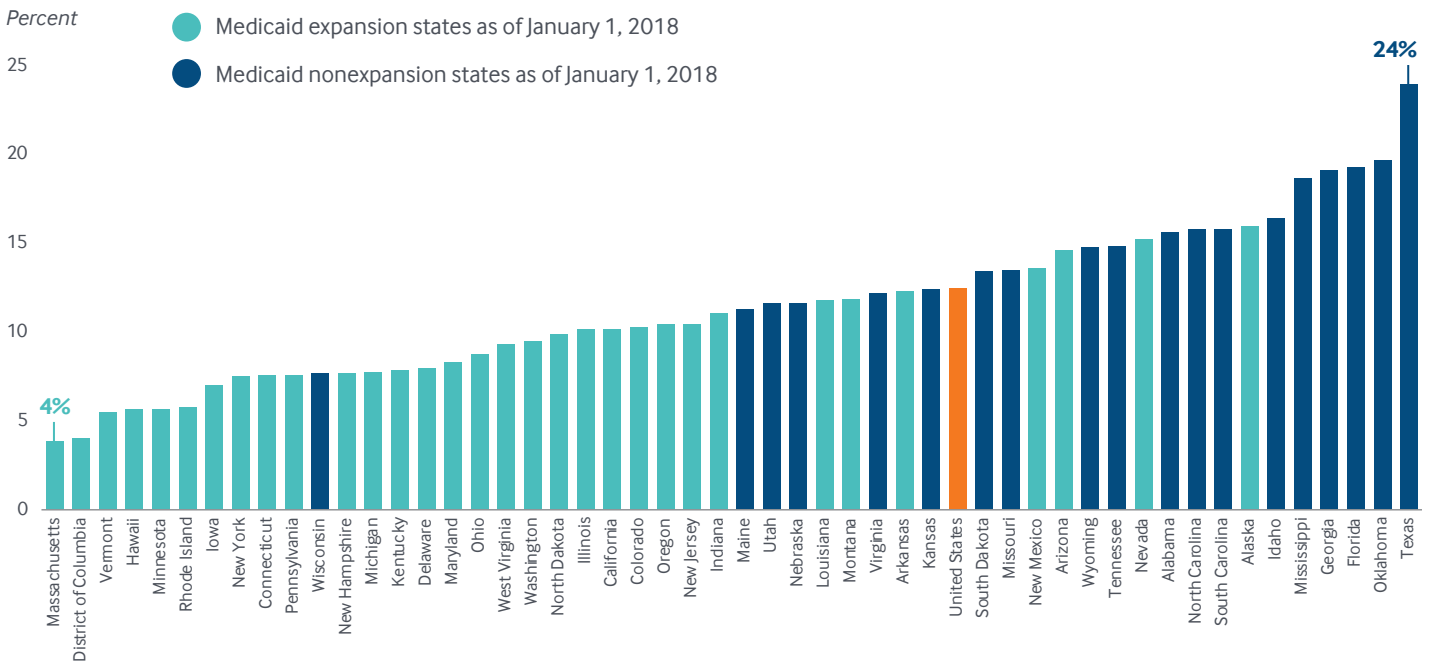
More than 50 million people have lost jobs or been furloughed since March.⁷ By August, the national unemployment rate was 8.4 percent; and as of July, Massachusetts, New York, and Nevada had the highest unemployment rates.⁸ A Commonwealth Fund survey conducted in May 2020 found that about 40 percent of respondents, or their spouses or partners, who experienced job dislocation had coverage through an affected job, and one in five of those affected reported being uninsured.⁹ Because many of the affected jobs were in industries that often do not provide insurance, many respondents (three in 10) were uninsured prior to the pandemic. Black and Latino adults have been more likely to lose jobs during the

Exhibit 3. In 17 states, there was at least a five-point disparity in the adult uninsured rate between white and both Black and Hispanic adults



Notes: States arranged in order of the uninsured rate for white adults. Nonelderly adults ages 19–64. Alaska, Montana, Maine, North Dakota, Vermont, and the District of Columbia do not have sufficient sample size for at least two races or ethnicities. Rhode Island, Hawaii, New Hampshire, New Mexico, Utah, South Dakota, West Virginia, Wyoming and Idaho do not have sufficient sample size for one race or ethnicity.
 Data: U.S. Census Bureau, 2018 One-Year American Community Survey, Public Use Microdata Sample (ACS PUMS).

Exhibit 4. Four of the 12 states that have yet to expand Medicaid had among the highest adult uninsured rates in 2018



Notes: Maine, Virginia, Utah, and Idaho implemented Medicaid expansion after January 1, 2018. Missouri, Nebraska, and Oklahoma have passed but have not yet implemented. Nonelderly adults ages 19–64.
 Data: U.S. Census Bureau, 2018 One-Year American Community Survey, Public Use Microdata Sample (ACS PUMS).

pandemic, but almost half of Black adults and one-third of Latino adults live in states that have not yet expanded Medicaid, leaving them at high risk of staying or becoming uninsured. As of September 2020, more than 35 million people in the United States are estimated to be uninsured.¹⁰ The question is how many people who have lost job-based coverage will enroll in marketplace plans during the open enrollment period that begins on November 1.

Health Care Prices Drive Spending Growth and Rising Costs for Consumers

Health care spending growth is a perpetual policy concern in the United States. High spending threatens the sustainability of public insurance programs and affects premium costs and out-of-pocket cost-sharing for the more than 170 million Americans enrolled in commercial plans.¹¹ Fee-for-service payment models have left many providers financially vulnerable in the wake of social-distancing restrictions and lower demand for care.

Short-term revenue losses among providers will certainly rebound, but the long-term impact of the pandemic on providers' bottom line is uncertain.¹² To the extent that volumes remain lower than once expected or the supply of providers decreases within markets, providers may raise prices.

Prices paid by commercial insurers are higher than Medicare rates for similar services.

Researchers and policymakers have been able to track spending for health care services, but only recently have they been able to break down total spending estimates into utilization and price-per-service components. Estimates suggest that about three-quarters of the growth in health care spending between 2014 and 2018 can be attributed to price increases.¹³

A recent state analysis compared prices paid by commercial employer-sponsored plans for inpatient hospital services to Medicare payment rates for similar services. It found significant variation, with commercial insurers paying between 140 percent of Medicare prices in Hawaii and 274 percent in Oregon (Exhibit 5).¹⁴ Prices can vary for a number

of reasons. In Rhode Island, for example, where prices are 158 percent of Medicare, the state drove down prices through insurer rate regulation.¹⁵ The presence of market-dominant, not-for-profit insurers with strong price negotiation leverage also can work to mitigate higher prices.

High prices have consequences. When health providers charge private insurers higher prices, insurers pass along those higher costs to employers by increasing premiums. Ultimately, employees bear the burden through higher premium contributions, deductibles, out-of-pocket medical costs, and reduced wages. States where providers charge the highest prices also tended to have the highest average premium costs in terms of both employer and employee contributions (Exhibit 6).

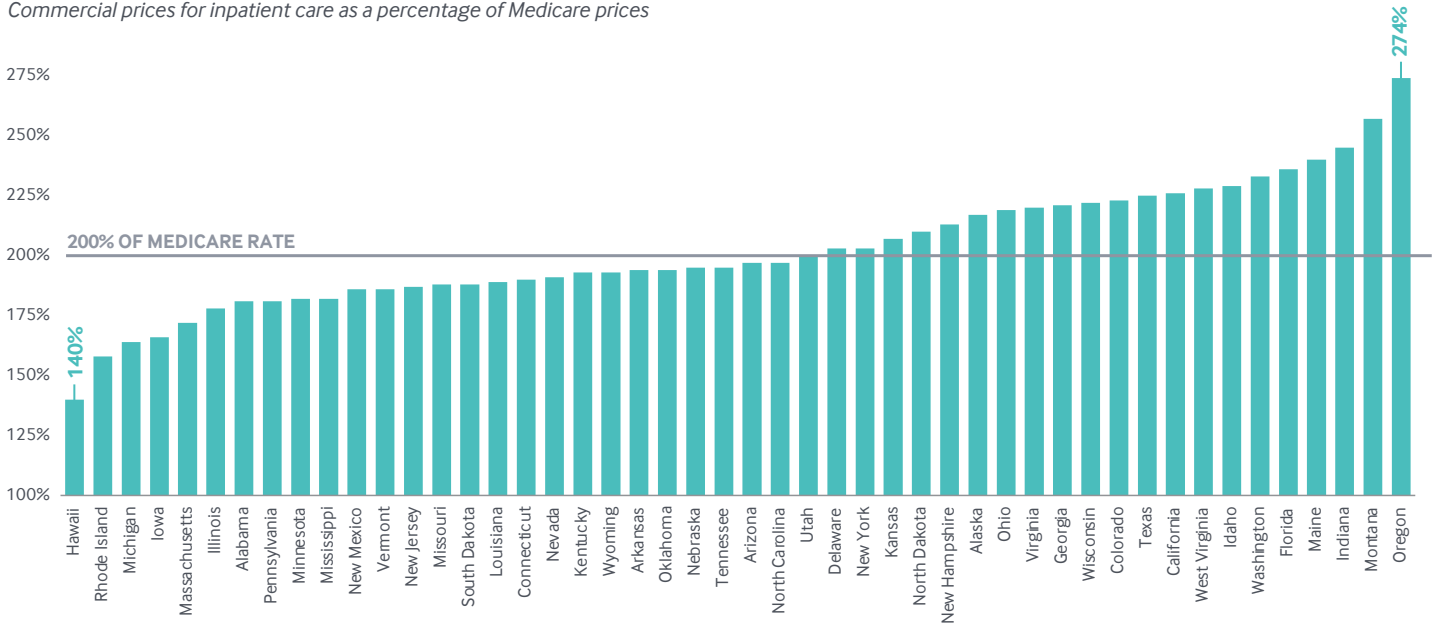
U.S. investment in primary care is low and could be further weakened by the pandemic.

The COVID-19 pandemic fueled a 70 percent drop in in-person outpatient visits in March 2020, including a 50 percent drop for primary care providers. This was the result of social distancing restrictions, public fear of the virus, and safety precautions taken by providers.¹⁶ Visit volumes have rebounded somewhat, and that will continue. Still, primary care's vulnerability to steep demand and revenue declines is concerning.

Pre-COVID data on primary care spending can inform our eventual understanding of the outbreak's impact. Among Medicare beneficiaries in 2017, for example, primary care accounted for just under 6 percent of all medical spending, translating to about \$712 per beneficiary per year nationally. State rates ranged from less than 5 percent in Rhode Island and New Hampshire to more than 7 percent in Tennessee (Exhibit 7). American investment in primary care was already low relative to international benchmarks. Among Medicare beneficiaries, for example, primary care spending amounts to only about half the OECD country average of 12 percent.¹⁷ There is significant uncertainty about whether the combined effects of the pandemic and economic collapse will further drive down primary care use. If that scenario materializes, forgone care and subsequent gaps in chronic disease management will contribute to avoidable illness and higher non-COVID mortality.¹⁸

Exhibit 5. Prices for hospital inpatient care paid by commercial insurers are higher than Medicare prices in every state

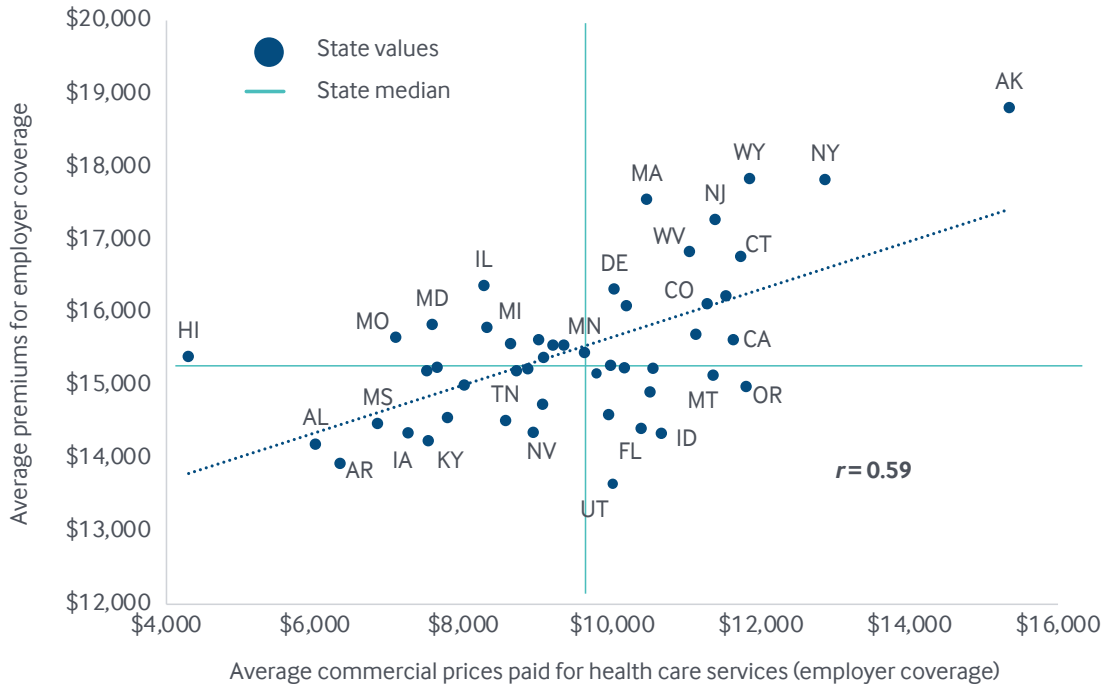
Commercial prices for inpatient care as a percentage of Medicare prices



Note: Data not available for District of Columbia, Maryland, or South Carolina.

Data: 2017 IBM Watson Health MarketScan Database and Medicare’s Healthcare Cost Report Information System (HCRIS); Michael E. Chernew, Andrew L. Hicks, and Shivani A. Shah, “Wide State-Level Variation in Commercial Health Care Prices Suggests Uneven Impact of Price Regulation,” Health Affairs, published online May 4, 2020.

Exhibit 6. Higher premiums for employer coverage are associated with higher commercial prices for health care services, 2017

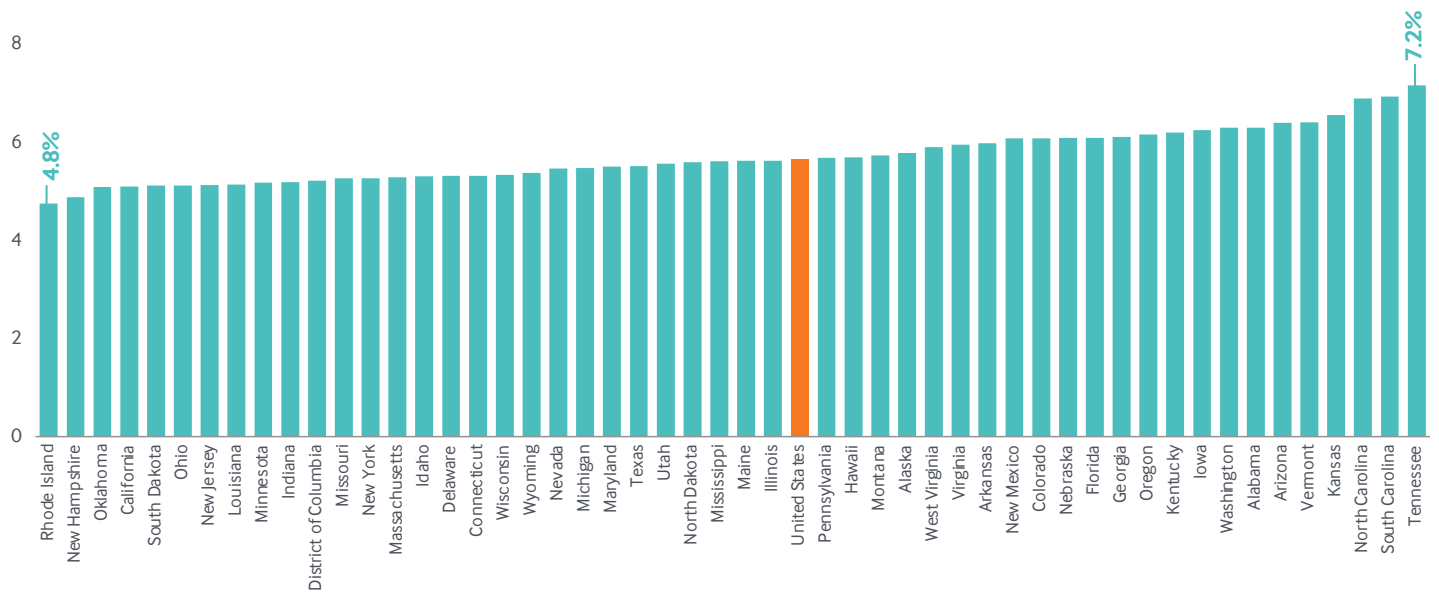


Notes: The x-axis and y-axis do not start at \$0. State abbreviations left off some data points clustered near the U.S. average for legibility.

Data: *Prices*: 2017 IBM Watson Health MarketScan Database, analysis by Michael Chernew, Harvard Medical School. *Premiums*: Medical Expenditure Panel Survey—Insurance Component (MEPS-IC, 2017).

Exhibit 7. The percentage of total Medicare spending on primary care is low throughout the U.S., but it varies by more than 50 percent across states

Percent of each state's total Medicare spending on primary care



Data: Centers for Medicare and Medicaid Services, 2017 Limited Data Set (LDS) 5% sample. Analysis by Westat.

Health Outcomes

The COVID-19 pandemic has triggered a public health and economic crisis at a time when American health outcomes were already moving in the wrong direction. Decades-long gains in life expectancy reversed after 2014, and adults of all races and ethnicities have been dying at increased rates.¹⁹ These trends are likely to continue in the wake of more than 185,000 COVID-19 deaths, and they may be exacerbated by the deep decline in the use of health care services unrelated to the disease and the greatest increase in unemployment since the Great Depression.

Deaths from suicide, alcohol, and drug overdose. Deaths from suicide, alcohol, and drug overdose have all climbed over the past few decades and have been an important contributor to recent mortality trends (Exhibit 8).²⁰ These types of death differ significantly in terms of regional impact (Exhibit 9).

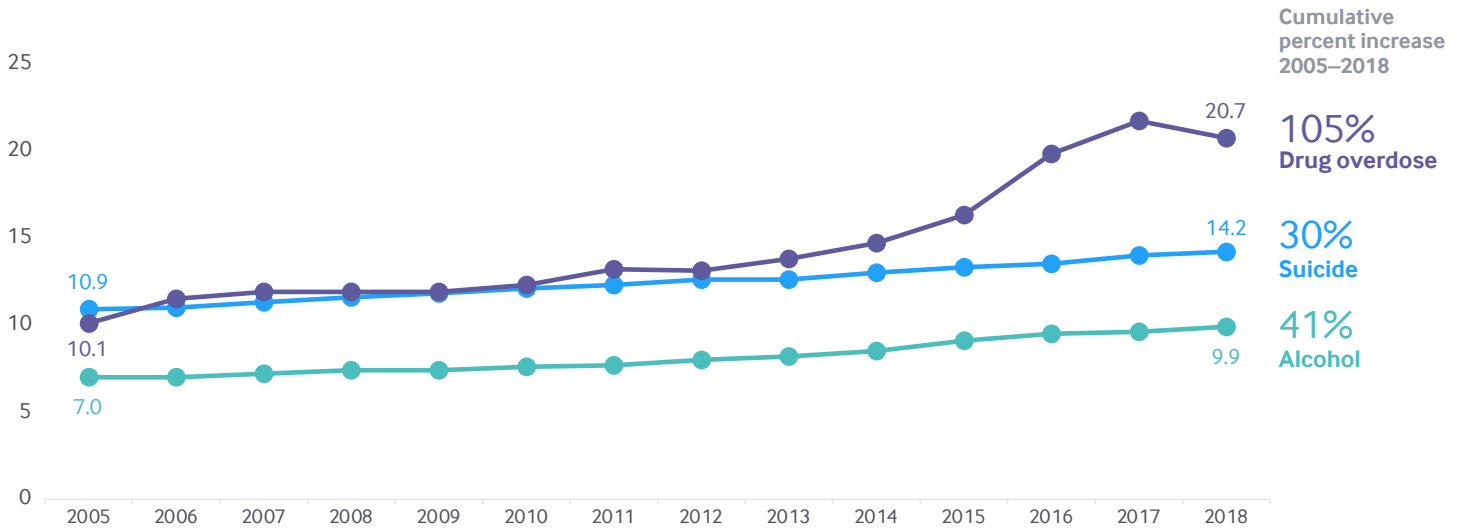
Opioids have been a critical driver, particularly since 2012, when the impact of synthetic opioids like fentanyl expanded. Since then, synthetic opioid overdoses have grown from 6 percent of all overdose deaths to nearly half

(Exhibit 10). In 2018, the U.S. reported its first significant decline in drug overdose deaths in decades; however, the rate of synthetic opioid overdose deaths increased another 10 percent. Ten states and the District of Columbia attributed more than 20 deaths per 100,000 people to this cause. Unfortunately, preliminary estimates from the Centers for Disease Control and Prevention also show that drug overdose deaths jumped again in 2019, despite recent federal support and state efforts (preliminary 2019 data not shown in Exhibit 8).²¹

Research indicates that higher local unemployment or economic shocks may be associated with increased overdose deaths from opioids or other drugs, as well as poor mental health.²² Experts have warned about potential consequences from COVID-19 on so-called deaths of despair, and recent reports indicate increases in overdose deaths in 2020.²³ The 38 states that, along with the District of Columbia, have expanded their Medicaid programs are much better prepared to address a pandemic-related rise in substance use. Studies have found that the ACA's Medicaid expansion is associated with improvement in access to mental health care,²⁴ greater access to medication-assisted treatment,²⁵ and fewer opioid-related overdose deaths and hospitalizations.²⁶

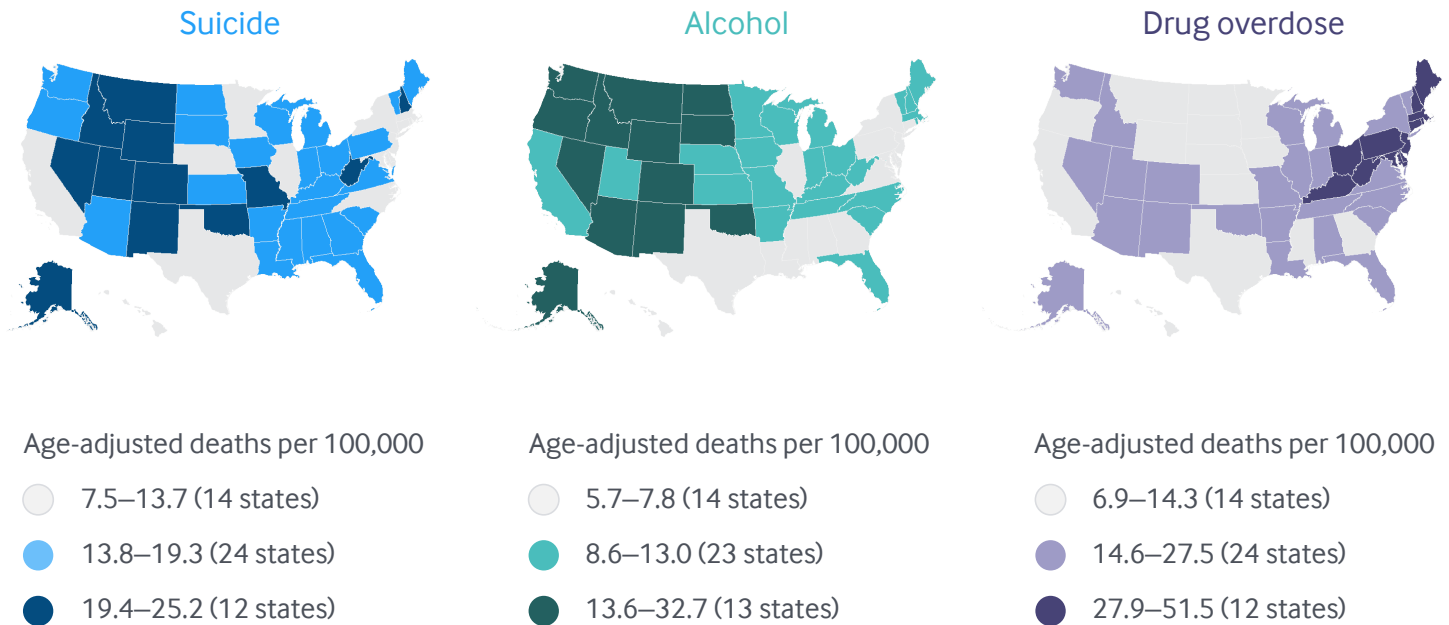
Exhibit 8. Suicide and alcohol deaths rose modestly in 2018. Though drug overdoses dropped for the first time in decades, preliminary 2019 data shows that they have jumped back up

Age-adjusted deaths per 100,000



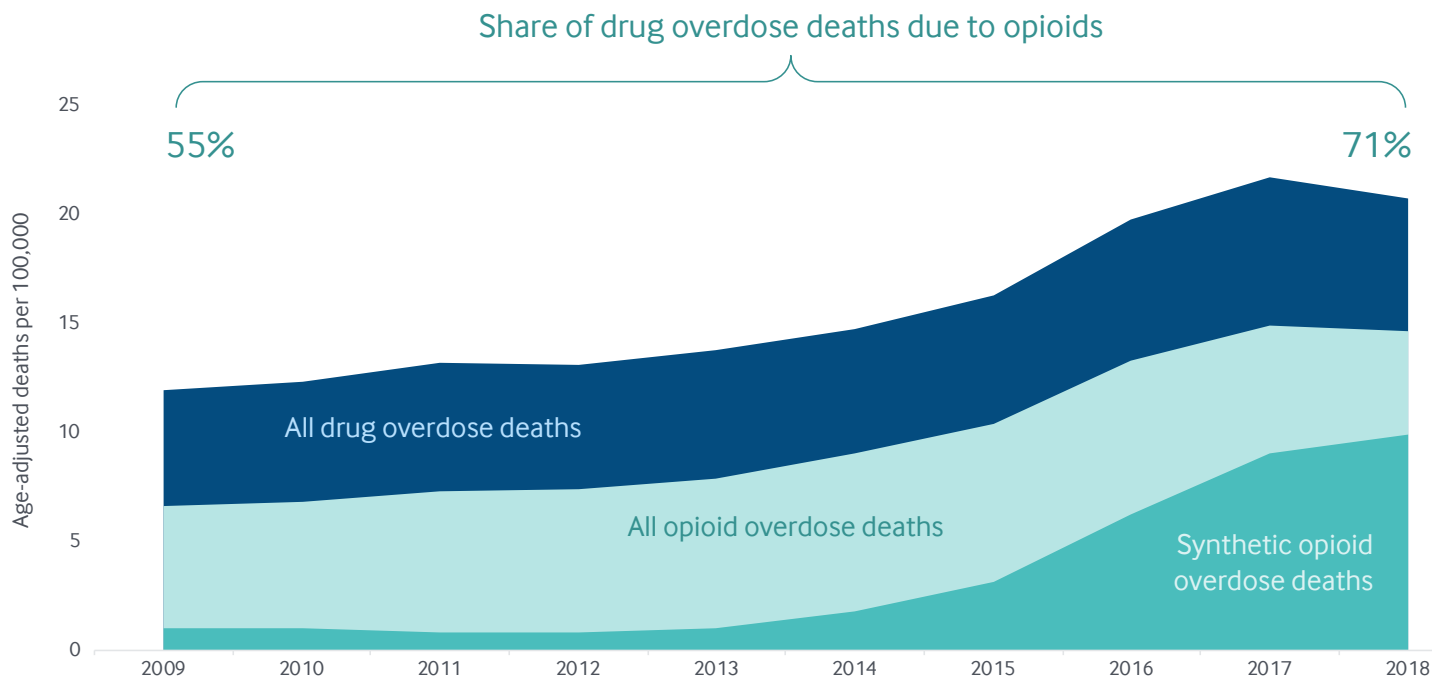
Note: Preliminary 2019 drug overdose data from the CDC is not included in this exhibit (see text).
 Data: 2005–2018 National Vital Statistics System (NVSS), via CDC WONDER.

Exhibit 9. Deaths from suicide, alcohol, and drug overdoses display significant regional variation



Note: District of Columbia not included in legend counts.
 Data: 2018 National Vital Statistics System (NVSS), via CDC WONDER.

Exhibit 10. Opioids contributed heavily to the overall rise in overdose deaths between 2009 and 2018, largely due to synthetic opioids



Note: Data categories are overlaid, not stacked/aggregated; synthetic opioid deaths are from synthetic opioids other than methadone.

Data: 2009–2018 National Vital Statistics System (NVSS), via CDC WONDER.

Premature deaths from treatable conditions.

Americans can expect to live a shorter life today than they did in 2014.²⁷ A number of factors contribute to this decline, including deaths from suicide, alcohol, and drug overdose, but another is premature deaths from health care–treatable conditions — also known as mortality amenable to health care. The Scorecard tracks deaths before age 75 from acute and chronic causes that are considered treatable when they are identified early and well managed; examples include appendicitis, certain cancers, heart disease, and diabetes, among others. Higher mortality rates in these categories point to deficiencies in the health system.

Between 2012–2013 and 2016–2017, these mortality rates either increased slightly or were unchanged in 37 states.²⁸ Oklahoma, Arkansas, New Mexico, Kentucky, and Mississippi saw the biggest rise in premature deaths. States with the highest premature death rates also have lower life expectancies (Exhibit 11), and recent research linked life expectancy disparities to specific state policy choices.²⁹

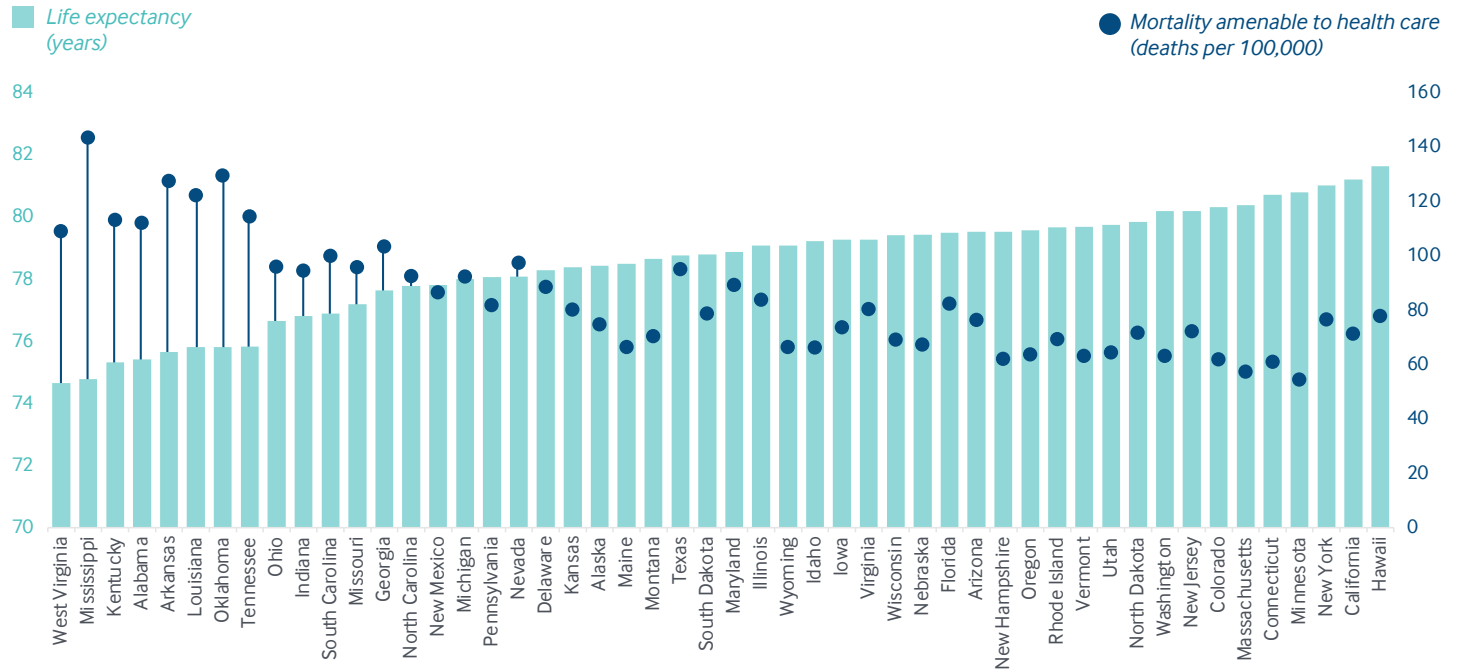
Black Americans, who have suffered disproportionately from the pandemic, are much more likely to die from some

of these conditions, several of which are key risk factors for COVID-19.³⁰ Significant racial disparities in mortality amenable to health care exist in nearly every state (Exhibit 12). The pandemic threatens to exacerbate these trends even further through the disruption of primary care and other critical health services. Early data suggest elevated mortality from non-COVID-19 causes.³¹

Public health investment. States are navigating unprecedented public health threats from COVID-19, as well as economic disruptions that have shrunk the tax revenues used to fund critical health and social services. But historically, most states have made only modest investments in their public health systems. Between 2014–2015 and 2017–2018, per capita public health spending was flat in most states, and increases were modest in the states where funding did rise (Exhibit 13).

Not only is public health funding low relative to other health care spending, but public health dollars are stretched thin. Competing for funding are various initiatives for emergency preparedness, disease prevention, promoting healthy behaviors, and, increasingly, fighting the opioid epidemic.³²

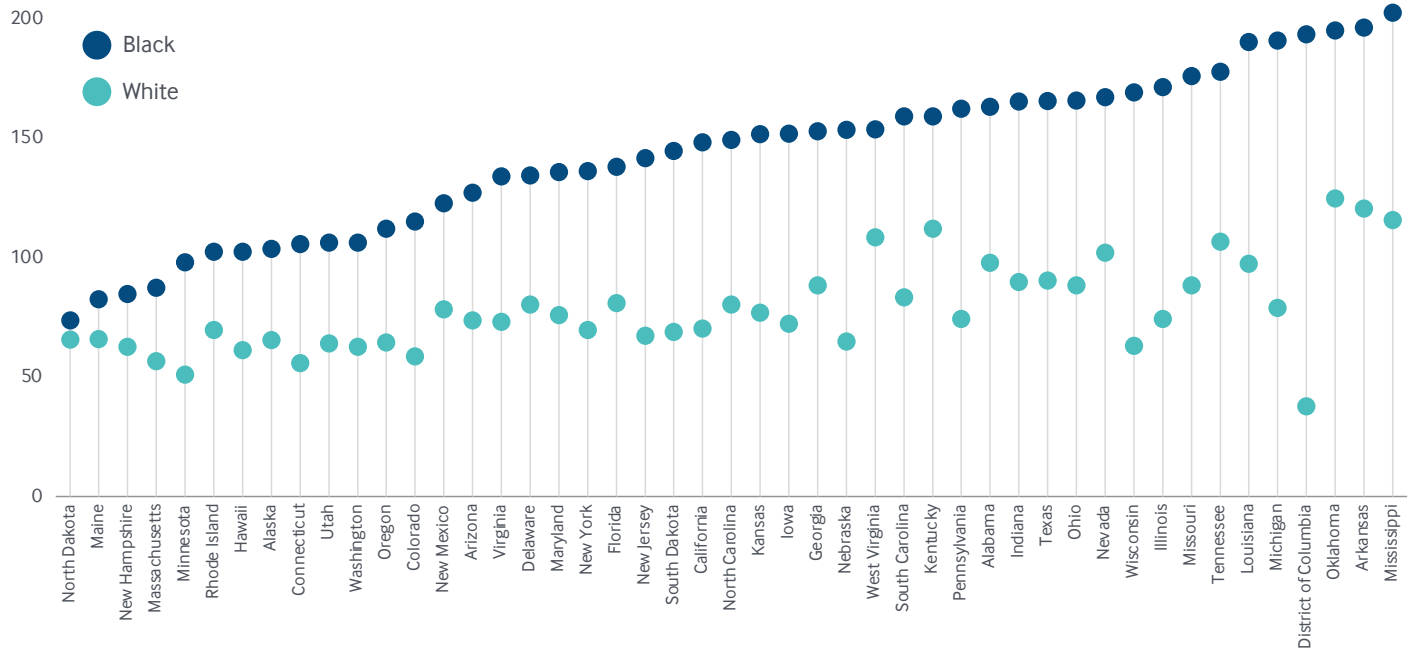
Exhibit 11. Premature deaths from treatable conditions are closely linked to the wide variation in state life expectancy



Data: *Life Expectancy*: United States Mortality Database, University of California, Berkeley; available at usa.mortality.org (data shown on 2020-05-11 12:22:03). *Mortality Amenable to Health Care*: Centers for Disease Control and Prevention, 2016 and 2017 National Vital Statistics System (NVSS), All-County Micro Data, Restricted Use Files.

Exhibit 12. In every state, Black people are more likely to die early from treatable conditions, 2016–17

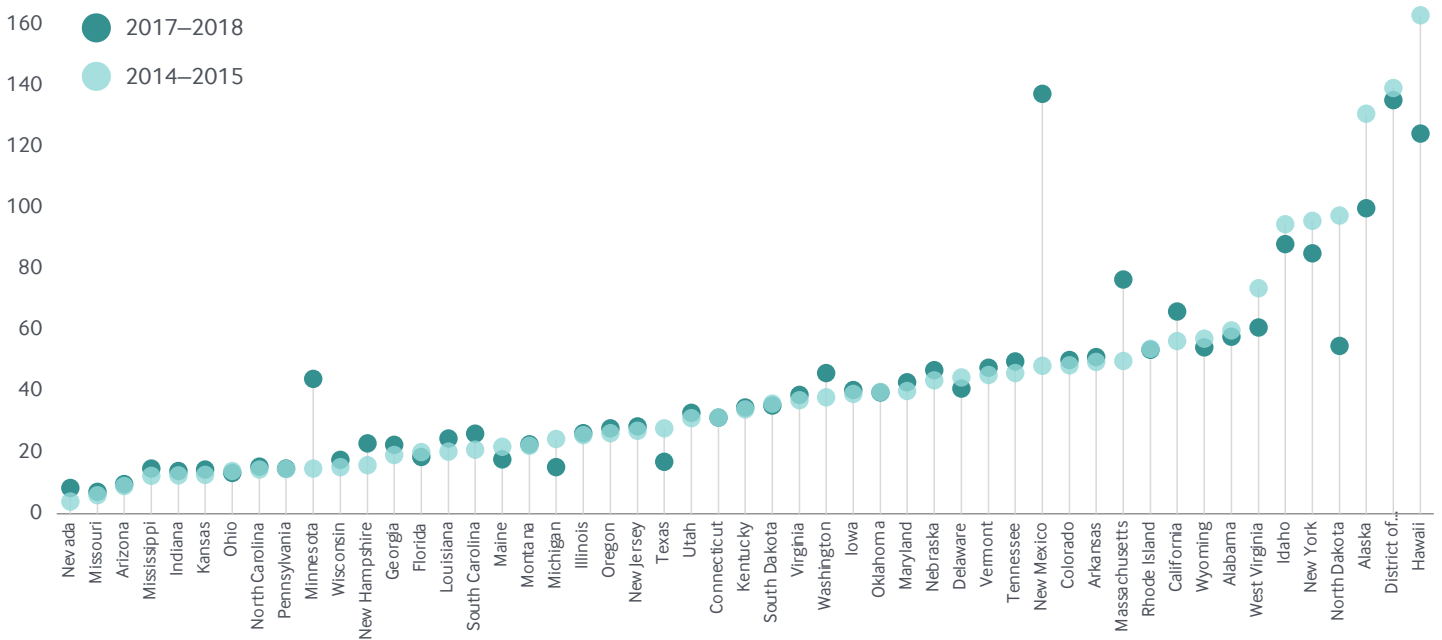
Mortality amenable to health care: deaths per 100,000 population



Notes: Data for Black individuals not available for Idaho, Montana, Vermont, or Wyoming. States arranged in rank order based on Black mortality rates. Data: CDC 2016 and 2017 National Vital Statistics System (NVSS), All-County Micro Data, Restricted Use Files.

Exhibit 13. Most states have seen modest changes in per capita public health spending in recent years

Per capita state-based public health spending



Notes: Estimates here include only state-based funding; federal public health funds are not included.
 Data: 2017–2018 estimates: Trust for America’s Health, *The Impact of Chronic Underfunding on America’s Public Health System: Trends, Risks, and Recommendations*, 2019 (TFAH, Apr. 2019); 2014–2015 estimates: Trust for America’s Health, *Investing in America’s Health: A State-by-State Look at Public Health Funding and Key Health Facts* (TFAH, Apr. 2016).

Conclusion

The 2020 Scorecard offers the latest available federal data on the state of the U.S. health system before it headed into the most severe public health crisis and economic collapse in modern times. It also highlights health system weaknesses that have left the U.S. far less prepared than other high-income countries to cope with public health threats like COVID-19. These weaknesses include:

- a health care delivery system that is highly unequal in its care of people of color and those with low and moderate incomes.
- an insurance system that still leaves millions without coverage.
- exorbitant commercial insurance prices that fuel growth in health spending and expose people to high premiums and deductibles, even as many make wage concessions to keep their employer benefits.
- an inadequate primary care system.
- declining life expectancy.

Some regions lag even further. The Scorecard also highlights the fact that the U.S. health system is characterized by considerable geographic variation in each of these areas. Some regions of the U.S. not only lag other regions on health performance indicators, but they also lag other economically advanced countries even further than national averages suggest.

For example, uninsured rates ranged from 4 percent of the adult population in the District of Columbia and Massachusetts to a high of 24 percent in Texas. These differences reflect demographic differences and U.S. immigration policy, but also political choices in the implementation of federal law. If states continue to be left to address the coronavirus pandemic with little federal leadership, performance gaps will only widen as the health and economic crises persist.

A looming court decision could further disrupt the health system.

Moreover, looming on the U.S. Supreme Court's 2020–2021 docket is *California v. Texas* (originally *Texas v. Azar*), in which a group of Republican-led states, with support from the Trump administration, is seeking to declare the entirety of the Affordable Care Act unconstitutional. Given the increased reliance of Americans on Medicaid and the marketplaces in the wake of job-based coverage losses over the past six months, a decision by the Supreme Court to overturn the law could result in more than 50 million uninsured people.

Because the ACA touches nearly every corner of the health system — not just coverage — such a decision also would trigger severe disruptions throughout a health system already severely compromised by the pandemic.

National gains if all states achieved top rates* of performance:

18 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

24 million

more adults with a usual source of care

11 million

more adults receiving recommended cancer screenings

632,000

more young children receiving all recommended vaccines

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

Daunting tasks for the federal government in 2021. The presidential election is just two months away. The federal government will face the daunting task of both controlling the pandemic and rebuilding a health system that had already been underperforming and unequal. The collection and analysis of new data on the effects of the pandemic will be critical to the ability of federal and state governments to craft evidence-based policy to move the health system forward and bring lagging states closer to the front of the pack.

We have amassed the most recent federal data as a baseline, but they are egregiously lagged. Timely data are needed in the critical areas of insurance coverage, racial and ethnic inequity in access and care, causes of mortality and life expectancy, provider performance during the pandemic, and more. And this information is needed quickly.

National gains if all states achieved top rates* of performance:

9 million

more children would receive recommended annual medical and dental visits

1 million**

fewer hospital readmissions

10 million**

fewer emergency department visits for nonemergency care or conditions treatable with primary care

91,000

fewer deaths before age 75 from treatable diseases

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

**** Estimate based on working-age population, ages 18–64, with employer-sponsored insurance, and Medicare beneficiaries age 65 and older.**

SCORECARD METHODS

The Commonwealth Fund's *2020 Scorecard on State Health System Performance* evaluates states on 49 performance indicators grouped into four dimensions:

- **Access and Affordability (7 indicators):** includes rates of insurance coverage for children and adults, as well as individuals' out-of-pocket expenses for health insurance and medical care, cost-related barriers to receiving care, and receipt of dental visits.
- **Prevention and Treatment (15 indicators):** includes measures of receipt of preventive care and needed mental health care, as well as measures of quality in ambulatory, hospital, postacute, and long-term care settings.
- **Potentially Avoidable Hospital Use and Cost (14 indicators; including several measures reported separately for distinct age groups):** includes indicators of hospital and emergency department use that might be reduced with timely and effective care and follow-up care, as well as estimates of per-person spending among Medicare beneficiaries and working-age adults with employer-sponsored insurance.
- **Healthy Lives (13 indicators):** includes measures of premature death, health status, health risk behaviors (including smoking and obesity), tooth loss, and state public health funding.

INCOME DISPARITY DIMENSION. This year, the Scorecard reports on performance differences within states associated with individuals' income level for 11 of the 49 indicators where data are available to support a population analysis by income; these indicators span three of the four dimensions. For each indicator, we measure the difference between rates for a state's low-income population (generally under 200% of the federal poverty level) and higher-income population (generally more than 400% of the federal poverty level). States are ranked on the relative magnitude of the resulting disparities in performance.

The income disparity indicators are different than those used in the 2019 Scorecard; hence, these disparity rankings are not strictly comparable to those published previously.

RACE EQUITY DATA. This year, the Scorecard includes racial and ethnic equity data based on within-state differences between racial and ethnic communities. These data are included for informational purposes but are not ranked.

We've included racial and ethnic differences in 10 of the 49 indicators where data are available to support a population analysis by race and/or ethnicity; these indicators span three of the four dimensions. Rates for all available races and ethnicities can be found in [Appendix H1](#).

GUIDING PRINCIPLES. The following principles guided the development of the Scorecard:

Performance Metrics. The 49 metrics selected for this report span health care system performance, representing important dimensions and measurable aspects of care. Where possible, indicators align with those used in previous state Scorecards. Several indicators used in previous versions of the Scorecard have been dropped either because all states improved to the point where no meaningful variations existed (for example, measures that assessed hospitals on processes of care) or the data to construct the measures were no longer available (for example, hospitalizations for children with asthma). New indicators have been added to

the Scorecard series over time in response to evolving priorities. Refer to “[About the 2020 State Scorecard](#)” for more detail on changes in indicators.

Measuring Change over Time. We were able to track performance over time for 43 of the 49 indicators. Not all indicators could be trended because of changes in the underlying data or measure definitions.

There were generally five years between indicators’ baseline and current-year data observation, though the starting and ending points depended on data availability (see [Appendix A1](#)).

We considered a change in an indicator’s value between the baseline and current-year data points to be meaningful if it was at least one-half (0.5) of a standard deviation larger than the indicator’s combined distribution over the two time points — a common approach used in social science research. We did not formally evaluate change over time for indicators in the income dimension.

Data Sources. Indicators draw 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 A1](#) provides detail on the data sources and time frames.

Scoring and Ranking Methodology. For each indicator, a state’s standardized z-score is calculated by subtracting the 51-state average (including the District of Columbia as if it were a state) from the state’s observed rate, and then dividing by the standard deviation of all observed state rates. States’ standardized z-scores are averaged across all indicators within the performance dimension, and dimension scores are averaged into an overall

score. Ranks are assigned based on the overall score. This approach gives each dimension equal weight and, within each dimension, it weights all indicators equally. This method was introduced in the 2018 Scorecard, and it better accommodates the different scales used across Scorecard indicators (for example, percentages, dollars, and population-based rates). This method also aligns with methods used in the Commonwealth Fund’s international health system rankings.

As in previous Scorecards, if historical data were not available for a particular indicator in the baseline period, the current-year data point was used as a substitute, thus ensuring that ranks in each time period were based on the same number of indicators.

REGIONAL COMPARISONS. The Scorecard groups states into the eight regions used by the Bureau of Economic Analysis to measure and compare economic activity. The regions are: Great Lakes (Illinois, Indiana, Michigan, Ohio, Wisconsin); Mid-Atlantic (Delaware, District of Columbia, Maryland, New Jersey, New York, Pennsylvania); New England (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont); Plains (Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota); Rocky Mountain (Colorado, Idaho, Montana, Utah, Wyoming); Southeast (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, Tennessee, Virginia, West Virginia); Southwest (Arizona, New Mexico, Oklahoma, Texas); and West (Alaska, California, Hawaii, Nevada, Oregon, Washington).

2020 State Rankings on Health System Performance

Which states lead the overall rankings?

Hawaii, Massachusetts, Minnesota, Iowa, and Connecticut

Which states are ranked at the bottom?

West Virginia, Missouri, Nevada, Oklahoma, and Mississippi

What are the leading states by region?

(See [Scorecard Methods](#) for states in each region)

Great Lakes Wisconsin

Mid-Atlantic New York

New England Massachusetts

Plains Minnesota

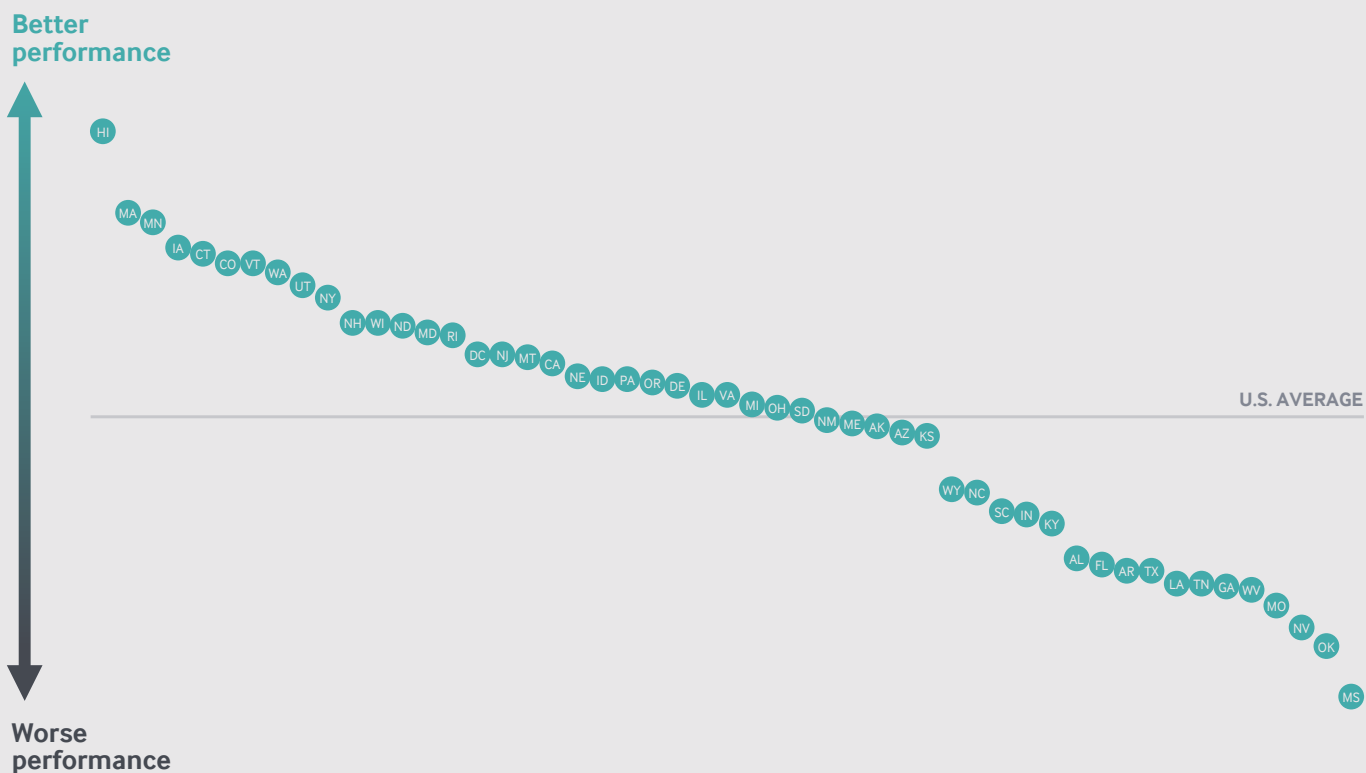
Rocky Mountain Colorado

Southeast Virginia

Southwest New Mexico

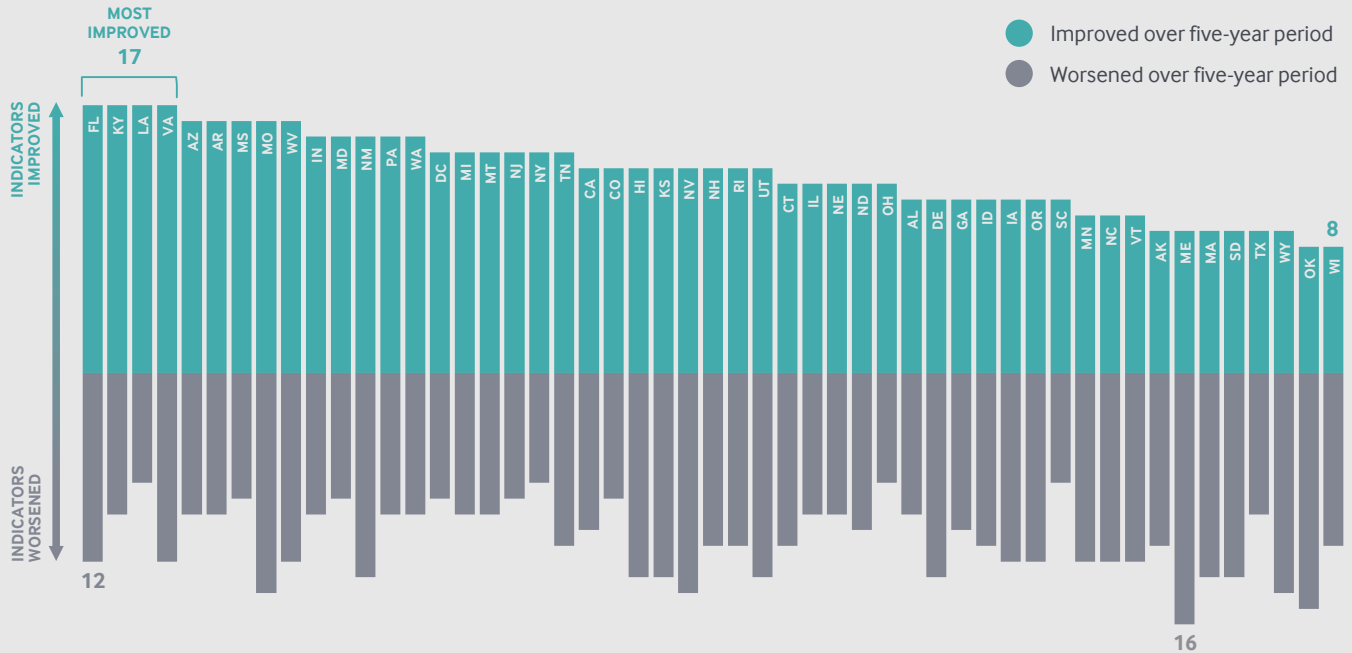
West Hawaii

Overall health system performance (prior to COVID-19)



Note: States are arranged in rank order from left (best) to right (worst), based on their overall 2020 Scorecard rank. The 2020 Scorecard rank reflects data generally from 2018, prior to the COVID-19 pandemic.

More improvement than decline: Florida, Kentucky, Louisiana, and Virginia improved most, with gains on 17 indicators between 2014 and 2018, prior to COVID-19



Notes: Based on five-year trends for 43 of 49 total indicators (disparity dimension not included), generally reflecting 2014 to 2018, prior to COVID-19 pandemic; 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 (StDev) of the state distribution.

Which states moved up the most in the rankings between 2014 and 2018, and which states dropped?

The District of Columbia had the largest jump in rankings, up 13 spots. New York gained 10 spots in the rankings and New Jersey rose nine spots.

South Dakota fell 19 spots in the rankings, while Wyoming and Maine fell 12 and 17 spots, respectively.

Which states improved on the most indicators?

Florida, Kentucky, Louisiana, and Virginia each improved on 17 of 43 indicators we track over time, although Louisiana had a larger net gain, having gotten worse on fewer indicators (seven indicators) than Florida and Virginia (12 indicators). Five states (Arizona, Arkansas, Mississippi, Missouri, and West Virginia) each improved on 16 indicators.

Fourteen states got worse on more indicators than they improved on.

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APPENDIX A1. State Scorecard Data Years and Databases

Indicator	Past year	Current year	Database
Access and Affordability			
1 Uninsured adults	2014	2018	American Community Survey, Public Use Microdata Sample (ACS PUMS)
2 Uninsured children	2014	2018	American Community Survey, Public Use Microdata Sample (ACS PUMS)
3 Adults without a usual source of care	2014	2018	Behavioral Risk Factor Surveillance System (BRFSS)
4 Adults who went without care because of cost	2014	2018	Behavioral Risk Factor Surveillance System (BRFSS)
5 High out-of-pocket medical spending	—	2017–18	Current Population Survey Annual Social and Economic Supplement (CPS ASEC)
6 Employee insurance costs as a share of median income	2014	2018	Medical Expenditure Panel Survey Insurance Component (MEPS-IC)
7 Adults without a dental visit	2014	2018	Behavioral Risk Factor Surveillance System (BRFSS)
Prevention and Treatment			
8 Adults without all recommended cancer screenings	2014	2018	Behavioral Risk Factor Surveillance System (BRFSS)
9 Adults without all recommended vaccines	2014	2018	Behavioral Risk Factor Surveillance System (BRFSS)
10 Diabetic adults without an annual hemoglobin A1c test	2015	2017	IBM Watson Health MarketScan Database
11 Elderly patients who received a high-risk prescription drug	—	2016	Medicare Part D Claims
12 Children without a medical home	2016	2018	National Survey of Children's Health (NSCH)
13 Children without a medical and dental preventive care visit	—	2018	National Survey of Children's Health (NSCH)
14 Children who did not receive needed mental health care	2016	2018	National Survey of Children's Health (NSCH)
15 Children without all recommended vaccines	2014	2018	National Immunization Survey (NIS)
16 Hospital 30-day mortality	07/2011–06/2014	07/2015–06/2018	CMS Hospital Compare
17 Central line-associated blood stream infection (CLABSI)	2015	2018	CDC Healthcare-Associated Infections (HAI) Progress Report
18 Hospitals with lower-than-average patient experience ratings	—	2018	Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS), via CMS Hospital Compare
19 Home health patients without improved mobility	2014	2018	Outcome and Assessment Information Set (OASIS), via CMS Home Health Compare
20 Nursing home residents with an antipsychotic medication	2013	2017	Minimum Dataset (MDS), via CMS Nursing Home Compare
21 Adults with any mental illness reporting unmet need	2012–14	2016–17	National Survey on Drug Use and Health (NSDUH), via State of Mental Health in America
22 Adults with any mental illness who did not receive treatment	2012–14	2016–17	National Survey on Drug Use and Health (NSDUH), via State of Mental Health in America
Avoidable Hospital Use and Cost			
Potentially avoidable emergency department visits			
23 Ages 18–64, per 1,000 employer-insured enrollees	2015	2017	IBM Watson Health MarketScan Database
24 Age 65 and older, per 1,000 Medicare beneficiaries	2013	2016	Chronic Conditions Data Warehouse (CCW), via CMS Geographic Variation Public Use File
Admissions for ambulatory care-sensitive conditions			
25 Ages 18–64, per 1,000 employer-insured enrollees	2015	2017	IBM Watson Health MarketScan Database
26 Age 65 and older, per 1,000 Medicare beneficiaries	2014	2018	Chronic Conditions Data Warehouse (CCW), via CMS Geographic Variation Public Use File
30-day hospital readmissions			
27 Ages 18–64, per 1,000 employer-insured enrollees	2015	2017	IBM Watson Health MarketScan Database
28 Age 65 and older, per 1,000 Medicare beneficiaries	2014	2018	Chronic Conditions Data Warehouse (CCW), via CMS Geographic Variation Public Use File
29 Skilled nursing facility patients with a hospital readmission	2012	2016	Residential History File
30 Nursing home residents with a hospital admission	2012	2016	Residential History File
31 Home health patients with a hospital admission	2014	2018	Medicare Claims, via CMS Home Health Compare
32 Adults with inappropriate lower back imaging	2015	2017	IBM Watson Health MarketScan Database
33 Employer-sponsored insurance spending per enrollee	2013	2017	IBM Watson Health MarketScan Database
34 Medicare spending per beneficiary	2014	2018	Chronic Conditions Data Warehouse (CCW), via CMS Geographic Variation Public Use File
Primary care as a share of total medical spending			
35 Ages 18–64, employer-insured enrollees	—	2018	IBM Watson Health MarketScan Database
36 Age 65 and older, Medicare beneficiaries	—	2017	CMS Limited Data Set (LDS)
Healthy Lives			
37 Mortality amenable to health care	2012–13	2016–17	CDC National Vital Statistics System (NVSS): Restricted Use Mortality Microdata
38 Breast cancer deaths	2014	2018	CDC National Vital Statistics System (NVSS): WONDER
39 Colorectal cancer deaths	2014	2018	CDC National Vital Statistics System (NVSS): WONDER
40 Suicide deaths	2014	2018	CDC National Vital Statistics System (NVSS): WONDER
41 Alcohol deaths	2014	2018	CDC National Vital Statistics System (NVSS): WONDER
42 Drug poisoning deaths	2014	2018	CDC National Vital Statistics System (NVSS): WONDER
43 Infant mortality	2013	2017	CDC National Vital Statistics System (NVSS): WONDER
44 Adults who report fair or poor health	2014	2018	Behavioral Risk Factor Surveillance System (BRFSS)
45 Adults who smoke	2014	2018	Behavioral Risk Factor Surveillance System (BRFSS)
46 Adults who are obese	2014	2018	Behavioral Risk Factor Surveillance System (BRFSS)
47 Children who are overweight or obese	2016	2018	National Survey of Children's Health (NSCH)
48 Adults who have lost six or more teeth	2014	2018	Behavioral Risk Factor Surveillance System (BRFSS)
49 Public health funding	2014/15	2017/18	Trust for America's Health (TFAH)

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

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

Indicator	Data years represented		U.S. average rate		Range of state performance	
	Baseline	2020 Scorecard	Baseline	2020 Scorecard	Baseline	2020 Scorecard
Access and Affordability						
1 Uninsured adults	2014	2018	16%	12%	5–26	4–24
2 Uninsured children	2014	2018	6%	5%	2–12	1–11
3 Adults without a usual source of care	2014	2018	23%	23%	11–35	13–37
4 Adults who went without care because of cost	2014	2018	14%	13%	7–19	7–18
5 High out-of-pocket medical spending	—	2017–18	—	8.3%	—	4.8–14.2
6 Employee insurance costs as a share of median income	2014	2018	6.6%	6.8%	4.3–8.9	4.1–10
7 Adults without a dental visit	2014	2018	36%	34%	25–46	24–46
Prevention and Treatment						
8 Adults without all recommended cancer screenings	2014	2018	32%	32%	23–40	24–41
9 Adults without all recommended vaccines	2014	2018	63%	69%	53–71	57–75
10 Diabetic adults without an annual hemoglobin A1c test	2015	2017	16.9%	10.7%	11–23.7	6.5–22.2
11 Elderly patients who received a high-risk prescription drug	—	2016	—	9.6%	—	4.6–15.5
12 Children without a medical home	2016	2018	51%	52%	40–66	41–59
13 Children without a medical and dental preventive care visit	—	2018	—	42%	—	29–51
14 Children who did not receive needed mental health care	2016	2018	18%	18%	5–34	5–39
15 Children without all recommended vaccines	2014	2018	28%	27%	15–37	16–38
16 Hospital 30-day mortality	2010-13	2014-17	12.8%	13.7%	11.9–13.6	12.5–14.8
17 Central line-associated blood stream infection (CLABSI)	2015	2018	0.994	0.739	0.324–1.434	0.087–0.923
18 Hospitals with lower-than-average patient experience ratings	—	2018	—	46%	—	15–83
19 Home health patients without improved mobility	2014	2018	37%	22%	31–49	17–35
20 Nursing home residents with an antipsychotic medication	2013	2017	21%	15%	11–27	7–20
21 Adults with any mental illness reporting unmet need	2012–14	2016–17	20%	22%	14–26	14–31
22 Adults with any mental illness who did not receive treatment	2012–14	2016–17	57%	57%	43–68	41–65
Avoidable Hospital Use and Cost						
Potentially avoidable emergency department visits						
23 Ages 18–64, per 1,000 employer-insured enrollees	2015	2017	159.0	149.5	130–203.4	84.2–258.1
24 Age 65 and older, per 1,000 Medicare beneficiaries	2013	2016	181.4	189.4	127.5–250.8	140.9–244.9
Admissions for ambulatory care–sensitive conditions						
25 Ages 18–64, per 1,000 employer-insured enrollees	2015	2017	4.6	6.8	3.3–6.1	6–7.9
26 Age 65 and older, per 1,000 Medicare beneficiaries	2014	2018	44.7	41.6	22.8–66.3	20.4–56
30-day hospital readmissions						
27 Ages 18–64, per 1,000 employer-insured enrollees	2015	2017	2.9	3.2	1.2–5.5	2.3–3.6
28 Age 65 and older, per 1,000 Medicare beneficiaries	2014	2018	42.0	40.0	19.9–54.7	18.5–51.1
29 Skilled nursing facility patients with a hospital readmission	2012	2016	20%	19%	13–26	11–24
30 Nursing home residents with a hospital admission	2012	2016	17%	15%	7–30	5–28
31 Home health patients with a hospital admission	2014	2018	16%	16%	12–18	14–17
32 Adults with inappropriate lower back imaging	2015	2017	71.1%	70.1%	59.2–83.7	57.5–76.4
33 Employer-sponsored insurance spending per enrollee	2013	2017	\$4,697	\$5,137	\$3,117–\$7,186	\$3,606–\$8,104
34 Medicare spending per beneficiary	2014	2018	\$9,025	\$9,847	\$5,640–\$10,851	\$6,473–\$11,604
Primary care as a share of total medical spending						
35 Ages 18–64, employer-insured enrollees	—	2018	—	6.0%	—	3.59–11.29
36 Age 65 and older, Medicare beneficiaries	—	2017	—	5.7%	—	4.75–7.16
Healthy Lives						
37 Mortality amenable to health care	2012–13	2016–17	83.7	84.5	55.6–136.7	54.5–143.4
38 Breast cancer deaths	2014	2018	20.6	19.7	14.2–28.9	15.1–26.7
39 Colorectal cancer deaths	2014	2018	14.3	12.6	10.9–19.3	9.1–17.2
40 Suicide deaths	2014	2018	13.0	14.2	7.8–23.9	7.5–25.2
41 Alcohol deaths	2014	2018	8.5	9.9	4.4–23.8	5.7–32.7
42 Drug poisoning deaths	2014	2018	14.7	20.7	6.3–35.5	6.9–51.5
43 Infant mortality	2013	2017	6.0	5.8	4.2–9.6	3.7–8.7
44 Adults who report fair or poor health	2014	2018	16%	17%	10–23	11–23
45 Adults who smoke	2014	2018	17%	16%	10–27	9–25
46 Adults who are obese	2014	2018	29%	32%	21–38	23–41
47 Children who are overweight or obese	2016	2018	31%	31%	19–38	19–39
48 Adults who have lost six or more teeth	2014	2018	10%	9%	6–22	5–20
49 Public health funding	2014/15	2017/18	\$36	\$37	\$4–\$163	\$7–\$137

Notes: (—) Previous data are not shown because of changes in the indicators’ definitions or data were not available.

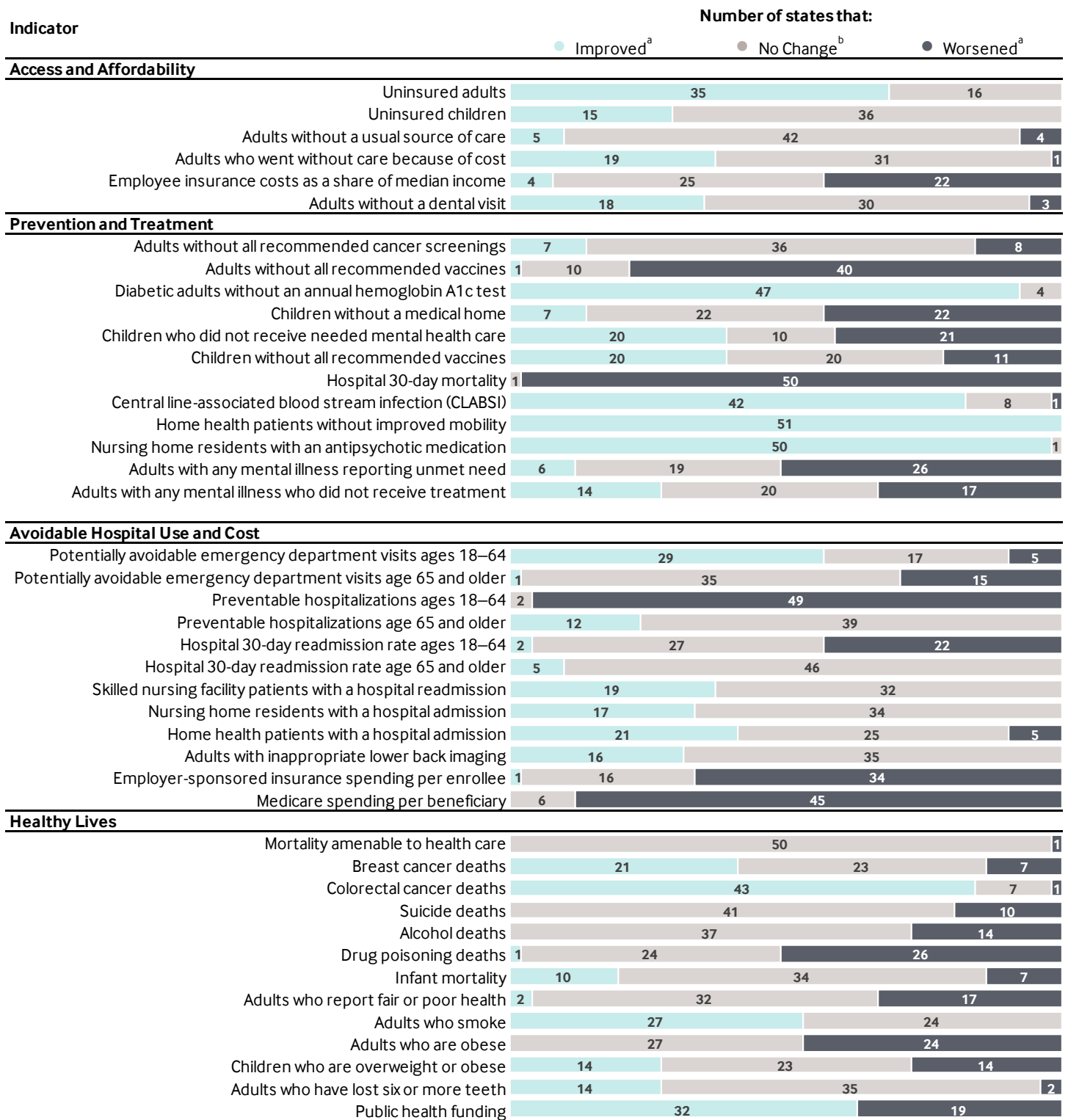
APPENDIX A3. National and Regional Performance Benchmarks

Indicator	National		Great Lakes		Mid-Atlantic		New England		Plains	
	Rate	Best state(s)	Rate	Best state(s)	Rate	Best state(s)	Rate	Best state(s)	Rate	Best state(s)
Access and Affordability										
1 Uninsured adults	4%	DC, MA	8	MI, WI	4	DC	4	MA	6	MN
2 Uninsured children	1%	MA	3	IL, MI	2	NY	1	MA	3	IA
3 Adults without a usual source of care	13%	MA	15	MI	15	PA	13	MA	18	IA
4 Adults who went without care because of cost	7%	HI	10	OH, WI	8	DC	8	VT	8	IA
5 High out-of-pocket medical spending	4.8%	DC	7.5	IN	4.8	DC	6.1	MA	6.0	MN
6 Employee insurance costs as a share of median income	4.1%	WA	5.2	MI	5.4	DC	5.1	NH	5.7	ND
7 Adults without a dental visit	24%	CT	29	MI, WI	26	DC	24	CT	26	MN
Prevention and Treatment										
8 Adults without all recommended cancer screenings	24%	MA	28	MI	26	DC	24	MA	28	MN
9 Adults without all recommended vaccines	57%	DC	66	OH	57	DC	65	MA, RI, VT	61	IA
10 Diabetic adults without an annual hemoglobin A1c test	6.5%	IA	9.0	MI	11.2	MD	9.4	MA	6.5	IA
11 Elderly patients who received a high-risk prescription drug	4.6%	HI	7.2	IL	6.4	NY	6.4	MA	6.2	MN
12 Children without a medical home	41%	IA, NH	46	WI	49	NJ	41	NH	41	IA
13 Children without a medical and dental preventive care visit	29%	MA	39	OH	33	DE	29	MA	33	IA
14 Children who did not receive needed mental health care	5%	ND	11	OH	7	NJ	10	VT	5	ND
15 Children without all recommended vaccines	16%	CT	21	WI	20	PA	16	CT	18	ND
16 Hospital 30-day mortality	12.5%	MA	13.1	OH	13.0	DC, NJ	12.5	MA	13.4	MN
17 Central line-associated blood stream infection (CLABSI)	0.087	WY	0.603	WI	0.649	DE	0.585	NH	0.616	NE
18 Hospitals with lower-than-average patient experience ratings	15%	CO	23	WI	51	PA	33	VT	23	MN
19 Home health patients without improved mobility	17%	AL, MS	23	MI, OH, WI	20	MD	21	MA	21	KS, ND
20 Nursing home residents with an antipsychotic medication	7%	HI	13	MI, WI	11	DC, NJ	15	NH	14	MN
21 Adults with any mental illness reporting unmet need	14%	AL	20	OH	20	NY	20	ME	18	IA
22 Adults with any mental illness who did not receive treatment	41%	VT	51	MI	48	DE	41	VT	47	IA
Avoidable Hospital Use and Cost										
Potentially avoidable emergency department visits										
23 Ages 18–64, per 1,000 employer-insured enrollees	84.2	OR	150.5	IL	93.0	NY	95.4	MA	96.0	MN
24 Age 65 and older, per 1,000 Medicare beneficiaries	140.9	HI	191.5	WI	167.5	NJ	174.9	VT	153.2	SD
Admissions for ambulatory care—sensitive conditions										
25 Ages 18–64, per 1,000 employer-insured enrollees	6.0	OR	6.4	WI	6.3	NY	6.3	CT, NH	6.3	MN
26 Ages 65 and older, per 1,000 Medicare beneficiaries	20.4	HI	35.1	WI	38.4	MD	33.4	VT	33.1	MN
30-day hospital readmissions										
27 Ages 18–64, per 1,000 employer-insured enrollees	2.3	AL	3.1	IL	2.9	NY	2.7	ME	3.0	NE
28 Age 65 and older, per 1,000 Medicare beneficiaries	18.5	HI	33.0	WI	35.4	DE	30.4	VT	29.7	IA
29 Skilled nursing facility patients with a hospital readmission	11%	AK	17	WI	19	DC, DE, MD, PA	16	ME, VT	15	ND, NE, SD
30 Nursing home residents with a hospital admission	5%	HI	11	WI	12	PA	8	RI	7	MN
31 Home health patients with a hospital admission	14%	AZ, CA, DC, HI, ID, NM, OR, UT	15	WI	14	DC	16	CT, ME, VT	15	ND
32 Adults with inappropriate lower back imaging	57.5%	AL	65.6	IN	67.8	NJ	65.1	RI	65.0	MO
33 Employer-sponsored insurance spending per enrollee	\$3,606	MS	\$4,134	MI	\$4,037	MD	\$4,413	RI	\$4,569	IA
34 Medicare spending per beneficiary	\$6,473	HI	\$8,517	WI	\$9,480	DE	\$7,634	VT	\$8,491	SD
Primary care as a share of total medical spending										
35 Ages 18–64, employer-insured enrollees	11.29%	AK	8.65	WI	6.32	MD	7.28	MA	8.29	IA
36 Ages 65 and older, Medicare beneficiaries	7.16%	TN	5.62	IL	5.68	PA	6.40	VT	6.55	KS
Healthy Lives										
37 Mortality amenable to health care	54.5	MN	69.1	WI	72.2	NJ	57.4	MA	54.5	MN
38 Breast cancer deaths	15.1	HI	19.6	WI	19.3	NY	15.7	MA	16.9	ND
39 Colorectal cancer deaths	9.1	UT	11.7	WI	11.2	NY	9.8	CT	11.3	MN
40 Suicide deaths	7.5	DC	11.3	IL	7.5	DC	9.5	RI	13.1	MN
41 Alcohol deaths	5.7	HI	7.7	IL	5.8	MD	7.6	CT	8.6	MO
42 Drug poisoning deaths	6.9	SD	19.2	WI	18.4	NY	26.6	VT	6.9	SD
43 Infant mortality	3.7	MA	6.1	IL	4.5	NJ	3.7	MA	4.4	ND
44 Adults who report fair or poor health	11%	ND	14	WI	12	DC	12	CT, VT	11	ND
45 Adults who smoke	9%	UT	15	IL	13	MD, NJ, NY	12	CT	15	MN
46 Adults who are obese	23%	CO	32	IL	25	DC	26	MA	29	SD
47 Children who are overweight or obese	19%	HI	25	IL	25	DE	26	MA, ME	23	NE
48 Adults who have lost six or more teeth	5%	UT	8	IL	6	DC	7	CT	6	MN
49 Public health funding	\$137	DC, NM	\$26	IL	\$135	DC	\$77	MA	\$55	ND

APPENDIX A3. National and Regional Performance Benchmarks (continued)

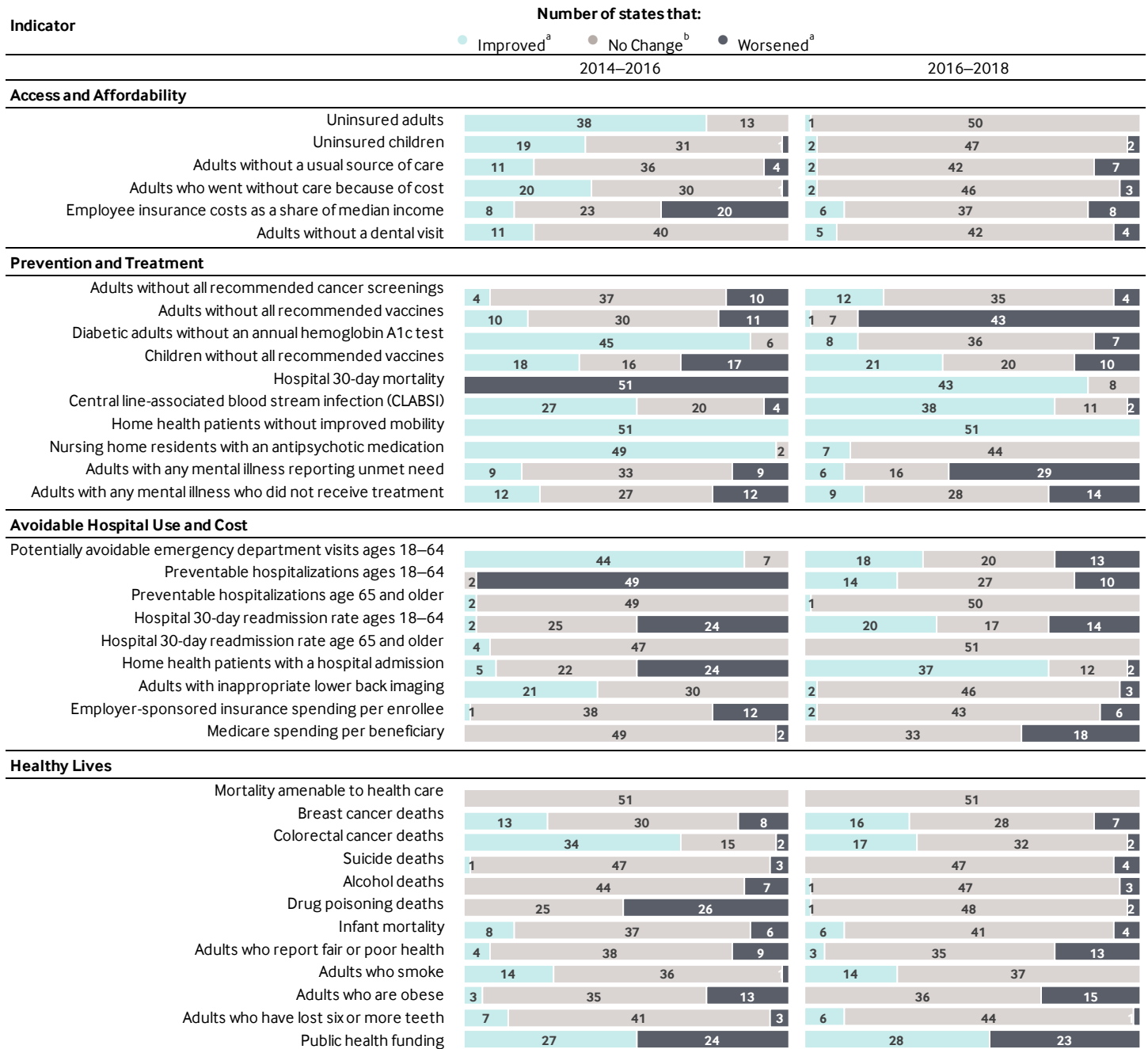
Indicator	Rocky Mountain		Southeast		Southwest		West	
	Rate	Best state(s)	Rate	Best state(s)	Rate	Best state(s)	Rate	Best state(s)
Access and Affordability								
1 Uninsured adults	10	CO	8	KY	14	NM	6	HI
2 Uninsured children	5	CO,MT	3	KY, LA, WV	6	NM	3	CA, HI, WA
3 Adults without a usual source of care	26	CO	19	AR, KY, WV	24	OK	15	HI
4 Adults who went without care because of cost	10	MT	13	KY, VA	13	AZ, NM	7	HI
5 High out-of-pocket medical spending	9.5	CO	8.3	VA	8.0	NM	6.5	WA
6 Employee insurance costs as a share of median income	5.1	UT	7.1	VA	7.5	OK	4.1	WA
7 Adults without a dental visit	28	UT	28	VA	35	NM	25	HI
Prevention and Treatment								
8 Adults without all recommended cancer screenings	34	CO, UT	29	LA, VA	34	AZ	25	HI
9 Adults without all recommended vaccines	65	CO	59	WV	64	OK	63	WA
10 Diabetic adults without an annual hemoglobin A1c test	11.3	CO, MT	7.8	NC	9.8	TX	7.9	WA
11 Elderly patients who received a high-risk prescription drug	8.9	MT	9.8	VA	9.6	AZ	4.6	HI
12 Children without a medical home	45	ID	45	VA	51	TX	50	OR, WA
13 Children without a medical and dental preventive care visit	34	MT	32	VA	41	NM	37	OR
14 Children who did not receive needed mental health care	11	CO, ID	10	FL	11	TX	9	HI
15 Children without all recommended vaccines	25	CO	19	KY	23	NM	28	CA
16 Hospital 30-day mortality	13.5	CO	13.5	FL, VA	13.4	AZ	13.2	CA
17 Central line-associated blood stream infection (CLABSI)	0.087	WY	0.620	VA	0.398	NM	0.337	HI
18 Hospitals with lower-than-average patient experience ratings	15	CO	31	LA	34	TX	29	OR
19 Home health patients without improved mobility	19	UT	17	AL, MS	21	OK	24	CA, WA
20 Nursing home residents with an antipsychotic medication	13	WY	13	NC	14	AZ	7	HI
21 Adults with any mental illness reporting unmet need	19	WY	14	AL	19	TX	15	HI
22 Adults with any mental illness who did not receive treatment	49	CO	51	TN, WV	54	NM	53	WA
Avoidable Hospital Use and Cost								
Potentially avoidable emergency department visits								
23 Ages 18–64, per 1,000 employer-insured enrollees	86.9	UT	121.9	KY	133.3	NM	84.2	OR
24 Age 65 and older, per 1,000 Medicare beneficiaries	155.1	UT	175.4	SC	183.7	AZ	140.9	HI
Admissions for ambulatory care–sensitive conditions								
25 Ages 18–64, per 1,000 employer-insured enrollees	6.1	CO	6.6	VA	6.5	NM	6.0	OR
26 Ages 65 and older, per 1,000 Medicare beneficiaries	22.6	UT	37.8	SC	27.0	AZ	20.4	HI
30-day hospital readmissions								
27 Ages 18–64, per 1,000 employer-insured enrollees	2.8	CO, WY	2.3	AL	2.9	NM	2.7	OR
28 Age 65 and older, per 1,000 Medicare beneficiaries	21.9	UT	32.7	SC	27.0	NM	18.5	HI
29 Skilled nursing facility patients with a hospital readmission	13	ID, UT	19	NC, TN, VA	18	NM	11	AK
30 Nursing home residents with a hospital admission	9	CO	15	VA	7	AZ	5	HI
31 Home health patients with a hospital admission	14	ID, UT	15	FL	14	AZ, NM	14	CA, HI, OR
32 Adults with inappropriate lower back imaging	69.2	CO	57.5	AL	64.0	OK	64.7	NV
33 Employer-sponsored insurance spending per enrollee	\$4,926	UT	\$3,606	MS	\$4,962	AZ	\$3,948	HI
34 Medicare spending per beneficiary	\$7,879	MT	\$9,084	VA	\$7,881	NM	\$6,473	HI
Primary care as a share of total medical spending								
35 Ages 18–64, employer-insured enrollees	7.21	ID	7.68	NC	6.40	AZ, NM	11.29	AK
36 Ages 65 and older, Medicare beneficiaries	6.08	CO	7.16	TN	6.39	AZ	6.30	WA
Healthy Lives								
37 Mortality amenable to health care	61.9	CO	80.3	VA	76.3	AZ	63.2	WA
38 Breast cancer deaths	16.5	MT	17.8	AR	17.1	AZ	15.1	HI
39 Colorectal cancer deaths	9.1	UT	12.0	NC	11.9	AZ	10.3	HI
40 Suicide deaths	21.9	CO	13.7	NC	13.7	TX	10.9	CA
41 Alcohol deaths	10.9	UT	5.9	MS	7.8	TX	5.7	HI
42 Drug poisoning deaths	11.1	WY	10.8	MS	10.4	TX	12.6	OR
43 Infant mortality	4.5	CO	5.9	VA	5.7	AZ	3.9	WA
44 Adults who report fair or poor health	13	CO, MT, UT	15	VA	17	TX	15	AK, HI, WA
45 Adults who smoke	9	UT	14	FL	14	AZ, TX	11	CA
46 Adults who are obese	23	CO	31	VA	31	AZ	26	CA
47 Children who are overweight or obese	21	MT, UT	29	NC	30	AZ, NM	19	HI
48 Adults who have lost six or more teeth	5	UT	8	VA	7	TX	6	CA, HI
49 Public health funding	\$88	ID	\$61	WV	\$137	NM	\$124	HI

APPENDIX A4. Change in State Health System Performance by Indicator



Notes: Only Scorecard indicators with trends are shown. Trend data generally reflect the four- to five-year period ending in 2017 or 2018—refer to Appendix A1 for additional detail (trend data were not available for all indicators). For purposes of this analysis we count District of Columbia as a state. (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 A5. Change in State Health System Performance by Indicator

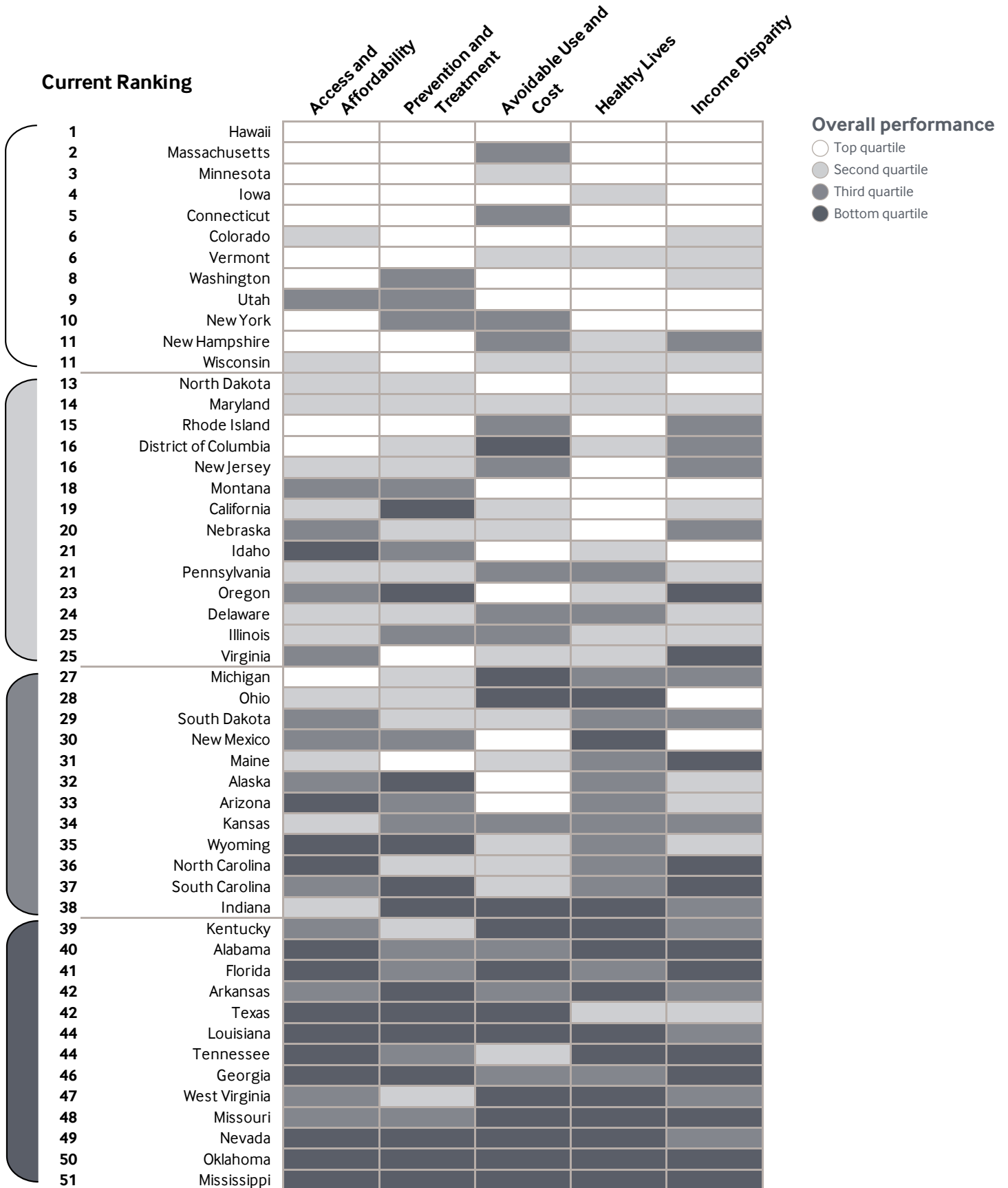


Notes: Only Scorecard indicators with trends are shown. Trend calculated over two periods, generally 2014 to 2016, and 2016 to 2018—refer to Appendix A1 for additional detail (trend data were not available for all indicators). For purposes of this analysis we count District of Columbia as a state. (a) Improvement or worsening refers to a change within the time period 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 A6. National Cumulative Impact if All States Achieved Top State Rate

Indicator	If all states improved their performance to the level of the best-performing state for this indicator, then:	
Insured adults	15,479,728	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	3,108,255	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	14,950,671	fewer adults (age 18 and older) would go without needed health care because of cost.
High out-of-pocket medical spending	9,492,104	fewer individuals would be burdened by high out-of-pocket spending on medical care.
Adult usual source of care	24,917,786	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	11,701,222	more adults would receive age- and gender-appropriate recommended cancer screenings, including tests for colon, breast, and cervical cancers.
Adult vaccines	29,901,343	more adults would receive age-appropriate recommended vaccines.
Children with a medical home	8,046,095	more children (ages 0–17) would have a medical home to help ensure that care is coordinated and accessible when needed.
Children vaccines	632,208	more children (ages 19–35 months) would receive all recommended vaccines.
Children with preventive medical and dental visits	9,509,021	more children (ages 0–17) would receive annual preventive medical and dental care visits each year.
Medicare received a high-risk drug	172,403	fewer Medicare beneficiaries would receive an inappropriately prescribed medication.
Hospital readmissions	1,164,798	fewer employer-insured adults and elderly Medicare beneficiaries would experience a hospital readmission within 30 days of discharge.
Potentially avoidable emergency department visits	10,449,205	fewer employer-insured adults and elderly Medicare beneficiaries would seek care in emergency departments for nonemergent or primary-care-treatable conditions.
Mortality amenable to health care	91,127	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	7,580	fewer women would die from breast cancer.
Colon cancer deaths	11,281	fewer individuals would die from colon cancer.
Suicides	21,596	fewer individuals would take their own lives.
Adults who smoke	17,442,450	fewer adults would smoke, reducing their risk of lung and heart disease.
Adults who are obese	17,825,100	fewer adults would be obese, with body weights that increase their risk for disease and long-term complications.
Children who are overweight or obese	4,047,634	fewer children (ages 10–17) would be overweight or obese, thus reducing the potential for poor health as they transition into adulthood.

APPENDIX B1. State Scorecard Summary of Health System Performance Across Dimensions



APPENDIX B2. Summary of State Rankings in Current and Previous Scorecards

State	2020 Scorecard Rankings						Overall ranking in the baseline ^a time period
	Overall ranking	Access and Affordability	Prevention and Treatment	Avoidable Use and Cost	Healthy Lives	Income Disparity	
Alabama	40	41	29	27	42	49	37
Alaska	32	35	48	8	28	17	35
Arizona	33	43	36	9	32	16	36
Arkansas	42	37	46	36	45	37	42
California	19	20	44	21	6	19	23
Colorado	6	24	6	4	6	13	10
Connecticut	5	6	10	31	3	7	5
Delaware	24	19	14	34	31	18	16
District of Columbia	16	2	16	42	25	30	29
Florida	41	48	33	47	27	44	43
Georgia	46	49	39	32	35	47	43
Hawaii	1	3	2	1	1	10	1
Idaho	21	45	30	5	16	8	22
Illinois	25	16	31	38	19	22	26
Indiana	38	24	40	41	43	31	40
Iowa	4	7	1	12	20	9	6
Kansas	34	22	27	29	34	34	30
Kentucky	39	28	24	45	48	35	39
Louisiana	44	40	44	48	46	28	50
Maine	31	21	12	21	26	47	14
Maryland	14	13	14	23	22	24	9
Massachusetts	2	1	7	37	2	3	3
Michigan	27	11	13	39	37	33	31
Minnesota	3	9	3	13	4	6	2
Mississippi	51	50	50	50	50	41	51
Missouri	48	34	38	46	44	50	41
Montana	18	30	34	7	12	12	21
Nebraska	20	29	23	14	11	32	19
Nevada	49	44	51	40	40	36	47
New Hampshire	11	8	5	26	14	38	16
New Jersey	16	17	16	35	10	26	25
New Mexico	30	36	34	10	39	5	33
New York	10	9	37	28	8	2	20
North Carolina	36	39	22	18	36	46	32
North Dakota	13	23	20	11	15	11	12
Ohio	28	18	16	44	41	3	34
Oklahoma	50	46	49	49	49	40	43
Oregon	23	27	40	2	20	41	16
Pennsylvania	21	14	21	32	33	23	26
Rhode Island	15	5	9	29	12	38	13
South Carolina	37	37	43	16	38	43	38
South Dakota	29	31	19	20	28	29	10
Tennessee	44	42	32	24	46	51	46
Texas	42	51	40	42	23	24	48
Utah	9	32	28	3	5	1	6
Vermont	6	4	4	15	17	14	4
Virginia	25	26	8	19	18	45	28
Washington	8	12	26	6	9	20	14
West Virginia	47	33	25	51	51	27	49
Wisconsin	11	15	11	24	24	15	8
Wyoming	35	47	47	17	30	20	23

Notes: (a) The baseline period generally reflects two to three years prior to the time of observation for the latest year of data available. This is not the same ranking as reported in our 2019 State Scorecard and should not be compared to the 2019 ranking because of changes in the underlying set of performance indicators evaluated in the two reports.

APPENDIX C1. Access & Affordability: Dimension Ranking and Indicator Rates

	Access and Affordability Dimension Summary	Adults ages 19–64 uninsured		Children ages 0–18 uninsured		Adults age 18 and older without a usual source of care		Adults age 18 and older who went without care because of cost in past year		Individuals under age 65 with high out-of-pocket medical costs relative to their annual household income		Employee insurance costs as a share of median income		Adults age 18 and older without a dental visit in past year	
		2020	2018	rank	2018	rank	2018	rank	2018	rank	2017–18	rank	2018	rank	2018
United States	—	12%	—	5%	—	23%	—	13%	—	8.3%	—	6.8%	—	34%	—
Alabama	41	16	42	4	16	22	22	16	45	11.0	48	7.7	40	39	44
Alaska	35	16	42	8	42	37	51	13	28	7.4	10	5.3	5	31	15
Arizona	43	15	38	8	42	27	41	13	28	9.3	31	7.9	41	38	40
Arkansas	37	12	28	4	16	19	15	15	38	9.8	39	9.1	49	44	49
California	20	10	20	3	5	25	35	12	20	6.6	7	6.9	32	33	27
Colorado	24	10	20	5	24	26	38	12	20	9.5	34	5.3	5	32	19
Connecticut	6	8	8	3	5	16	9	9	5	8.3	21	6.0	15	24	1
Delaware	19	8	8	4	16	18	12	11	13	9.5	34	6.3	23	34	30
District of Columbia	2	4	1	—	—	22	22	8	2	4.8	1	5.4	7	26	3
Florida	48	19	47	8	42	26	38	16	45	9.0	27	8.6	48	35	32
Georgia	49	19	47	8	42	28	44	18	50	9.9	40	8.1	44	38	40
Hawaii	3	6	4	3	5	15	5	7	1	7.3	9	5.5	8	25	2
Idaho	45	16	42	7	38	29	46	15	38	11.0	48	7.1	34	35	32
Illinois	16	10	20	3	5	18	12	12	20	7.9	15	6.0	15	32	19
Indiana	24	11	26	7	38	20	18	12	20	7.5	12	5.7	10	36	38
Iowa	7	7	7	3	5	18	12	8	2	7.7	13	5.8	13	29	11
Kansas	22	12	28	5	24	22	22	12	20	8.1	19	6.2	19	32	19
Kentucky	28	8	8	3	5	19	15	13	28	9.4	33	7.9	41	38	40
Louisiana	40	12	28	3	5	23	28	15	38	9.1	29	10.0	51	42	47
Maine	21	11	26	5	24	15	5	12	20	8.9	26	6.5	27	35	32
Maryland	13	8	8	3	5	17	10	11	13	6.6	7	5.7	10	33	27
Massachusetts	1	4	1	1	1	13	1	9	5	6.1	4	5.5	8	26	3
Michigan	11	8	8	3	5	15	5	12	20	7.9	15	5.2	4	29	11
Minnesota	9	6	4	4	16	24	29	10	9	6.0	3	6.1	18	26	3
Mississippi	50	19	47	5	24	26	38	18	50	10.5	46	9.7	50	46	51
Missouri	34	13	35	5	24	24	29	13	28	10.3	44	6.5	27	37	39
Montana	30	12	28	5	24	27	41	10	9	10.4	45	6.4	24	34	30
Nebraska	29	12	28	6	35	22	22	12	20	10.1	42	6.4	24	32	19
Nevada	44	15	38	8	42	31	47	15	38	7.9	15	8.4	47	35	32
New Hampshire	8	8	8	2	2	14	2	11	13	8.3	21	5.1	2	31	15
New Jersey	17	10	20	4	16	20	18	13	28	7.4	10	6.2	19	28	6
New Mexico	36	14	37	6	35	31	47	13	28	8.0	18	8.0	43	35	32
New York	9	8	8	2	2	20	18	11	13	5.8	2	6.4	24	30	14
North Carolina	39	16	42	5	24	22	22	15	38	10.8	47	8.2	45	35	32
North Dakota	23	10	20	7	38	27	41	9	5	8.7	25	5.7	10	32	19
Ohio	18	9	17	5	24	20	18	10	9	7.8	14	6.2	19	33	27
Oklahoma	46	20	50	8	42	24	29	15	38	9.2	30	7.5	38	40	45
Oregon	27	10	20	4	16	25	35	13	28	9.3	31	6.8	30	32	19
Pennsylvania	14	8	8	4	16	15	5	9	5	8.1	19	6.2	19	31	15
Rhode Island	5	6	4	2	2	14	2	11	13	6.3	5	6.9	32	28	6
South Carolina	37	16	42	5	24	24	29	16	45	9.6	37	7.3	37	38	40
South Dakota	31	13	35	6	35	25	35	11	13	10.2	43	6.8	30	32	19
Tennessee	42	15	38	5	24	24	29	16	45	9.7	38	7.6	39	42	47
Texas	51	24	51	11	49	32	49	17	49	9.5	34	8.2	45	40	45
Utah	32	12	28	7	38	28	44	13	28	11.7	50	5.1	2	28	6
Vermont	4	5	3	—	—	14	2	8	2	9.0	27	6.0	15	28	6
Virginia	26	12	28	5	24	22	22	13	28	8.3	21	7.1	34	28	6
Washington	12	9	17	3	5	24	29	11	13	6.5	6	4.1	1	31	15
West Virginia	33	9	17	3	5	19	15	15	38	9.9	40	7.2	36	45	50
Wisconsin	15	8	8	4	16	17	10	10	9	8.5	24	5.8	13	29	11
Wyoming	47	15	38	8	42	32	49	13	28	14.2	51	6.5	27	32	19

Notes: — Indicates that estimates are not available.

APPENDIX C2. Access & Affordability: Key Indicator Trends

	Adults ages 19–64 uninsured					Adults age 18 and older who went without care because of cost in past year					Employee insurance costs as a share of median income				
	Average annual change					Average annual change					Average annual change				
	2014	2016	2018	2014–2016	2016–2018	2014	2016	2018	2014–2016	2016–2018	2014	2016	2018	2014–2016	2016–2018
	2014	2016	2018	2014–2016	2016–2018	2014	2016	2018	2014–2016	2016–2018	2014	2016	2018	2014–2016	2016–2018
United States	16%	12%	12%	-13.4%	0.0%	14%	13%	13%	-3.6%	0.0%	6.6%	6.7%	6.8%	0.8%	0.7%
Alabama	18	14	16	-11.8	6.9	17	16	16	-3.0	0.0	7.6	7.5	7.7	-0.7	1.3
Alaska	22	18	16	-9.5	-5.7	12	13	13	4.1	0.0	5.1	5.6	5.3	4.8	-2.7
Arizona	18	14	15	-11.8	3.5	16	14	13	-6.5	-3.6	7.8	8.3	7.9	3.2	-2.4
Arkansas	18	12	12	-18.4	0.0	18	15	15	-8.7	0.0	7.1	7.8	9.1	4.8	8.0
California	17	10	10	-23.3	0.0	14	11	12	-11.4	4.4	7.5	6.8	6.9	-4.8	0.7
Colorado	14	10	10	-15.5	0.0	13	12	12	-3.9	0.0	5.8	5.5	5.3	-2.6	-1.8
Connecticut	9	7	8	-11.8	6.9	11	10	9	-4.7	-5.1	4.6	5.8	6.0	12.3	1.7
Delaware	10	8	8	-10.6	0.0	11	11	11	0.0	0.0	5.9	7.7	6.3	14.2	-9.5
District of Columbia	7	5	4	-15.5	-10.6	11	9	8	-9.5	-5.7	5.6	5.9	5.4	2.6	-4.3
Florida	24	18	19	-13.4	2.7	18	17	16	-2.8	-3.0	8.4	9.9	8.6	8.6	-6.8
Georgia	22	18	19	-9.5	2.7	19	17	18	-5.4	2.9	7.2	8.2	8.1	6.7	-0.6
Hawaii	7	5	6	-15.5	9.5	9	7	7	-11.8	0.0	4.3	5.5	5.5	13.1	0.0
Idaho	19	15	16	-11.1	3.3	16	14	15	-6.5	3.5	6.7	7.3	7.1	4.4	-1.4
Illinois	14	9	10	-19.8	5.4	12	11	12	-4.3	4.4	6.2	6.2	6.0	0.0	-1.6
Indiana	17	11	11	-19.6	0.0	15	13	12	-6.9	-3.9	6.9	5.6	5.7	-9.9	0.9
Iowa	8	6	7	-13.4	8.0	9	8	8	-5.7	0.0	5.1	5.4	5.8	2.9	3.6
Kansas	15	12	12	-10.6	0.0	13	12	12	-3.9	0.0	5.9	6.5	6.2	5.0	-2.3
Kentucky	12	7	8	-23.6	6.9	16	12	13	-13.4	4.1	8.2	7.2	7.9	-6.3	4.7
Louisiana	22	15	12	-17.4	-10.6	17	18	15	2.9	-8.7	8.5	9.4	10.0	5.2	3.1
Maine	14	11	11	-11.4	0.0	11	11	12	0.0	4.4	5.5	6.7	6.5	10.4	-1.5
Maryland	11	8	8	-14.7	0.0	10	11	11	4.9	0.0	5.6	6.0	5.7	3.5	-2.5
Massachusetts	5	4	4	-10.6	0.0	8	9	9	6.1	0.0	5.4	5.1	5.5	-2.8	3.8
Michigan	12	8	8	-18.4	0.0	15	13	12	-6.9	-3.9	5.6	4.8	5.2	-7.4	4.1
Minnesota	8	6	6	-13.4	0.0	9	9	10	0.0	5.4	4.6	5.1	6.1	5.3	9.4
Mississippi	22	18	19	-9.5	2.7	19	19	18	0.0	-2.7	8.9	10.1	9.7	6.5	-2.0
Missouri	16	13	13	-9.9	0.0	14	13	13	-3.6	0.0	5.7	8.0	6.5	18.5	-9.9
Montana	19	12	12	-20.5	0.0	12	11	10	-4.3	-4.7	6.4	7.6	6.4	9.0	-8.2
Nebraska	13	12	12	-3.9	0.0	12	12	12	0.0	0.0	5.7	5.9	6.4	1.7	4.2
Nevada	21	15	15	-15.5	0.0	17	16	15	-3.0	-3.2	6.8	7.7	8.4	6.4	4.4
New Hampshire	13	9	8	-16.8	-5.7	11	10	11	-4.7	4.9	5.3	5.1	5.1	-1.9	0.0
New Jersey	16	11	10	-17.1	-4.7	14	13	13	-3.6	0.0	5.2	6.1	6.2	8.3	0.8
New Mexico	21	13	14	-21.3	3.8	17	13	13	-12.6	0.0	8.6	9.6	8.0	5.7	-8.7
New York	12	9	8	-13.4	-5.7	14	11	11	-11.4	0.0	6.0	6.2	6.4	1.7	1.6
North Carolina	19	15	16	-11.1	3.3	16	16	15	0.0	-3.2	7.0	7.0	8.2	0.0	8.2
North Dakota	10	9	10	-5.1	5.4	7	8	9	6.9	6.1	4.6	5.4	5.7	8.3	2.7
Ohio	12	8	9	-18.4	6.1	13	11	10	-8.0	-4.7	5.5	5.6	6.2	0.9	5.2
Oklahoma	21	20	20	-2.4	0.0	15	15	15	0.0	0.0	7.7	7.5	7.5	-1.3	0.0
Oregon	14	9	10	-19.8	5.4	14	11	13	-11.4	8.7	7.1	5.6	6.8	-11.2	10.2
Pennsylvania	12	8	8	-18.4	0.0	12	11	9	-4.3	-9.5	4.8	5.9	6.2	10.9	2.5
Rhode Island	10	6	6	-22.5	0.0	12	10	11	-8.7	4.9	6.2	6.3	6.9	0.8	4.7
South Carolina	20	15	16	-13.4	3.3	18	16	16	-5.7	0.0	6.8	7.4	7.3	4.3	-0.7
South Dakota	13	12	13	-3.9	4.1	10	9	11	-5.1	10.6	6.3	6.7	6.8	3.1	0.7
Tennessee	17	14	15	-9.3	3.5	16	12	16	-13.4	15.5	8.9	7.2	7.6	-10.1	2.7
Texas	26	23	24	-5.9	2.2	18	18	17	0.0	-2.8	8.7	8.0	8.2	-4.1	1.2
Utah	16	12	12	-13.4	0.0	14	12	13	-7.4	4.1	6.3	5.0	5.1	-10.9	1.0
Vermont	7	5	5	-15.5	0.0	9	8	8	-5.7	0.0	5.3	5.7	6.0	3.7	2.6
Virginia	15	12	12	-10.6	0.0	13	13	13	0.0	0.0	6.2	7.0	7.1	6.3	0.7
Washington	13	9	9	-16.8	0.0	12	10	11	-8.7	4.9	5.7	6.5	4.1	6.8	-20.6
West Virginia	13	8	9	-21.6	6.1	17	15	15	-6.1	0.0	7.2	7.1	7.2	-0.7	0.7
Wisconsin	10	7	8	-16.3	6.9	11	10	10	-4.7	0.0	5.1	5.4	5.8	2.9	3.6
Wyoming	17	15	15	-6.1	0.0	12	14	13	8.0	-3.6	5.0	5.9	6.5	8.6	5.0

APPENDIX D1. Prevention & Treatment: Dimension Ranking and Indicator Rates

	Prevention and Treatment Dimension Summary	Adults without all recommended cancer screenings		Adults without all recommended vaccines		Diabetic adults without an annual hemoglobin A1c test		Elderly patients who received a high-risk prescription drug	
	2020	2018	rank	2018	rank	2017	rank	2016	rank
United States	—	32%	—	69%	—	10.7%	—	9.6%	—
Alabama	29	31	19	68	27	9.7	10	12.8	45
Alaska	48	39	49	68	27	13.1	37	9.5	25
Arizona	36	34	32	71	42	10.6	16	9.6	26
Arkansas	46	36	43	71	42	12.5	33	11.8	42
California	44	29	12	70	35	15.3	43	9.2	23
Colorado	6	34	32	65	14	11.3	22	10.9	36
Connecticut	10	25	2	67	25	12.7	34	7.4	11
Delaware	14	28	6	64	12	13.5	39	8.4	18
District of Columbia	16	26	4	57	1	—	—	9.3	24
Florida	33	31	19	72	44	13.3	38	10.4	35
Georgia	39	32	23	72	44	8.7	6	12.2	44
Hawaii	2	25	2	69	30	10.3	13	4.6	1
Idaho	30	39	49	70	35	14.2	41	11.4	40
Illinois	31	34	32	70	35	11.8	30	7.2	9
Indiana	40	34	32	73	47	12.3	32	9.9	30
Iowa	1	30	17	61	4	6.5	1	6.7	6
Kansas	27	35	39	66	19	11.4	24	9.6	26
Kentucky	24	34	32	66	19	9.3	8	13.7	48
Louisiana	44	29	12	75	50	16.7	46	15.4	50
Maine	12	28	6	69	30	10.6	16	8.2	16
Maryland	14	28	6	62	5	11.2	21	8.9	20
Massachusetts	7	24	1	65	14	9.4	9	6.4	3
Michigan	13	28	6	69	30	9.0	7	8.2	16
Minnesota	3	28	6	62	5	6.8	2	6.2	2
Mississippi	50	35	39	70	35	11.9	31	15.5	51
Missouri	38	33	29	66	19	11.5	26	10.0	31
Montana	34	37	46	66	19	11.3	22	8.9	20
Nebraska	23	32	23	62	5	10.4	15	7.7	13
Nevada	51	36	43	70	35	17.3	47	11.3	39
New Hampshire	5	28	6	69	30	11.7	29	8.4	18
New Jersey	16	31	19	65	14	12.9	36	7.9	15
New Mexico	34	36	43	68	27	15.4	44	10.2	33
New York	37	29	12	74	49	12.8	35	6.4	3
North Carolina	22	30	17	60	3	7.8	4	11.2	37
North Dakota	20	35	39	62	5	10.7	18	7.3	10
Ohio	16	33	29	66	19	15.4	44	9.1	22
Oklahoma	49	38	48	64	12	10.9	19	13.7	48
Oregon	40	31	19	70	35	11.0	20	10.2	33
Pennsylvania	21	32	23	62	5	13.7	40	6.7	6
Rhode Island	9	27	5	65	14	18.4	48	6.5	5
South Carolina	43	32	23	67	25	—	—	13.3	46
South Dakota	19	35	39	66	19	7.4	3	7.1	8
Tennessee	32	33	29	73	47	10.3	13	13.4	47
Texas	40	37	46	75	50	9.8	11	11.8	42
Utah	28	34	32	69	30	11.4	24	11.2	37
Vermont	4	32	23	65	14	11.6	28	7.7	13
Virginia	8	29	12	63	10	9.8	11	9.8	29
Washington	26	32	23	63	10	7.9	5	9.7	28
West Virginia	25	34	32	59	2	15.1	42	11.6	41
Wisconsin	11	29	12	72	44	11.5	26	7.4	11
Wyoming	47	41	51	70	35	22.2	49	10.0	31

Notes: — Indicates that estimates are not available.

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

	Children without a medical home		Children without a medical and dental preventive care visit		Children who did not receive needed mental health care		Children without all recommended vaccines		Hospital 30-day mortality		Central line-associated blood stream infection (CLABSI)	
	2018	rank	2018	rank	2018	rank	2018	rank	07/2015 – 06/2018	rank	2018	rank
United States	52%	—	42%	—	18%	—	27%	—	13.7%	—	0.739	—
Alabama	56	47	46	42	13	13	21	7	14.1	32	0.780	40
Alaska	52	29	45	40	12	12	32	43	14.1	32	0.694	24
Arizona	54	38	46	42	16	24	30	37	13.4	13	0.650	16
Arkansas	53	30	51	51	14	15	29	31	14.8	51	0.634	13
California	55	42	48	48	30	48	28	27	13.2	6	0.793	41
Colorado	49	18	35	11	11	8	25	17	13.5	16	0.596	8
Connecticut	45	5	31	2	18	28	16	1	13.3	8	0.846	47
Delaware	54	38	33	6	18	28	26	22	13.2	6	0.649	16
District of Columbia	57	49	37	15	24	46	27	26	13.0	3	0.719	27
Florida	59	51	39	19	10	5	30	37	13.5	16	0.749	34
Georgia	55	42	40	21	21	40	23	13	13.9	27	0.772	39
Hawaii	53	30	44	37	9	4	29	31	13.3	8	0.337	2
Idaho	45	5	43	34	11	8	29	31	14.3	42	0.483	4
Illinois	53	30	42	31	22	43	24	15	13.3	8	0.643	14
Indiana	54	38	40	21	17	27	36	49	14.0	29	0.679	20
Iowa	41	1	33	6	13	13	26	22	14.7	50	0.838	46
Kansas	46	8	40	21	10	5	25	17	14.3	42	0.738	33
Kentucky	49	18	36	12	15	20	19	4	14.0	29	0.646	15
Louisiana	50	21	47	47	21	40	28	27	13.6	22	0.732	31
Maine	43	3	32	4	19	36	24	15	13.9	27	0.729	30
Maryland	55	42	38	17	18	28	26	22	13.5	16	0.796	42
Massachusetts	48	14	29	1	39	51	18	2	12.5	1	0.866	49
Michigan	53	30	43	34	16	24	29	31	13.3	8	0.678	20
Minnesota	46	8	41	27	15	20	33	45	13.4	13	0.766	36
Mississippi	55	42	50	50	18	28	29	31	14.5	47	0.864	48
Missouri	51	25	46	42	18	28	33	45	13.8	24	0.825	45
Montana	50	21	34	8	14	15	38	51	14.3	42	0.680	22
Nebraska	48	14	44	37	16	24	22	10	14.5	47	0.616	10
Nevada	55	42	49	49	35	50	36	49	13.8	24	0.923	51
New Hampshire	41	1	31	2	19	36	19	4	13.5	16	0.585	7
New Jersey	49	18	34	8	7	2	30	37	13.0	3	0.724	28
New Mexico	57	49	41	27	14	15	23	13	13.7	23	0.398	3
New York	56	47	45	40	18	28	31	40	13.4	13	0.806	43
North Carolina	54	38	41	27	18	28	22	10	14.1	32	0.899	50
North Dakota	48	14	43	34	5	1	18	2	14.2	40	0.650	16
Ohio	47	12	39	19	11	8	25	17	13.1	5	0.712	25
Oklahoma	53	30	46	42	24	46	31	40	14.1	32	0.711	25
Oregon	50	21	37	15	23	45	34	47	14.3	42	0.523	5
Pennsylvania	53	30	38	17	19	36	20	6	13.3	8	0.735	32
Rhode Island	48	14	36	12	14	15	25	17	12.9	2	0.767	37
South Carolina	51	25	41	27	30	48	25	17	14.1	32	0.807	44
South Dakota	47	12	40	21	7	2	31	40	14.3	42	0.687	23
Tennessee	51	25	42	31	21	40	29	31	14.1	32	0.677	19
Texas	51	25	46	42	11	8	28	27	13.5	16	0.771	38
Utah	46	8	44	37	15	20	26	22	14.1	32	0.620	11
Vermont	43	3	34	8	10	5	21	7	14.0	29	0.753	35
Virginia	45	5	32	4	18	28	22	10	13.5	16	0.620	11
Washington	50	21	40	21	15	20	35	48	14.2	40	0.535	6
West Virginia	53	30	36	12	22	43	28	27	13.8	24	0.724	28
Wisconsin	46	8	42	31	20	39	21	7	14.1	32	0.603	9
Wyoming	53	30	40	21	14	15	32	43	14.5	47	0.087	1

Notes: — Indicates that estimates are not available.

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

	Hospitals with lower-than-average patient experience ratings		Home health patients who did not get better at walking or moving around		Nursing home residents with an antipsychotic medication		Adults with any mental illness reporting unmet need		Adults with any mental illness who did not receive treatment	
	2018	rank	2018	rank	2017	rank	2016–17	rank	2016–17	rank
United States	46%	—	22%	—	15%	—	22%	—	57%	—
Alabama	43	25	17	1	19	44	14	1	64	47
Alaska	37	16	35	51	12	5	22	15	62	44
Arizona	62	41	24	33	14	12	21	12	61	42
Arkansas	49	32	19	4	15	16	25	39	53	15
California	57	39	24	33	11	2	22	15	65	50
Colorado	15	1	22	20	15	16	22	15	49	6
Connecticut	63	42	25	40	16	27	23	30	56	28
Delaware	67	45	25	40	14	12	22	15	48	5
District of Columbia	71	47	21	13	11	2	25	39	55	23
Florida	61	40	20	7	15	16	22	15	59	37
Georgia	43	25	20	7	19	44	23	30	61	42
Hawaii	42	24	28	48	7	1	15	2	65	50
Idaho	27	7	20	7	18	40	22	15	57	33
Illinois	44	29	24	33	19	44	22	15	56	28
Indiana	25	4	24	33	15	16	25	39	54	19
Iowa	34	12	23	24	15	16	18	3	47	4
Kansas	25	4	21	13	19	44	26	46	57	33
Kentucky	39	18	20	7	19	44	23	30	55	23
Louisiana	31	10	20	7	17	35	20	7	62	44
Maine	53	36	24	33	18	40	20	7	50	7
Maryland	—	—	20	7	13	7	23	30	56	28
Massachusetts	63	42	21	13	18	40	22	15	52	14
Michigan	40	20	23	24	13	7	22	15	51	9
Minnesota	23	2	27	47	14	12	19	4	50	7
Mississippi	43	25	17	1	19	44	22	15	55	23
Missouri	39	18	22	20	19	44	25	39	51	9
Montana	36	15	28	48	15	16	23	30	58	36
Nebraska	37	16	24	33	18	40	23	30	53	15
Nevada	65	44	25	40	16	27	29	48	64	47
New Hampshire	46	30	23	24	15	16	29	48	45	2
New Jersey	75	48	23	24	11	2	23	30	60	38
New Mexico	68	46	25	40	16	27	24	37	54	19
New York	81	49	23	24	12	5	20	7	60	38
North Carolina	47	31	21	13	13	7	22	15	55	23
North Dakota	83	50	21	13	17	35	21	12	56	28
Ohio	40	20	23	24	16	27	20	7	54	19
Oklahoma	35	14	21	13	20	51	22	15	60	38
Oregon	29	9	26	44	15	16	29	48	60	38
Pennsylvania	51	34	22	20	16	27	25	39	54	19
Rhode Island	50	33	22	20	16	27	24	37	46	3
South Carolina	41	22	21	13	14	12	25	39	57	33
South Dakota	27	7	23	24	17	35	22	15	56	28
Tennessee	41	22	19	4	17	35	22	15	51	9
Texas	34	12	26	44	16	27	19	4	62	44
Utah	26	6	19	4	16	27	31	51	51	9
Vermont	33	11	26	44	17	35	21	12	41	1
Virginia	43	25	23	24	15	16	28	47	55	23
Washington	52	35	24	33	15	16	25	39	53	15
West Virginia	56	37	18	3	15	16	20	7	51	9
Wisconsin	23	2	23	24	13	7	22	15	53	15
Wyoming	56	37	28	48	13	7	19	4	64	47

Notes: — Indicates that estimates are not available.

APPENDIX D2. Prevention & Treatment: Key Indicator Trends

	Adults without all age- and gender-appropriate cancer screenings			Adult diabetic patients ages 18–64 with employer-sponsored insurance without a hemoglobin A1c test during the year			Children ages 19–35 months who did not receive all recommended vaccines			Adults age 18 and older with any mental illness who did not receive treatment		
	2014	2018		2015	2017		2014	2018		2012–14	2016–17	
United States	32%	32%	No Change	16.9%	10.7%	Improved	28%	27%	No Change	57%	57%	No Change
Alabama	33	31	Improved	15.2	9.7	Improved	23	21	No Change	54	64	Worsened
Alaska	38	39	No Change	16.4	13.1	Improved	33	32	No Change	61	62	No Change
Arizona	34	34	No Change	15.9	10.6	Improved	34	30	Improved	59	61	No Change
Arkansas	37	36	No Change	17.7	12.5	Improved	34	29	Improved	51	53	No Change
California	30	29	No Change	19.2	15.3	Improved	22	28	Worsened	62	65	Worsened
Colorado	32	34	Worsened	16.6	11.3	Improved	27	25	No Change	62	49	Improved
Connecticut	25	25	No Change	20.9	12.7	Improved	27	16	Improved	50	56	Worsened
Delaware	28	28	No Change	20.8	13.5	Improved	25	26	No Change	52	48	Improved
District of Columbia	27	26	No Change	—	—	—	29	27	No Change	55	55	No Change
Florida	33	31	Improved	18.9	13.3	Improved	27	30	Worsened	62	59	Improved
Georgia	30	32	Worsened	14.8	8.7	Improved	26	23	Improved	62	61	No Change
Hawaii	30	25	Improved	15.2	10.3	Improved	26	29	Worsened	66	65	No Change
Idaho	40	39	No Change	16.4	14.2	Improved	34	29	Improved	53	57	Worsened
Illinois	34	34	No Change	17.8	11.8	Improved	32	24	Improved	55	56	No Change
Indiana	38	34	Improved	18.4	12.3	Improved	34	36	No Change	57	54	Improved
Iowa	30	30	No Change	15.1	6.5	Improved	29	26	Improved	45	47	No Change
Kansas	34	35	No Change	16.2	11.4	Improved	24	25	No Change	53	57	Worsened
Kentucky	33	34	No Change	14.4	9.3	Improved	28	19	Improved	52	55	Worsened
Louisiana	33	29	Improved	17.0	16.7	No Change	27	28	No Change	59	62	Worsened
Maine	27	28	No Change	16.8	10.6	Improved	15	24	Worsened	45	50	Worsened
Maryland	27	28	No Change	16.4	11.2	Improved	26	26	No Change	57	56	No Change
Massachusetts	23	24	No Change	16.3	9.4	Improved	25	18	Improved	46	52	Worsened
Michigan	29	28	No Change	15.5	9.0	Improved	35	29	Improved	53	51	No Change
Minnesota	28	28	No Change	11.0	6.8	Improved	30	33	Worsened	46	50	Worsened
Mississippi	36	35	No Change	14.8	11.9	Improved	29	29	No Change	61	55	Improved
Missouri	36	33	Improved	17.9	11.5	Improved	30	33	Worsened	51	51	No Change
Montana	37	37	No Change	16.0	11.3	Improved	33	38	Worsened	54	58	Worsened
Nebraska	33	32	No Change	18.5	10.4	Improved	20	22	No Change	56	53	Improved
Nevada	37	36	No Change	19.6	17.3	Improved	32	36	Worsened	68	64	Improved
New Hampshire	28	28	No Change	20.9	11.7	Improved	20	19	No Change	49	45	Improved
New Jersey	31	31	No Change	18.6	12.9	Improved	33	30	Improved	56	60	Worsened
New Mexico	37	36	No Change	19.6	15.4	Improved	24	23	No Change	57	54	Improved
New York	30	29	No Change	21.2	12.8	Improved	29	31	No Change	60	60	No Change
North Carolina	28	30	Worsened	13.4	7.8	Improved	19	22	Worsened	49	55	Worsened
North Dakota	34	35	No Change	14.6	10.7	Improved	29	18	Improved	58	56	No Change
Ohio	34	33	No Change	18.4	15.4	Improved	32	25	Improved	54	54	No Change
Oklahoma	40	38	Improved	15.8	10.9	Improved	27	31	Worsened	58	60	No Change
Oregon	32	31	No Change	16.0	11.0	Improved	35	34	No Change	53	60	Worsened
Pennsylvania	32	32	No Change	18.9	13.7	Improved	21	20	No Change	52	54	No Change
Rhode Island	25	27	Worsened	23.7	18.4	Improved	24	25	No Change	55	46	Improved
South Carolina	33	32	No Change	—	—	—	27	25	No Change	55	57	No Change
South Dakota	31	35	Worsened	13.2	7.4	Improved	24	31	Worsened	53	56	Worsened
Tennessee	32	33	No Change	13.5	10.3	Improved	28	29	No Change	57	51	Improved
Texas	36	37	No Change	15.0	9.8	Improved	36	28	Improved	60	62	No Change
Utah	32	34	Worsened	15.2	11.4	Improved	29	26	Improved	56	51	Improved
Vermont	30	32	Worsened	19.3	11.6	Improved	28	21	Improved	43	41	No Change
Virginia	29	29	No Change	14.2	9.8	Improved	26	22	Improved	51	55	Worsened
Washington	31	32	No Change	12.7	7.9	Improved	33	35	No Change	59	53	Improved
West Virginia	35	34	No Change	19.6	15.1	Improved	37	28	Improved	54	51	Improved
Wisconsin	27	29	Worsened	13.7	11.5	Improved	29	21	Improved	53	53	No Change
Wyoming	40	41	No Change	22.4	22.2	No Change	36	32	Improved	53	64	Worsened

Notes: — Indicates that estimates are not available.

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

	Avoidable Hospital Use and Cost Dimension Summary	Potentially avoidable emergency department visits ages 18–64		Potentially avoidable emergency department visits age 65 and older		Preventable hospitalizations ages 18–64		Preventable hospitalizations age 65 and older	
		2020	2017 rank	2016 rank	2017 rank	2018 rank			
United States	—	149.5	—	189.4	—	6.8	—	41.6	—
Alabama	27	163.0	37	188.3	28	7.9	49	52.8	47
Alaska	8	152.4	30	207.2	42	6.4	11	23.7	4
Arizona	9	146.8	28	183.7	26	6.6	18	27.0	7
Arkansas	36	170.3	43	193.4	34	6.8	27	46.6	39
California	21	97.9	7	172.3	14	6.2	3	33.5	14
Colorado	4	110.9	11	174.0	15	6.1	2	23.4	3
Connecticut	31	140.0	26	193.4	34	6.3	4	43.1	30
Delaware	34	98.0	7	168.7	8	7.5	47	42.5	29
District of Columbia	42	—	—	243.3	50	—	—	47.5	41
Florida	47	206.2	47	190.4	30	7.4	46	44.3	34
Georgia	32	169.1	42	193.0	33	6.9	32	44.1	33
Hawaii	1	156.8	32	140.9	1	6.6	18	20.4	1
Idaho	5	117.6	14	176.3	18	6.3	4	23.9	5
Illinois	38	150.5	29	192.4	32	6.8	27	48.5	45
Indiana	41	162.4	35	199.8	39	7.0	38	46.3	37
Iowa	12	116.7	13	182.9	25	6.5	15	34.6	16
Kansas	29	139.4	25	177.2	19	6.9	32	39.5	25
Kentucky	45	121.9	18	223.5	46	7.2	42	56.0	51
Louisiana	48	162.8	36	223.9	47	6.7	24	54.8	48
Maine	21	135.6	23	212.0	43	6.6	18	35.6	19
Maryland	23	122.6	19	181.0	21	7.0	38	38.4	23
Massachusetts	37	95.4	5	196.6	38	6.4	11	50.1	46
Michigan	39	166.8	39	218.4	45	7.3	43	47.8	43
Minnesota	13	96.0	6	182.6	23	6.3	4	33.1	12
Mississippi	50	173.7	45	229.3	49	7.3	43	55.0	49
Missouri	46	258.1	49	202.2	41	7.3	43	45.7	36
Montana	7	127.6	20	170.3	10	6.3	4	28.7	10
Nebraska	14	118.8	15	155.2	3	6.8	27	34.7	17
Nevada	40	224.3	48	172.1	12	7.1	40	38.0	22
New Hampshire	26	105.5	9	179.4	20	6.3	4	39.2	24
New Jersey	35	107.5	10	167.5	6	6.5	15	44.7	35
New Mexico	10	133.3	22	187.0	27	6.5	15	28.5	9
New York	28	93.0	4	172.0	12	6.3	4	43.2	31
North Carolina	18	163.9	38	201.5	40	6.7	24	41.9	27
North Dakota	11	158.1	33	166.6	5	6.6	18	35.9	20
Ohio	44	168.7	41	217.2	44	6.9	32	47.8	43
Oklahoma	49	171.8	44	226.2	48	6.9	32	47.5	41
Oregon	2	84.2	1	170.5	11	6.0	1	26.6	6
Pennsylvania	32	111.7	12	181.0	21	6.8	27	46.3	37
Rhode Island	29	120.4	17	182.6	23	6.9	32	42.4	28
South Carolina	16	—	—	175.4	17	—	—	37.8	21
South Dakota	20	118.9	16	153.2	2	6.7	24	34.3	15
Tennessee	24	167.4	40	195.2	37	7.1	40	47.4	40
Texas	42	196.6	46	194.4	36	6.9	32	44.0	32
Utah	3	86.9	2	155.1	3	6.4	11	22.6	2
Vermont	15	136.3	24	174.9	16	6.6	18	33.4	13
Virginia	19	145.4	27	189.1	29	6.6	18	39.7	26
Washington	6	89.5	3	169.9	9	6.3	4	27.5	8
West Virginia	51	160.3	34	244.9	51	7.7	48	55.7	50
Wisconsin	24	155.5	31	191.5	31	6.4	11	35.1	18
Wyoming	17	127.9	20	167.8	7	6.8	27	32.5	11

Notes: — Indicates that estimates are not available.

APPENDIX E1. Avoidable Hospital Use & Cost: Dimension Ranking and Indicator Rates (continued)

	Hospital 30-day readmission rate ages 18–64		Hospital 30-day readmission rate age 65 and older		Skilled nursing facility patients with a hospital readmission		Nursing home residents with a hospital admission		Home health patients with a hospital admission	
	2017	rank	2018	rank	2016	rank	2016	rank	2018	rank
United States	3.2	—	40.0	—	19%	—	15%	—	16%	—
Alabama	2.3	1	43.2	35	20	32	19	39	17	43
Alaska	2.9	7	24.2	4	11	1	13	14	15	9
Arizona	3.3	34	28.4	11	19	22	7	2	14	1
Arkansas	3.3	34	41.0	31	22	47	23	48	16	19
California	2.8	4	36.8	22	20	32	19	39	14	1
Colorado	2.8	4	24.4	5	15	6	9	5	15	9
Connecticut	2.9	7	46.8	46	19	22	13	14	16	19
Delaware	3.4	42	35.4	21	19	22	16	28	15	9
District of Columbia	—	—	43.7	37	19	22	19	39	14	1
Florida	3.5	44	46.3	44	21	43	21	46	15	9
Georgia	3.2	26	40.3	27	20	32	16	28	17	43
Hawaii	3.1	19	18.5	1	13	2	5	1	14	1
Idaho	3.2	26	22.9	3	13	2	11	8	14	1
Illinois	3.1	19	47.4	47	20	32	17	34	16	19
Indiana	3.3	34	40.7	29	18	20	17	34	16	19
Iowa	3.2	26	29.7	12	16	12	14	21	16	19
Kansas	3.3	34	38.0	26	17	16	19	39	17	43
Kentucky	3.5	44	49.5	50	21	43	21	46	16	19
Louisiana	3.1	19	45.1	41	24	50	26	50	16	19
Maine	2.7	2	32.2	15	16	12	12	10	16	19
Maryland	3.0	12	41.4	33	19	22	16	28	15	9
Massachusetts	3.2	26	48.1	48	20	32	13	14	17	43
Michigan	3.5	44	49.0	49	20	32	15	23	16	19
Minnesota	3.3	34	37.4	25	16	12	7	2	16	19
Mississippi	3.1	19	45.3	42	22	47	28	51	17	43
Missouri	3.3	34	44.4	39	20	32	17	34	16	19
Montana	3.0	12	25.0	7	14	5	13	14	15	9
Nebraska	3.0	12	33.0	18	15	6	16	28	16	19
Nevada	3.5	44	40.7	29	24	50	20	44	16	19
New Hampshire	3.2	26	35.2	20	17	16	13	14	17	43
New Jersey	3.1	19	44.3	38	21	43	18	37	16	19
New Mexico	2.9	7	27.0	8	18	20	13	14	14	1
New York	2.9	7	46.7	45	20	32	13	14	16	19
North Carolina	3.0	12	37.2	23	19	22	16	28	16	19
North Dakota	3.1	19	32.5	16	15	6	14	21	15	9
Ohio	3.3	34	44.9	40	20	32	12	10	16	19
Oklahoma	3.6	49	41.5	34	22	47	23	48	16	19
Oregon	2.7	2	24.9	6	17	16	9	5	14	1
Pennsylvania	3.3	34	43.6	36	19	22	12	10	17	43
Rhode Island	3.2	26	45.3	42	19	22	8	4	17	43
South Carolina	—	—	32.7	17	20	32	18	37	16	19
South Dakota	3.2	26	30.8	14	15	6	15	23	16	19
Tennessee	3.0	12	41.0	31	19	22	19	39	16	19
Texas	3.5	44	40.3	27	21	43	20	44	15	9
Utah	2.9	7	21.9	2	13	2	10	7	14	1
Vermont	3.0	12	30.4	13	16	12	15	23	16	19
Virginia	3.0	12	37.2	23	19	22	15	23	16	19
Washington	3.1	19	27.7	10	15	6	12	10	15	9
West Virginia	3.2	26	51.1	51	20	32	16	28	17	43
Wisconsin	3.4	42	33.0	18	17	16	11	8	15	9
Wyoming	2.8	4	27.5	9	15	6	15	23	16	19

Notes: — Indicates that estimates are not available.

APPENDIX E1. Avoidable Hospital Use & Cost: Dimension Ranking and Indicator Rates (continued)

	Adults with inappropriate lower back imaging		Employer-sponsored insurance spending per enrollee		Total Medicare (Parts A & B) reimbursements per enrollee		Primary care spending as share of total, ages 18–64		Primary care spending as share of total, age 65 and older	
	2017	rank	2017	rank	2018	rank	2018	rank	2017	rank
United States	70.1%	—	\$5,137	—	\$9,847	—	6.0%	—	5.7%	—
Alabama	57.5	1	4,068	5	10,758	46	7.3	12	6.3	7
Alaska	73.5	41	8,104	49	7,109	2	11.3	1	5.8	20
Arizona	66.9	19	4,962	21	9,003	19	6.4	18	6.4	6
Arkansas	65.4	15	3,874	2	10,068	38	7.0	15	6.0	17
California	73.4	40	5,376	38	9,529	27	5.0	41	5.1	48
Colorado	69.2	28	5,057	27	8,504	11	5.6	32	6.1	15
Connecticut	68.1	23	5,447	41	10,525	44	6.4	18	5.3	35
Delaware	69.9	32	5,173	33	9,480	25	4.5	46	5.3	35
District of Columbia	—	—	—	—	9,624	28	—	—	5.2	41
Florida	65.1	12	5,176	33	11,316	50	4.7	45	6.1	13
Georgia	62.6	3	5,063	28	9,840	30	6.2	23	6.1	12
Hawaii	73.5	41	3,948	3	6,473	1	6.2	22	5.7	22
Idaho	69.4	31	5,225	35	8,328	9	7.2	14	5.3	37
Illinois	68.9	26	5,110	30	10,226	41	5.8	30	5.6	24
Indiana	65.6	17	5,799	46	9,925	33	3.9	48	5.2	42
Iowa	75.7	47	4,569	10	8,613	13	8.3	3	6.3	9
Kansas	71.1	33	4,657	16	9,987	37	6.0	27	6.6	4
Kentucky	65.6	17	4,488	9	10,254	42	4.5	47	6.2	10
Louisiana	62.3	2	4,633	15	11,604	51	6.1	25	5.1	44
Maine	74.4	44	5,152	32	8,808	17	5.9	29	5.6	24
Maryland	67.9	22	4,037	4	9,691	29	6.3	21	5.5	30
Massachusetts	71.6	36	5,042	26	9,949	34	7.3	13	5.3	38
Michigan	68.6	25	4,134	6	10,125	39	7.7	8	5.5	31
Minnesota	72.6	38	5,105	29	8,697	16	8.1	4	5.2	43
Mississippi	64.7	8	3,606	1	11,193	49	5.3	36	5.6	26
Missouri	65.0	11	4,618	14	9,874	31	5.0	40	5.3	39
Montana	69.3	30	5,232	36	7,879	5	5.3	36	5.7	21
Nebraska	74.8	45	5,016	24	9,452	24	7.8	7	6.1	13
Nevada	64.7	8	4,597	12	9,473	25	5.0	43	5.5	32
New Hampshire	65.5	16	5,818	47	8,674	14	6.1	24	4.9	50
New Jersey	67.8	21	5,240	37	10,595	45	5.6	34	5.1	45
New Mexico	74.2	43	5,006	23	7,881	5	6.4	18	6.1	15
New York	69.0	27	5,631	42	10,356	43	5.5	35	5.3	39
North Carolina	64.9	10	4,916	19	9,245	21	7.7	9	6.9	3
North Dakota	68.1	23	4,888	18	8,684	14	8.0	5	5.6	27
Ohio	67.7	20	5,137	31	10,142	40	4.7	44	5.1	46
Oklahoma	64.0	5	5,022	25	10,947	47	6.1	26	5.1	49
Oregon	75.5	46	4,598	12	7,586	3	8.0	6	6.2	11
Pennsylvania	69.2	28	4,587	11	9,953	34	5.1	38	5.7	23
Rhode Island	65.1	12	4,413	8	9,314	23	5.7	31	4.8	51
South Carolina	—	—	—	—	9,289	22	—	—	6.9	2
South Dakota	76.4	49	5,379	39	8,491	10	6.8	16	5.1	46
Tennessee	63.0	4	4,355	7	9,966	36	7.6	10	7.2	1
Texas	64.2	6	5,707	43	11,137	48	5.9	28	5.5	29
Utah	71.5	35	4,926	20	8,955	18	5.6	33	5.6	28
Vermont	72.6	38	5,420	40	7,634	4	5.1	39	6.4	5
Virginia	65.2	14	4,725	17	9,084	20	6.5	17	6.0	18
Washington	75.7	47	4,957	21	8,044	8	7.5	11	6.3	7
West Virginia	64.2	6	5,729	44	9,908	32	3.6	49	5.9	19
Wisconsin	72.5	37	6,350	48	8,517	12	8.7	2	5.3	34
Wyoming	71.1	33	5,727	44	8,017	7	5.0	42	5.4	33

Notes: — Indicates that estimates are not available.

APPENDIX E2. Avoidable Hospital Use & Cost: Key Indicator Trends

	Potentially avoidable emergency department visits						Hospital admissions for ambulatory care—sensitive conditions					
	Ages 18–64			Age 65 and older			Ages 18–64			Age 65 and older		
	2015	2017		2013	2016		2015	2017		2014	2018	
United States	159.0	149.5	No Change	181.4	189.4	No Change	4.6	6.8	No Change	44.7	41.6	No Change
Alabama	171.5	163.0	No Change	183.9	188.3	No Change	6.0	7.9	Worsened	52.4	52.8	No Change
Alaska	166.0	152.4	No Change	203.1	207.2	No Change	4.4	6.4	Worsened	—	23.7	—
Arizona	175.7	146.8	Improved	170.5	183.7	Worsened	4.6	6.6	Worsened	30.4	27.0	No Change
Arkansas	157.1	170.3	No Change	176.6	193.4	Worsened	5.3	6.8	Worsened	52.3	46.6	Improved
California	130.0	97.9	Improved	163.0	172.3	No Change	3.6	6.2	Worsened	33.1	33.5	No Change
Colorado	147.4	110.9	Improved	163.6	174.0	No Change	3.5	6.1	Worsened	27.7	23.4	No Change
Connecticut	162.9	140.0	Improved	188.8	193.4	No Change	3.9	6.3	Worsened	45.0	43.1	No Change
Delaware	150.6	98.0	Improved	158.9	168.7	No Change	5.2	7.5	Worsened	45.8	42.5	No Change
District of Columbia	—	—	—	250.8	243.3	No Change	—	—	—	49.7	47.5	No Change
Florida	177.6	206.2	Worsened	175.8	190.4	Worsened	5.7	7.4	Worsened	49.3	44.3	Improved
Georgia	164.0	169.1	No Change	187.8	193.0	No Change	5.1	6.9	Worsened	45.9	44.1	No Change
Hawaii	137.6	156.8	Worsened	127.5	140.9	Worsened	4.3	6.6	Worsened	22.8	20.4	No Change
Idaho	133.5	117.6	Improved	159.5	176.3	Worsened	3.6	6.3	Worsened	26.3	23.9	No Change
Illinois	154.4	150.5	No Change	185.7	192.4	No Change	4.8	6.8	Worsened	48.8	48.5	No Change
Indiana	171.5	162.4	No Change	191.6	199.8	No Change	5.6	7.0	Worsened	50.3	46.3	No Change
Iowa	151.1	116.7	Improved	178.8	182.9	No Change	4.4	6.5	Worsened	40.0	34.6	Improved
Kansas	160.8	139.4	Improved	168.7	177.2	No Change	5.3	6.9	Worsened	44.8	39.5	Improved
Kentucky	151.2	121.9	Improved	218.5	223.5	No Change	5.4	7.2	Worsened	66.3	56.0	Improved
Louisiana	173.9	162.8	No Change	219.4	223.9	No Change	5.6	6.7	Worsened	62.2	54.8	Improved
Maine	172.4	135.6	Improved	216.9	212.0	No Change	3.8	6.6	Worsened	40.9	35.6	Improved
Maryland	148.5	122.6	Improved	185.6	181.0	No Change	4.7	7.0	Worsened	44.6	38.4	Improved
Massachusetts	142.1	95.4	Improved	197.3	196.6	No Change	4.0	6.4	Worsened	50.3	50.1	No Change
Michigan	159.4	166.8	No Change	209.9	218.4	No Change	4.9	7.3	Worsened	51.7	47.8	No Change
Minnesota	139.2	96.0	Improved	175.3	182.6	No Change	3.8	6.3	Worsened	34.5	33.1	No Change
Mississippi	182.6	173.7	No Change	222.0	229.3	No Change	6.1	7.3	Worsened	61.8	55.0	Improved
Missouri	203.4	258.1	Worsened	190.0	202.2	Worsened	5.1	7.3	Worsened	47.8	45.7	No Change
Montana	144.6	127.6	Improved	159.1	170.3	No Change	4.1	6.3	Worsened	32.4	28.7	No Change
Nebraska	140.3	118.8	Improved	148.7	155.2	No Change	4.7	6.8	Worsened	39.5	34.7	No Change
Nevada	186.7	224.3	Worsened	157.9	172.1	Worsened	4.9	7.1	Worsened	35.0	38.0	No Change
New Hampshire	155.5	105.5	Improved	174.6	179.4	No Change	3.9	6.3	Worsened	39.8	39.2	No Change
New Jersey	145.3	107.5	Improved	160.3	167.5	No Change	4.6	6.5	Worsened	46.2	44.7	No Change
New Mexico	149.2	133.3	Improved	170.1	187.0	Worsened	3.9	6.5	Worsened	35.7	28.5	Improved
New York	155.0	93.0	Improved	165.0	172.0	No Change	4.7	6.3	Worsened	44.1	43.2	No Change
North Carolina	159.2	163.9	No Change	192.3	201.5	No Change	4.4	6.7	Worsened	43.6	41.9	No Change
North Dakota	161.7	158.1	No Change	177.6	166.6	No Change	3.9	6.6	Worsened	41.5	35.9	Improved
Ohio	177.0	168.7	No Change	213.8	217.2	No Change	5.3	6.9	Worsened	54.1	47.8	Improved
Oklahoma	172.3	171.8	No Change	205.6	226.2	Worsened	5.2	6.9	Worsened	51.2	47.5	No Change
Oregon	137.1	84.2	Improved	155.4	170.5	Worsened	3.5	6.0	Worsened	29.6	26.6	No Change
Pennsylvania	158.6	111.7	Improved	181.3	181.0	No Change	4.6	6.8	Worsened	47.9	46.3	No Change
Rhode Island	157.9	120.4	Improved	195.6	182.6	Improved	4.2	6.9	Worsened	—	42.4	—
South Carolina	—	—	—	168.7	175.4	No Change	—	—	—	40.1	37.8	No Change
South Dakota	143.3	118.9	Improved	149.1	153.2	No Change	4.2	6.7	Worsened	—	34.3	—
Tennessee	168.3	167.4	No Change	189.2	195.2	No Change	5.7	7.1	Worsened	52.3	47.4	No Change
Texas	175.6	196.6	Worsened	180.2	194.4	Worsened	5.3	6.9	Worsened	47.7	44.0	No Change
Utah	131.9	86.9	Improved	141.7	155.1	Worsened	4.0	6.4	Worsened	25.6	22.6	No Change
Vermont	163.5	136.3	Improved	178.0	174.9	No Change	4.1	6.6	Worsened	—	33.4	—
Virginia	168.4	145.4	Improved	186.6	189.1	No Change	4.6	6.6	Worsened	40.5	39.7	No Change
Washington	137.5	89.5	Improved	156.4	169.9	Worsened	3.3	6.3	Worsened	29.2	27.5	No Change
West Virginia	181.7	160.3	Improved	222.5	244.9	Worsened	5.5	7.7	Worsened	59.6	55.7	No Change
Wisconsin	163.8	155.5	No Change	175.8	191.5	Worsened	4.3	6.4	Worsened	37.6	35.1	No Change
Wyoming	165.8	127.9	Improved	159.6	167.8	No Change	5.0	6.8	Worsened	—	32.5	—

Notes: — Indicates that estimates are not available.

APPENDIX E2. Avoidable Hospital Use & Cost: Key Indicator Trends (continued)

	Total employer-sponsored insurance reimbursements per enrollee, ages 18–64			Total Medicare (Parts A & B) reimbursements per enrollee		
	2013	2017		2014	2018	
United States	\$4,697	\$5,137	Worsened	\$9,025	\$9,847	Worsened
Alabama	3,706	4,068	No Change	9,426	10,758	Worsened
Alaska	7,186	8,104	Worsened	6,237	7,109	Worsened
Arizona	4,453	4,962	Worsened	8,137	9,003	Worsened
Arkansas	3,117	3,874	Worsened	8,877	10,068	Worsened
California	4,915	5,376	Worsened	8,409	9,529	Worsened
Colorado	4,625	5,057	Worsened	7,632	8,504	Worsened
Connecticut	5,067	5,447	Worsened	9,174	10,525	Worsened
Delaware	4,509	5,173	Worsened	8,899	9,480	No Change
District of Columbia	3,548	—	—	8,843	9,624	Worsened
Florida	4,748	5,176	Worsened	10,683	11,316	Worsened
Georgia	4,951	5,063	No Change	8,890	9,840	Worsened
Hawaii	3,460	3,948	Worsened	5,640	6,473	Worsened
Idaho	4,906	5,225	No Change	7,564	8,328	Worsened
Illinois	4,575	5,110	Worsened	9,362	10,226	Worsened
Indiana	4,955	5,799	Worsened	9,199	9,925	Worsened
Iowa	3,784	4,569	Worsened	7,766	8,613	Worsened
Kansas	4,079	4,657	Worsened	8,887	9,987	Worsened
Kentucky	4,393	4,488	No Change	9,288	10,254	Worsened
Louisiana	4,404	4,633	No Change	10,851	11,604	Worsened
Maine	4,661	5,152	Worsened	7,957	8,808	Worsened
Maryland	3,683	4,037	No Change	8,986	9,691	Worsened
Massachusetts	4,659	5,042	Worsened	9,058	9,949	Worsened
Michigan	3,903	4,134	No Change	9,739	10,125	No Change
Minnesota	4,483	5,105	Worsened	7,697	8,697	Worsened
Mississippi	3,982	3,606	Improved	10,087	11,193	Worsened
Missouri	4,266	4,618	No Change	8,967	9,874	Worsened
Montana	4,553	5,232	Worsened	6,836	7,879	Worsened
Nebraska	4,507	5,016	Worsened	8,339	9,452	Worsened
Nevada	4,022	4,597	Worsened	8,656	9,473	Worsened
New Hampshire	5,245	5,818	Worsened	7,853	8,674	Worsened
New Jersey	4,771	5,240	Worsened	9,740	10,595	Worsened
New Mexico	4,407	5,006	Worsened	7,148	7,881	Worsened
New York	5,279	5,631	No Change	9,171	10,356	Worsened
North Carolina	4,497	4,916	Worsened	8,448	9,245	Worsened
North Dakota	4,306	4,888	Worsened	7,888	8,684	Worsened
Ohio	4,464	5,137	Worsened	9,598	10,142	No Change
Oklahoma	4,312	5,022	Worsened	9,462	10,947	Worsened
Oregon	4,300	4,598	No Change	6,743	7,586	Worsened
Pennsylvania	4,185	4,587	Worsened	9,468	9,953	No Change
Rhode Island	4,018	4,413	Worsened	8,925	9,314	No Change
South Carolina	—	—	—	8,629	9,289	Worsened
South Dakota	5,042	5,379	No Change	7,567	8,491	Worsened
Tennessee	4,081	4,355	No Change	9,252	9,966	Worsened
Texas	5,110	5,707	Worsened	10,387	11,137	Worsened
Utah	4,322	4,926	Worsened	8,206	8,955	Worsened
Vermont	5,384	5,420	No Change	7,046	7,634	No Change
Virginia	4,203	4,725	Worsened	8,156	9,084	Worsened
Washington	4,545	4,957	Worsened	7,315	8,044	Worsened
West Virginia	5,345	5,729	Worsened	8,681	9,908	Worsened
Wisconsin	5,871	6,350	Worsened	7,826	8,517	Worsened
Wyoming	5,779	5,727	No Change	7,012	8,017	Worsened

Notes: — Indicates that estimates are not available.

APPENDIX F1. Healthy Lives: Dimension Ranking and Indicator Rates

	Healthy Lives Dimension Summary	Mortality amenable to health care		Breast cancer deaths		Colorectal cancer deaths		Suicide deaths		Alcohol deaths		Drug poisoning deaths	
	2020	2016–17	rank	2018	rank	2018	rank	2018	rank	2018	rank	2018	rank
United States	—	84.5	—	19.7	—	12.6	—	14.2	—	9.9	—	20.7	—
Alabama	42	112.0	44	21.9	45	14.7	46	16.5	29	7.2	8	16.6	19
Alaska	28	74.7	21	16.0	3	13.4	34	24.6	48	26.6	50	14.6	15
Arizona	32	76.3	22	17.1	9	11.9	13	19.2	36	15.1	43	23.8	31
Arkansas	45	127.5	49	17.8	11	13.5	35	18.3	32	9.8	22	15.7	18
California	6	71.2	17	19.0	18	11.6	11	10.9	8	11.8	34	12.8	12
Colorado	6	61.9	4	18.2	13	10.5	4	21.9	45	16.7	45	16.8	20
Connecticut	3	61.0	3	16.4	5	9.8	2	10.6	7	7.6	10	30.7	41
Delaware	31	88.5	32	21.8	44	13.0	31	11.4	10	7.7	11	43.8	50
District of Columbia	25	123.4	48	26.7	51	12.7	26	7.5	1	11.1	29	35.4	45
Florida	27	82.3	29	18.1	12	12.2	16	15.2	23	10.7	24	22.8	30
Georgia	35	103.3	42	20.6	33	13.5	35	14.6	18	7.7	11	13.2	13
Hawaii	1	77.8	24	15.1	1	10.3	3	11.9	11	5.7	1	14.3	14
Idaho	16	66.2	10	22.2	46	12.3	19	23.9	47	13.9	40	14.6	15
Illinois	19	83.8	30	20.7	34	13.5	35	11.3	9	7.7	11	21.3	27
Indiana	43	94.4	36	20.8	37	13.7	39	16.0	28	10.7	24	25.6	33
Iowa	20	73.7	20	18.3	14	14.1	43	15.5	26	10.9	26	9.6	3
Kansas	34	80.1	26	20.3	28	13.8	40	19.3	38	11.0	28	12.4	10
Kentucky	48	113.1	45	19.8	24	15.6	49	17.5	31	9.4	21	30.9	42
Louisiana	46	122.2	47	22.6	48	14.8	47	15.1	22	6.7	6	25.4	32
Maine	26	66.3	10	16.3	4	12.2	16	18.5	33	12.0	35	27.9	39
Maryland	22	89.2	33	21.2	39	12.8	29	10.2	6	5.8	2	37.2	49
Massachusetts	2	57.4	2	15.7	2	10.7	5	9.9	5	8.9	16	32.8	43
Michigan	37	92.3	34	21.7	42	12.6	24	15.0	21	9.3	19	26.6	34
Minnesota	4	54.5	1	18.3	14	11.3	8	13.1	12	11.7	32	11.5	8
Mississippi	50	143.4	51	21.5	41	16.1	50	13.8	16	5.9	3	10.8	6
Missouri	44	95.7	38	19.2	19	14.0	41	19.5	41	8.6	15	27.5	37
Montana	12	70.3	16	16.5	6	11.3	8	24.9	49	14.7	42	12.2	9
Nebraska	11	67.2	13	18.3	14	14.6	45	13.4	13	13.0	38	7.4	2
Nevada	40	97.3	40	21.2	39	12.7	26	20.8	43	15.8	44	21.2	25
New Hampshire	14	62.1	5	16.7	7	11.9	13	19.4	40	11.7	32	35.8	46
New Jersey	10	72.2	19	20.7	34	12.5	22	8.3	2	6.5	5	33.1	44
New Mexico	39	86.4	31	19.4	21	12.2	16	25.0	50	32.7	51	26.7	36
New York	8	76.6	23	19.3	20	11.2	7	8.3	2	7.3	9	18.4	22
North Carolina	36	92.5	35	20.3	28	12.0	15	13.7	14	9.2	18	22.4	28
North Dakota	15	71.6	18	16.9	8	12.5	22	19.2	36	17.2	46	10.2	4
Ohio	41	95.9	39	21.0	38	14.1	43	15.3	24	8.9	16	35.9	47
Oklahoma	49	129.5	50	24.3	50	15.1	48	20.0	42	14.3	41	18.4	22
Oregon	20	63.6	8	18.4	17	11.5	10	19.0	35	18.2	47	12.6	11
Pennsylvania	33	81.7	28	20.4	32	13.3	33	14.9	20	5.9	3	36.1	48
Rhode Island	12	69.3	14	17.1	9	12.3	19	9.5	4	12.4	37	30.1	40
South Carolina	38	99.9	41	21.7	42	12.4	21	15.4	25	9.3	19	22.6	29
South Dakota	28	78.7	25	20.0	25	13.5	35	19.3	38	22.0	48	6.9	1
Tennessee	46	114.4	46	23.2	49	14.0	41	16.6	30	11.4	31	27.5	37
Texas	23	95.0	37	20.0	25	12.9	30	13.7	14	7.8	14	10.4	5
Utah	5	64.3	9	20.1	27	9.1	1	22.2	46	10.9	26	21.2	25
Vermont	17	63.1	6	20.3	28	12.7	26	18.8	34	12.3	36	26.6	34
Virginia	18	80.3	27	20.7	34	12.6	24	14.0	17	6.9	7	17.1	21
Washington	9	63.2	7	19.4	21	10.9	6	15.9	27	13.6	39	14.8	17
West Virginia	51	108.9	43	22.3	47	17.2	51	21.2	44	10.6	23	51.5	51
Wisconsin	24	69.1	14	19.6	23	11.7	12	14.8	19	11.3	30	19.2	24
Wyoming	30	66.3	10	20.3	28	13.1	32	25.2	51	23.3	49	11.1	7

APPENDIX F1. Healthy Lives: Dimension Ranking and Indicator Rates (continued)

	Infant mortality		Adults who report fair or poor health		Adults who smoke		Adults who are obese		Children who are overweight or obese		Adults who have lost six or more teeth		State-based public health spending per resident	
	2017	rank	2018	rank	2018	rank	2018	rank	2018	rank	2018	rank	2017/18	rank
United States	5.8	—	17%	—	16%	—	32%	—	31%	—	9%	—	\$37	—
Alabama	7.4	46	20	44	19	36	38	46	33	35	14	46	58	10
Alaska	5.7	19	15	18	19	36	30	16	26	11	10	27	100	4
Arizona	5.7	19	18	36	14	9	31	21	30	24	8	13	10	49
Arkansas	8.1	49	22	50	23	49	39	48	33	35	17	49	51	14
California	4.2	3	17	29	11	2	26	3	33	35	6	2	66	8
Colorado	4.5	6	13	8	14	9	23	1	24	5	7	6	50	15
Connecticut	4.5	6	12	2	12	3	28	7	30	24	7	6	31	29
Delaware	6.3	32	15	18	16	22	34	32	25	6	10	27	41	22
District of Columbia	8.2	50	12	2	14	9	25	2	28	19	6	2	135	1
Florida	6.1	28	19	41	14	9	32	25	30	24	11	33	19	38
Georgia	7.2	42	17	29	16	22	33	29	30	24	11	33	23	36
Hawaii	5.4	16	15	18	13	5	27	6	19	1	6	2	124	3
Idaho	4.6	9	14	14	15	16	28	7	27	17	8	13	88	5
Illinois	6.1	28	15	18	15	16	32	25	25	6	8	13	26	32
Indiana	7.2	42	18	36	21	44	35	34	38	48	12	40	14	47
Iowa	5.3	14	12	2	17	29	36	42	36	42	8	13	41	22
Kansas	6.0	27	16	26	17	29	35	34	25	6	11	33	14	46
Kentucky	6.6	37	20	44	23	49	39	48	36	42	15	48	35	27
Louisiana	7.1	41	20	44	21	44	38	46	36	42	13	43	25	34
Maine	5.9	21	17	29	18	33	31	21	26	11	13	43	18	39
Maryland	6.4	34	14	14	13	5	32	25	32	32	7	6	43	21
Massachusetts	3.7	1	13	8	14	9	26	3	26	11	8	13	77	7
Michigan	6.8	38	18	36	19	36	33	29	26	11	10	27	15	43
Minnesota	4.8	12	12	2	15	16	30	16	25	6	6	2	44	20
Mississippi	8.7	51	20	44	21	44	41	50	39	51	17	49	15	44
Missouri	6.3	32	19	41	20	42	36	42	37	47	11	33	7	51
Montana	5.5	17	13	8	18	33	28	7	21	2	10	27	23	36
Nebraska	5.5	17	13	8	16	22	35	34	23	4	8	13	47	18
Nevada	5.9	21	18	36	16	22	30	16	34	40	8	13	8	50
New Hampshire	4.2	3	13	8	16	22	30	16	27	17	9	22	23	35
New Jersey	4.5	6	15	18	13	5	26	3	31	29	7	6	29	30
New Mexico	5.9	21	19	41	15	16	35	34	30	24	9	22	137	1
New York	4.6	9	15	18	13	5	28	7	29	22	9	22	85	6
North Carolina	7.0	39	17	29	17	29	35	34	29	22	11	33	15	42
North Dakota	4.4	5	11	1	19	36	35	34	32	32	7	6	55	11
Ohio	7.2	42	16	26	21	44	34	32	31	29	12	40	13	48
Oklahoma	7.8	47	20	44	20	42	36	42	36	42	13	43	40	24
Oregon	5.3	14	18	36	16	22	31	21	25	6	11	33	28	31
Pennsylvania	6.1	28	17	29	17	29	32	25	26	11	10	27	15	44
Rhode Island	6.2	31	16	26	15	16	28	7	31	29	8	13	54	13
South Carolina	6.5	36	17	29	18	33	35	34	38	48	12	40	26	32
South Dakota	7.8	47	12	2	19	36	29	14	26	11	9	22	35	26
Tennessee	7.3	45	20	44	21	44	36	42	36	42	14	46	50	15
Texas	5.9	21	17	29	14	9	35	34	33	35	7	6	17	41
Utah	5.9	21	13	8	9	1	28	7	21	2	5	1	33	28
Vermont	4.8	12	12	2	14	9	28	7	33	35	10	27	48	17
Virginia	5.9	21	15	18	15	16	31	21	32	32	8	13	39	25
Washington	3.9	2	15	18	12	3	29	14	28	19	7	6	46	19
West Virginia	7.0	39	23	51	25	51	41	50	38	48	20	51	61	9
Wisconsin	6.4	34	14	14	16	22	33	29	35	41	9	22	18	40
Wyoming	4.6	9	14	14	19	36	30	16	28	19	11	33	54	11

APPENDIX F2. Healthy Lives: Key Indicator Trends

	Mortality amenable to health care, deaths per 100,000 population			Infant mortality, deaths per 1,000 live births			Adults ages 18–64 who report fair or poor health			State-based public health spending per resident		
	2012–13	2016–17		2013	2017		2014	2018		2014/15	2017/18	
United States	83.7	84.5	No Change	6.0	5.8	No Change	16%	17%	No Change	\$36	\$37	Improved
Alabama	111.3	112.0	No Change	8.6	7.4	Improved	20	20	No Change	\$60	\$58	Worsened
Alaska	71.6	74.7	No Change	5.8	5.7	No Change	12	15	Worsened	\$131	\$100	Worsened
Arizona	72.4	76.3	No Change	5.3	5.7	No Change	18	18	No Change	\$9	\$10	Improved
Arkansas	118.9	127.5	No Change	7.9	8.1	No Change	21	22	No Change	\$50	\$51	Improved
California	72.0	71.2	No Change	4.8	4.2	No Change	17	17	No Change	\$56	\$66	Improved
Colorado	59.2	61.9	No Change	5.1	4.5	No Change	12	13	No Change	\$49	\$50	Improved
Connecticut	61.3	61.0	No Change	4.8	4.5	No Change	13	12	No Change	\$31	\$31	Worsened
Delaware	85.0	88.5	No Change	6.4	6.3	No Change	13	15	Worsened	\$45	\$41	Worsened
District of Columbia	123.9	123.4	No Change	6.7	8.2	Worsened	11	12	No Change	\$139	\$135	Worsened
Florida	80.0	82.3	No Change	6.1	6.1	No Change	17	19	Worsened	\$20	\$19	Worsened
Georgia	100.4	103.3	No Change	7.0	7.2	No Change	17	17	No Change	\$19	\$23	Improved
Hawaii	75.3	77.8	No Change	6.4	5.4	Improved	13	15	Worsened	\$163	\$124	Worsened
Idaho	66.7	66.2	No Change	5.6	4.6	Improved	11	14	Worsened	\$95	\$88	Worsened
Illinois	87.1	83.8	No Change	6.0	6.1	No Change	15	15	No Change	\$26	\$26	Improved
Indiana	91.0	94.4	No Change	7.2	7.2	No Change	17	18	No Change	\$13	\$14	Improved
Iowa	71.8	73.7	No Change	4.3	5.3	Worsened	12	12	No Change	\$39	\$41	Improved
Kansas	78.1	80.1	No Change	6.5	6.0	No Change	13	16	Worsened	\$13	\$14	Improved
Kentucky	105.8	113.1	No Change	6.4	6.6	No Change	22	20	Improved	\$34	\$35	Improved
Louisiana	123.5	122.2	No Change	8.7	7.1	Improved	19	20	No Change	\$20	\$25	Improved
Maine	62.3	66.3	No Change	7.1	5.9	Improved	14	17	Worsened	\$22	\$18	Worsened
Maryland	88.7	89.2	No Change	6.6	6.4	No Change	13	14	No Change	\$40	\$43	Improved
Massachusetts	60.4	57.4	No Change	4.2	3.7	No Change	13	13	No Change	\$50	\$77	Improved
Michigan	91.3	92.3	No Change	7.1	6.8	No Change	15	18	Worsened	\$24	\$15	Worsened
Minnesota	55.6	54.5	No Change	5.1	4.8	No Change	10	12	Worsened	\$15	\$44	Improved
Mississippi	136.7	143.4	No Change	9.6	8.7	Improved	20	20	No Change	\$12	\$15	Improved
Missouri	95.1	95.7	No Change	6.5	6.3	No Change	14	19	Worsened	\$6	\$7	Improved
Montana	70.3	70.3	No Change	5.6	5.5	No Change	13	13	No Change	\$22	\$23	Improved
Nebraska	64.9	67.2	No Change	5.2	5.5	No Change	12	13	No Change	\$44	\$47	Improved
Nevada	91.7	97.3	No Change	5.3	5.9	Worsened	17	18	No Change	\$4	\$8	Improved
New Hampshire	58.4	62.1	No Change	5.6	4.2	Improved	12	13	No Change	\$16	\$23	Improved
New Jersey	75.1	72.2	No Change	4.5	4.5	No Change	15	15	No Change	\$27	\$29	Improved
New Mexico	78.6	86.4	No Change	5.3	5.9	Worsened	19	19	No Change	\$48	\$137	Improved
New York	79.0	76.6	No Change	4.9	4.6	No Change	15	15	No Change	\$96	\$85	Worsened
North Carolina	92.5	92.5	No Change	7.0	7.0	No Change	17	17	No Change	\$14	\$15	Improved
North Dakota	70.5	71.6	No Change	6.0	4.4	Improved	12	11	No Change	\$98	\$55	Worsened
Ohio	94.5	95.9	No Change	7.3	7.2	No Change	16	16	No Change	\$14	\$13	Worsened
Oklahoma	117.5	129.5	Worsened	6.7	7.8	Worsened	18	20	Worsened	\$40	\$40	Worsened
Oregon	61.9	63.6	No Change	4.9	5.3	No Change	14	18	Worsened	\$26	\$28	Improved
Pennsylvania	82.0	81.7	No Change	6.7	6.1	Improved	15	17	Worsened	\$15	\$15	Improved
Rhode Island	68.5	69.3	No Change	6.5	6.2	No Change	13	16	Worsened	\$54	\$54	Worsened
South Carolina	99.2	99.9	No Change	6.9	6.5	No Change	18	17	No Change	\$21	\$26	Improved
South Dakota	74.5	78.7	No Change	6.5	7.8	Worsened	12	12	No Change	\$36	\$35	Worsened
Tennessee	110.0	114.4	No Change	6.8	7.3	No Change	22	20	Improved	\$46	\$50	Improved
Texas	93.4	95.0	No Change	5.8	5.9	No Change	18	17	No Change	\$28	\$17	Worsened
Utah	61.4	64.3	No Change	5.2	5.9	Worsened	11	13	Worsened	\$31	\$33	Improved
Vermont	57.2	63.1	No Change	4.4	4.8	No Change	10	12	Worsened	\$45	\$48	Improved
Virginia	81.3	80.3	No Change	6.2	5.9	No Change	15	15	No Change	\$37	\$39	Improved
Washington	62.2	63.2	No Change	4.5	3.9	Improved	15	15	No Change	\$38	\$46	Improved
West Virginia	103.5	108.9	No Change	7.6	7.0	No Change	23	23	No Change	\$74	\$61	Worsened
Wisconsin	69.4	69.1	No Change	6.3	6.4	No Change	14	14	No Change	\$15	\$18	Improved
Wyoming	68.0	66.3	No Change	4.8	4.6	No Change	12	14	Worsened	\$57	\$54	Worsened

APPENDIX F3. Death from Suicide, Alcohol, and Drugs, 2005–2018

	Suicide deaths (rate per 100,000)				Alcohol deaths (rate per 100,000)				Drug poisoning deaths (rate per 100,000)			
	2005	2012	2018	% Change 2005–2018	2005	2012	2018	% Change 2005–2018	2005	2012	2018	% Change 2005–2018
United States	10.9	12.6	14.2	30%	7.0	8.0	9.9	41%	10.1	13.1	20.7	105%
Alabama	11.5	14.7	16.5	43	5.2	5.1	7.2	38	6.3	12.1	16.6	163
Alaska	19.9	23.0	24.6	24	19.5	15.9	26.6	36	11.4	17.4	14.6	28
Arizona	16.4	17.3	19.2	17	11.3	14.9	15.1	34	14.1	17.7	23.8	69
Arkansas	14.3	16.3	18.3	28	4.9	5.3	9.8	100	10.1	13.1	15.7	55
California	9.1	10.0	10.9	20	11.2	11.0	11.8	5	9.0	10.3	12.8	42
Colorado	17.2	19.7	21.9	27	10.5	13.2	16.7	59	12.7	15.0	16.8	32
Connecticut	8.1	9.9	10.6	31	4.8	4.5	7.6	58	8.5	12.1	30.7	261
Delaware	9.7	13.2	11.4	18	6.2	5.7	7.7	24	7.5	15.2	43.8	484
District of Columbia	5.4	5.7	7.5	39	14.5	11.7	11.1	-23	13.7	12.6	35.4	158
Florida	12.5	14.3	15.2	22	8.0	8.4	10.7	34	13.5	13.3	22.8	69
Georgia	10.6	11.7	14.6	38	5.7	5.9	7.7	35	8.2	10.6	13.2	61
Hawaii	8.2	13.1	11.9	45	3.5	5.3	5.7	63	9.4	11.0	14.3	52
Idaho	16.5	19.0	23.9	45	9.5	13.0	13.9	46	8.1	11.9	14.6	80
Illinois	8.6	9.8	11.3	31	4.4	5.5	7.7	75	8.4	12.5	21.3	154
Indiana	11.8	14.3	16.0	36	4.9	7.0	10.7	118	9.8	16.0	25.6	161
Iowa	11.2	12.7	15.5	38	6.1	8.0	10.9	79	4.8	8.7	9.6	100
Kansas	13.3	17.4	19.3	45	6.3	7.2	11.0	75	9.1	11.5	12.4	36
Kentucky	13.4	16.2	17.5	31	5.6	7.2	9.4	68	15.3	25.0	30.9	102
Louisiana	11.0	12.4	15.1	37	4.6	4.4	6.7	46	14.7	12.3	25.4	73
Maine	12.4	14.5	18.5	49	8.2	7.8	12.0	46	12.4	11.5	27.9	125
Maryland	8.4	9.5	10.2	21	4.7	4.1	5.8	23	11.4	13.7	37.2	226
Massachusetts	7.2	8.7	9.9	38	5.5	6.9	8.9	62	12.0	12.7	32.8	173
Michigan	11.0	12.5	15.0	36	6.8	7.7	9.3	37	9.8	13.5	26.6	171
Minnesota	10.5	12.0	13.1	25	6.5	8.4	11.7	80	5.4	8.9	11.5	113
Mississippi	12.7	14.0	13.8	9	5.5	5.3	5.9	7	8.8	10.7	10.8	23
Missouri	12.5	14.9	19.5	56	5.5	6.8	8.6	56	10.7	16.2	27.5	157
Montana	21.7	22.6	24.9	15	12.1	14.6	14.7	21	10.1	11.9	12.2	21
Nebraska	10.9	12.5	13.4	23	6.4	8.5	13.0	103	5.0	7.9	7.4	48
Nevada	19.8	18.2	20.8	5	8.9	12.3	15.8	78	18.7	21.0	21.2	13
New Hampshire	12.0	14.1	19.4	62	7.5	8.8	11.7	56	10.7	13.4	35.8	235
New Jersey	6.1	7.4	8.3	36	5.2	5.0	6.5	25	9.4	13.7	33.1	252
New Mexico	17.8	21.3	25.0	40	16.2	22.5	32.7	102	20.1	24.7	26.7	33
New York	6.0	8.3	8.3	38	5.2	6.3	7.3	40	4.8	10.4	18.4	283
North Carolina	11.5	12.7	13.7	19	6.7	6.7	9.2	37	11.4	13.3	22.4	96
North Dakota	13.7	15.2	19.2	40	10.9	15.4	17.2	58	—	3.1	10.2	—
Ohio	11.5	13.0	15.3	33	6.1	6.4	8.9	46	10.9	18.9	35.9	229
Oklahoma	14.8	17.6	20.0	35	9.3	11.3	14.3	54	13.8	20.6	18.4	33
Oregon	14.9	17.8	19.0	28	13.4	14.9	18.2	36	10.4	12.5	12.6	21
Pennsylvania	11.1	12.4	14.9	34	3.5	5.1	5.9	69	13.2	19.0	36.1	173
Rhode Island	6.3	9.5	9.5	51	4.9	11.0	12.4	153	14.3	18.2	30.1	110
South Carolina	11.8	13.7	15.4	31	8.3	7.9	9.3	12	9.9	12.5	22.6	128
South Dakota	15.4	16.8	19.3	25	11.0	16.6	22.0	100	5.5	5.5	6.9	25
Tennessee	14.0	14.6	16.6	19	6.9	8.3	11.4	65	14.5	17.6	27.5	90
Texas	10.9	11.9	13.7	26	5.8	6.3	7.8	34	8.5	9.4	10.4	22
Utah	15.4	21.0	22.2	44	6.7	8.1	10.9	63	19.3	23.1	21.2	10
Vermont	12.5	13.0	18.8	50	7.5	8.0	12.3	64	8.5	10.9	26.6	213
Virginia	11.2	12.6	14.0	25	4.4	5.7	6.9	57	7.5	8.9	17.1	128
Washington	12.8	14.5	15.9	24	9.4	12.3	13.6	45	13.0	13.7	14.8	14
West Virginia	13.2	17.1	21.2	61	5.3	7.9	10.6	100	10.5	32.0	51.5	390
Wisconsin	11.6	12.4	14.8	28	7.9	8.6	11.3	43	9.3	12.2	19.2	106
Wyoming	17.3	29.6	25.2	46	11.6	17.0	23.3	101	4.9	16.8	11.1	127

Notes: — Indicates that estimates are not available.

APPENDIX G1. Income Disparity: Dimension Ranking and Indicator Rates

	Income Disparity Dimension Summary	Uninsured adults				Adults who went without care because of cost				High out-of-pocket medical spending				Adults without a dental visit			
		2018				2018				2017-18				2018			
		0%-19% and above	40% and above	Disparity	rank	0%-19% and above	40% and above	Disparity	rank	0%-19% and above	40% and above	Disparity	rank	0%-19% and above	20% and above	Disparity	rank
United States	—	23%	5%	-18	—	22%	6%	-16	—	19.3%	1.6%	-17.7	—	49%	20%	-29	—
Alabama	49	30	5	-25	45	30	5	-25	49	24.3	1.0	-23.3	43	56	21	-35	44
Alaska	17	27	8	-19	34	21	6	-15	19	18.4	2.4	-16.0	6	45	18	-27	14
Arizona	16	24	6	-18	32	21	6	-15	19	19.8	2.4	-17.4	17	52	23	-29	23
Arkansas	37	19	5	-14	22	23	5	-18	33	19.1	1.6	-17.5	19	62	22	-40	50
California	19	18	4	-14	22	19	5	-14	15	15.5	1.1	-14.4	3	47	18	-29	23
Colorado	13	19	5	-14	22	22	6	-16	26	25.3	2.4	-22.9	41	49	21	-28	18
Connecticut	7	16	3	-13	17	17	5	-12	9	19.6	2.8	-16.8	13	38	14	-24	4
Delaware	18	11	4	-7	3	19	4	-15	19	23.5	3.9	-19.6	34	55	18	-37	47
District of Columbia	30	8	2	-6	1	12	5	-7	2	15.1	0.6	-14.5	4	37	18	-19	1
Florida	44	32	8	-24	43	27	7	-20	40	18.8	2.3	-16.5	10	51	20	-31	31
Georgia	47	36	7	-29	50	32	7	-25	49	21.0	1.7	-19.3	31	53	20	-33	39
Hawaii	10	10	3	-7	3	14	3	-11	6	19.0	0.7	-18.3	24	40	14	-26	11
Idaho	8	26	6	-20	35	28	4	-24	47	22.9	2.0	-20.9	36	52	20	-32	33
Illinois	22	20	4	-16	28	21	4	-17	29	20.1	1.8	-18.3	24	45	20	-25	6
Indiana	31	20	5	-15	26	22	5	-17	29	16.3	1.1	-15.2	5	51	22	-29	23
Iowa	9	13	2	-11	12	15	3	-12	9	18.6	2.0	-16.6	11	43	18	-25	6
Kansas	34	26	4	-22	38	25	4	-21	41	21.0	2.2	-18.8	28	51	17	-34	41
Kentucky	35	12	3	-9	7	21	7	-14	15	20.0	2.4	-17.6	21	53	24	-29	23
Louisiana	28	18	6	-12	15	23	7	-16	26	17.4	1.1	-16.3	8	54	29	-25	6
Maine	47	21	5	-16	28	20	5	-15	19	23.2	—	—	—	57	17	-40	50
Maryland	24	18	3	-15	26	24	5	-19	36	21.3	1.6	-19.7	35	53	21	-32	33
Massachusetts	3	8	2	-6	1	18	5	-13	12	20.0	0.7	-19.3	31	39	18	-21	2
Michigan	33	13	3	-10	10	20	5	-15	19	17.7	1.4	-16.3	8	45	16	-29	23
Minnesota	6	12	2	-10	10	17	5	-12	9	18.6	1.6	-17.0	16	42	17	-25	6
Mississippi	41	32	7	-25	45	30	4	-26	51	19.0	1.6	-17.4	17	58	27	-31	31
Missouri	50	27	5	-22	38	27	4	-23	45	23.9	—	—	—	54	22	-32	33
Montana	12	20	6	-14	22	15	5	-10	4	21.3	2.8	-18.5	26	46	22	-24	4
Nebraska	32	26	4	-22	38	23	5	-18	33	25.0	2.3	-22.7	40	48	19	-29	23
Nevada	36	25	8	-17	30	23	7	-16	26	17.9	1.1	-16.8	13	53	17	-36	46
New Hampshire	38	15	4	-11	12	24	5	-19	36	28.0	0.7	-27.3	45	57	18	-39	49
New Jersey	26	24	4	-20	35	23	6	-17	29	20.4	1.8	-18.6	27	45	18	-27	14
New Mexico	5	19	6	-13	17	19	6	-13	12	14.5	2.2	-12.3	1	45	20	-25	6
New York	2	13	4	-9	7	17	6	-11	6	14.4	1.2	-13.2	2	42	20	-22	3
North Carolina	46	30	5	-25	45	27	6	-21	41	21.3	3.5	-17.8	22	51	17	-34	41
North Dakota	11	21	4	-17	30	19	4	-15	19	20.8	1.8	-19.0	30	52	20	-32	33
Ohio	3	16	3	-13	17	15	6	-9	3	17.9	1.3	-16.6	11	46	20	-26	11
Oklahoma	40	33	8	-25	45	27	4	-23	45	19.5	1.5	-18.0	23	57	23	-34	41
Oregon	41	17	4	-13	17	21	6	-15	19	23.8	—	—	—	49	17	-32	33
Pennsylvania	23	14	3	-11	12	15	5	-10	4	21.7	0.7	-21.0	37	48	20	-28	18
Rhode Island	38	10	3	-7	3	18	4	-14	15	15.3	—	—	—	42	14	-28	18
South Carolina	43	28	6	-22	38	28	6	-22	44	21.7	2.3	-19.4	33	55	20	-35	44
South Dakota	29	29	4	-25	45	23	4	-19	36	23.5	2.1	-21.4	38	46	18	-28	18
Tennessee	51	26	5	-21	37	25	7	-18	33	21.6	—	—	—	60	23	-37	47
Texas	24	43	9	-34	51	25	8	-17	29	20.8	2.0	-18.8	28	54	26	-28	18
Utah	1	23	5	-18	32	26	7	-19	36	29.5	1.9	-27.6	46	45	19	-26	11
Vermont	14	9	2	-7	3	10	5	-5	1	24.3	1.2	-23.1	42	43	16	-27	14
Virginia	45	28	4	-24	43	29	5	-24	47	22.6	1.2	-21.4	38	49	16	-33	39
Washington	20	17	4	-13	17	20	6	-14	15	17.4	1.3	-16.1	7	49	19	-30	29
West Virginia	27	13	4	-9	7	21	8	-13	12	18.5	1.0	-17.5	19	58	26	-32	33
Wisconsin	15	15	3	-12	15	17	6	-11	6	18.9	2.1	-16.8	13	44	17	-27	14
Wyoming	20	29	6	-23	42	26	5	-21	41	30.8	4.0	-26.8	44	50	20	-30	29

Notes: — Indicates that estimates are not available.

APPENDIX G1. Income Disparity: Dimension Ranking and Indicator Rates (continued)

	Adults without all recommended cancer screenings				Children without a medical home				Children without a medical and dental preventive care visit				Children without all recommended vaccines			
	2018				2018				2018				2018			
	0%–19%	40% and above	Disparity	rank	0%–19%	40% and above	Disparity	rank	0%–19%	40% and above	Disparity	rank	0%–19%	30% and above	Disparity	rank
United States	37%	26%	-11	—	64%	39%	-25	—	52%	29%	-23	—	33%	19%	-14	—
Alabama	37	25	-12	31	67	35	-32	43	58	37	-21	19	26	12	-14	24
Alaska	42	34	-8	9	65	47	-18	13	63	39	-24	32	29	34	5	2
Arizona	38	30	-8	9	64	38	-26	32	51	33	-18	8	34	28	-6	10
Arkansas	38	28	-10	19	61	42	-19	14	61	37	-24	32	31	16	-15	28
California	36	22	-14	39	63	47	-16	9	60	36	-24	32	39	15	-24	47
Colorado	39	29	-10	19	57	41	-16	9	46	24	-22	26	32	21	-11	18
Connecticut	28	22	-6	4	65	35	-30	40	44	23	-21	19	16	15	-1	7
Delaware	30	22	-8	9	65	41	-24	23	43	21	-22	26	34	16	-18	38
District of Columbia	37	20	-17	50	71	40	-31	42	49	24	-25	37	33	23	-10	15
Florida	39	25	-14	39	73	31	-42	51	44	26	-18	8	35	16	-19	42
Georgia	38	24	-14	39	67	35	-32	43	52	23	-29	44	29	12	-17	35
Hawaii	35	19	-16	48	58	42	-16	9	54	36	-18	8	35	17	-18	38
Idaho	49	34	-15	45	44	45	1	2	46	35	-11	4	25	38	13	1
Illinois	38	30	-8	9	72	35	-37	49	53	33	-20	15	31	14	-17	35
Indiana	38	30	-8	9	70	34	-36	48	58	24	-34	51	44	28	-16	32
Iowa	32	27	-5	2	48	41	-7	3	47	21	-26	39	39	10	-29	51
Kansas	43	29	-14	39	54	35	-19	14	47	26	-21	19	30	20	-10	15
Kentucky	42	27	-15	45	52	36	-16	9	47	23	-24	32	23	8	-15	28
Louisiana	33	23	-10	19	62	29	-33	46	60	29	-31	49	25	26	1	5
Maine	35	24	-11	26	56	32	-24	23	47	19	-28	43	32	14	-18	38
Maryland	31	24	-7	7	69	40	-29	37	49	27	-22	26	37	18	-19	42
Massachusetts	28	21	-7	7	72	33	-39	50	40	21	-19	13	20	15	-5	9
Michigan	30	25	-5	2	66	37	-29	37	60	29	-31	49	35	19	-16	32
Minnesota	35	24	-11	26	66	39	-27	34	52	30	-22	26	35	25	-10	15
Mississippi	38	28	-10	19	66	41	-25	29	57	39	-18	8	35	20	-15	28
Missouri	40	26	-14	39	65	41	-24	23	58	28	-30	47	41	18	-23	46
Montana	44	32	-12	31	61	36	-25	29	42	22	-20	15	42	35	-7	12
Nebraska	39	27	-12	31	61	32	-29	37	54	33	-21	19	27	21	-6	10
Nevada	44	28	-16	48	60	45	-15	8	58	31	-27	41	39	31	-8	13
New Hampshire	32	23	-9	16	44	35	-9	4	37	27	-10	2	32	10	-22	45
New Jersey	40	29	-11	26	62	38	-24	23	44	23	-21	19	38	27	-11	18
New Mexico	39	33	-6	4	64	43	-21	18	46	26	-20	15	26	14	-12	22
New York	35	22	-13	34	66	44	-22	20	53	31	-22	26	30	30	0	6
North Carolina	36	23	-13	34	71	41	-30	40	52	22	-30	47	28	13	-15	28
North Dakota	41	30	-11	26	56	42	-14	6	53	32	-21	19	28	14	-14	24
Ohio	34	30	-4	1	61	37	-24	23	48	31	-17	7	33	15	-18	38
Oklahoma	42	32	-10	19	61	33	-28	36	51	30	-21	19	37	24	-13	23
Oregon	36	25	-11	26	67	35	-32	43	49	22	-27	41	38	29	-9	14
Pennsylvania	36	28	-8	9	67	40	-27	34	50	24	-26	39	27	16	-11	18
Rhode Island	35	20	-15	45	62	38	-24	23	50	26	-24	32	30	13	-17	35
South Carolina	36	27	-9	16	62	40	-22	20	52	23	-29	44	31	15	-16	32
South Dakota	42	29	-13	34	57	34	-23	22	48	34	-14	5	41	15	-26	49
Tennessee	40	23	-17	50	63	30	-33	46	48	23	-25	37	32	28	-4	8
Texas	39	31	-8	9	57	38	-19	14	54	32	-22	26	31	20	-11	18
Utah	41	32	-9	16	44	47	3	1	48	41	-7	1	23	27	4	4
Vermont	41	27	-14	39	51	32	-19	14	48	19	-29	44	21	26	5	2
Virginia	37	24	-13	34	55	42	-13	5	42	24	-18	8	38	10	-28	50
Washington	41	28	-13	34	66	40	-26	32	48	29	-19	13	47	23	-24	47
West Virginia	38	28	-10	19	65	40	-25	29	41	27	-14	5	33	14	-19	42
Wisconsin	35	25	-10	19	57	43	-14	6	56	36	-20	15	27	13	-14	24
Wyoming	41	35	-6	4	61	40	-21	18	44	34	-10	2	36	22	-14	24

APPENDIX G1. Income Disparity: Dimension Ranking and Indicator Rates (continued)

	Adults who report fair or poor health				Adults who are obese				Adults who have lost six or more teeth			
	2018				2018				2018			
	0%–19% 400% and above	Disparity	rank		0%–19% 400% and above	Disparity	rank		0%–19% 400% and above	Disparity	rank	
United States	29%	7%	-22	—	36%	29%	-7	—	16%	5%	-11	—
Alabama	33	8	-25	39	41	34	-7	23	22	5	-17	42
Alaska	31	8	-23	31	31	27	-4	8	26	4	-22	51
Arizona	26	10	-16	3	37	24	-13	50	12	4	-8	5
Arkansas	32	9	-23	31	44	38	-6	20	25	8	-17	42
California	27	7	-20	19	32	22	-10	41	9	3	-6	2
Colorado	24	6	-18	7	26	23	-3	5	12	4	-8	5
Connecticut	25	5	-20	19	33	25	-8	36	14	4	-10	17
Delaware	26	8	-18	7	36	32	-4	8	16	6	-10	17
District of Columbia	26	4	-22	28	40	17	-23	51	15	1	-14	30
Florida	31	8	-23	31	36	29	-7	23	18	6	-12	23
Georgia	29	8	-21	26	37	30	-7	23	19	6	-13	26
Hawaii	24	10	-14	1	32	22	-10	41	10	4	-6	2
Idaho	23	5	-18	7	30	28	-2	2	13	3	-10	17
Illinois	28	6	-22	28	36	29	-7	23	12	4	-8	5
Indiana	32	8	-24	36	36	35	-1	1	20	6	-14	30
Iowa	24	6	-18	7	42	33	-9	37	13	4	-9	13
Kansas	27	8	-19	13	39	34	-5	16	19	5	-14	30
Kentucky	36	8	-28	48	44	37	-7	23	26	6	-20	49
Louisiana	32	8	-24	36	43	36	-7	23	21	6	-15	36
Maine	32	6	-26	44	39	28	-11	47	25	6	-19	47
Maryland	26	8	-18	7	38	31	-7	23	13	5	-8	5
Massachusetts	23	6	-17	4	30	25	-5	16	13	4	-9	13
Michigan	34	7	-27	46	40	31	-9	37	20	4	-16	40
Minnesota	24	5	-19	13	33	29	-4	8	10	4	-6	2
Mississippi	32	7	-25	39	46	41	-5	16	24	8	-16	40
Missouri	34	6	-28	48	42	35	-7	23	22	5	-17	42
Montana	25	5	-20	19	31	27	-4	8	19	4	-15	36
Nebraska	26	6	-20	19	39	33	-6	20	15	4	-11	21
Nevada	36	7	-29	50	36	29	-7	23	12	4	-8	5
New Hampshire	29	6	-23	31	39	28	-11	47	20	5	-15	36
New Jersey	27	7	-20	19	34	24	-10	41	13	4	-9	13
New Mexico	29	8	-21	26	38	31	-7	23	14	5	-9	13
New York	26	6	-20	19	32	25	-7	23	13	5	-8	5
North Carolina	31	6	-25	39	39	32	-7	23	19	4	-15	36
North Dakota	21	6	-15	2	38	36	-2	2	13	3	-10	17
Ohio	27	9	-18	7	38	34	-4	8	19	6	-13	26
Oklahoma	33	8	-25	39	40	37	-3	5	20	6	-14	30
Oregon	31	6	-25	39	34	28	-6	20	23	3	-20	49
Pennsylvania	32	8	-24	36	35	31	-4	8	21	4	-17	42
Rhode Island	32	5	-27	46	36	25	-11	47	17	3	-14	30
South Carolina	26	7	-19	13	39	30	-9	37	18	5	-13	26
South Dakota	24	7	-17	4	34	30	-4	8	13	5	-8	5
Tennessee	38	8	-30	51	40	30	-10	41	24	6	-18	46
Texas	27	8	-19	13	39	29	-10	41	10	5	-5	1
Utah	24	7	-17	4	30	27	-3	5	11	3	-8	5
Vermont	24	5	-19	13	32	25	-7	23	19	5	-14	30
Virginia	30	8	-22	28	38	28	-10	41	17	4	-13	26
Washington	27	8	-19	13	33	28	-5	16	15	3	-12	23
West Virginia	36	10	-26	44	44	40	-4	8	29	10	-19	47
Wisconsin	29	6	-23	31	38	29	-9	37	17	5	-12	23
Wyoming	27	7	-20	19	32	30	-2	2	18	7	-11	21

APPENDIX H1. Race Disparity: Indicator Rates

	Uninsured adults				Adults without a usual source of care				Adults who went without care because of cost				Adults without a dental visit				Adults without all recommended cancer screenings			
	2018				2018				2018				2018				2018			
	White	Black	Hispanic	Other	White	Black	Hispanic	Other	White	Black	Hispanic	Other	White	Black	Hispanic	Other	White	Black	Hispanic	Other
United States	9%	14%	25%	10%	18%	23%	39%	25%	11%	16%	20%	13%	30%	40%	42%	33%	31%	28%	33%	35%
Alabama	13	18	46	16	20	24	46	29	14	21	24	24	37	45	35	49	31	29	—	36
Alaska	13	—	—	22	35	—	39	40	13	—	15	13	28	—	28	36	40	—	38	35
Arizona	9	13	23	17	21	24	36	35	10	18	21	12	33	46	45	42	34	34	33	39
Arkansas	10	13	33	14	16	21	39	32	14	13	27	19	42	48	58	50	37	30	39	38
California	6	8	17	6	19	20	37	19	9	11	17	9	25	39	43	28	27	24	32	33
Colorado	7	10	22	7	21	28	43	34	10	17	19	15	29	40	43	38	33	26	36	38
Connecticut	4	9	20	7	11	23	33	21	7	13	18	9	21	31	31	29	25	24	25	26
Delaware	6	6	25	—	15	20	39	23	9	13	17	11	30	42	42	37	27	27	29	42
District of Columbia	—	6	—	—	23	19	23	31	5	9	13	11	17	35	24	36	20	30	30	37
Florida	15	21	26	17	22	26	35	31	13	21	21	17	32	39	37	38	30	31	31	38
Georgia	15	19	45	15	24	29	56	31	15	21	28	17	34	41	51	34	33	28	33	31
Hawaii	4	—	8	6	19	22	20	13	7	1	10	7	22	27	38	24	22	—	22	26
Idaho	14	—	34	20	26	—	47	38	14	—	17	30	34	—	39	45	39	—	30	44
Illinois	6	12	23	8	15	18	31	23	8	18	20	12	28	39	44	27	35	27	34	37
Indiana	9	15	27	11	18	26	39	30	11	15	19	19	35	45	39	41	33	29	38	47
Iowa	5	24	20	9	15	31	45	24	6	23	15	13	28	37	32	42	30	20	22	39
Kansas	10	15	31	10	19	30	38	33	11	18	17	17	31	38	31	39	35	36	37	41
Kentucky	7	8	34	10	17	23	49	24	12	14	17	20	38	39	43	42	35	24	29	24
Louisiana	10	11	40	14	21	25	35	34	13	16	20	22	39	48	40	42	30	25	38	24
Maine	11	—	—	14	14	—	24	19	11	—	12	23	34	—	40	42	28	—	28	38
Maryland	4	9	30	6	12	15	44	19	7	12	32	10	27	41	42	35	30	24	29	32
Massachusetts	3	6	7	4	11	18	20	22	8	14	15	7	24	31	33	28	24	17	25	31
Michigan	7	9	16	7	14	17	22	19	11	16	15	17	27	35	40	34	28	28	23	32
Minnesota	4	8	24	9	22	28	53	30	8	19	23	14	24	34	42	31	27	32	32	37
Mississippi	16	21	40	23	23	29	—	50	15	20	—	32	44	49	—	50	38	29	—	49
Missouri	12	18	29	14	21	31	35	36	11	17	35	25	36	41	47	42	34	23	38	43
Montana	11	—	—	23	26	—	30	36	10	—	16	11	32	—	38	45	37	—	39	39
Nebraska	9	14	29	18	18	30	55	35	10	19	22	19	30	46	42	43	32	35	33	44
Nevada	9	15	27	12	23	28	48	26	11	16	20	12	32	37	42	31	34	32	40	45
New Hampshire	7	—	18	10	13	—	34	23	10	—	29	16	30	—	43	45	28	—	—	26
New Jersey	5	11	25	8	12	19	43	22	8	11	28	14	20	37	43	31	29	29	30	39
New Mexico	7	—	16	22	24	21	36	42	10	16	15	15	30	27	39	40	37	—	34	43
New York	5	8	15	8	15	19	32	22	8	11	18	15	26	37	35	37	28	27	30	38
North Carolina	12	16	44	14	18	22	59	26	12	19	27	15	31	40	47	42	30	33	31	32
North Dakota	7	—	—	23	26	50	43	30	8	24	22	18	30	58	35	42	34	—	—	38
Ohio	8	12	20	10	18	25	36	38	9	11	23	12	32	36	35	34	33	28	39	38
Oklahoma	15	22	36	28	21	24	44	29	14	16	25	12	39	44	46	38	39	29	37	36
Oregon	8	11	25	9	22	29	42	30	11	21	23	14	31	31	40	34	32	—	31	24
Pennsylvania	6	10	17	7	13	16	28	24	8	11	18	10	29	39	31	31	32	26	31	44
Rhode Island	4	—	13	—	10	21	29	25	8	15	23	11	25	35	38	33	25	23	38	27
South Carolina	13	17	39	21	21	24	56	37	13	20	28	17	36	43	45	42	34	26	32	38
South Dakota	9	—	28	41	22	—	45	49	9	—	24	19	30	—	41	43	34	—	32	34
Tennessee	12	17	43	16	21	24	59	31	14	18	23	22	40	43	58	50	32	33	32	38
Texas	14	21	37	15	23	29	45	33	13	16	23	12	34	40	46	40	37	27	40	39
Utah	8	—	29	16	24	19	47	36	11	22	22	20	25	33	45	38	34	—	36	39
Vermont	5	—	—	—	14	—	21	21	8	—	15	7	27	—	24	37	32	—	—	38
Virginia	9	15	32	9	20	20	44	24	11	14	28	12	26	34	38	25	31	25	31	24
Washington	6	14	29	7	22	21	42	24	9	9	20	12	29	35	40	33	32	42	32	32
West Virginia	9	15	—	—	18	24	—	33	14	19	—	25	44	55	—	60	34	40	—	36
Wisconsin	6	13	24	13	16	12	36	19	9	13	20	16	26	33	46	46	29	22	34	32
Wyoming	13	—	24	23	30	—	46	45	12	—	16	18	31	—	42	45	41	—	42	36

Notes: — Indicates that estimates are not available.

APPENDIX H1. Race Disparity: Indicator Rates (continued)

	Adults without all recommended vaccines				Mortality amenable to health care				Infant mortality			Adults who smoke				Adults who are obese			
	2018				2016–17				2017			2018				2018			
	White	Black	Hispanic	Other	White	Black	Hispanic	Other	White	Black	Hispanic	White	Black	Hispanic	Other	White	Black	Hispanic	Other
United States	66%	74%	76%	67%	78.5	154.9	66.7	56.1	4.7	10.9	5.1	16%	17%	12%	14%	31%	41%	34%	20%
Alabama	65	73	71	73	97.8	163.0	40.7	56.5	5.6	11.1	5.7	19	19	11	31	36	44	31	25
Alaska	67	—	78	64	65.5	103.5	55.2	106.4	4.2	—	—	15	—	16	32	29	—	28	32
Arizona	68	75	75	73	73.7	127.1	70.3	85.4	4.9	12.2	5.1	14	13	13	14	29	33	34	29
Arkansas	70	74	67	78	120.5	196.2	57.6	83.0	6.9	12.6	6.2	23	21	16	34	38	44	37	37
California	64	76	78	64	70.3	148.2	66.0	52.3	3.1	8.4	4.5	12	13	11	9	23	39	33	14
Colorado	63	69	66	73	58.5	115.0	70.7	49.8	4.1	6.2	5.0	13	21	16	20	21	31	30	20
Connecticut	64	76	76	70	55.8	105.5	63.0	36.0	3.0	10.3	5.0	11	18	17	8	26	36	32	18
Delaware	62	70	69	65	80.2	134.2	57.7	36.2	—	12.8	—	17	17	16	10	33	41	34	21
District of Columbia	45	68	58	68	37.8	193.3	51.0	—	—	11.8	—	7	22	8	17	12	38	31	19
Florida	67	81	79	74	80.9	137.9	56.8	48.3	4.8	10.6	4.5	16	12	13	16	29	38	35	23
Georgia	69	76	80	74	88.4	152.7	46.6	51.1	4.8	10.9	6.0	19	14	11	12	31	41	29	18
Hawaii	71	59	77	68	61.2	102.4	88.8	83.7	4.9	—	—	12	13	21	13	18	38	35	29
Idaho	69	—	70	73	66.8	—	62.4	63.5	3.8	—	6.1	15	—	8	27	27	—	32	37
Illinois	67	78	76	64	74.2	171.3	55.9	41.8	4.5	12.5	5.0	16	21	10	11	30	44	37	13
Indiana	73	80	76	66	89.8	165.3	60.0	47.8	6.4	12.7	6.0	22	21	13	21	34	41	38	26
Iowa	61	67	66	59	72.2	151.8	54.6	58.4	4.7	9.9	6.8	16	23	14	25	36	43	37	33
Kansas	65	70	70	67	76.9	151.6	63.6	79.0	5.6	11.5	5.9	17	21	17	22	35	41	38	31
Kentucky	65	75	67	66	112.1	159.0	45.1	45.2	6.4	9.5	6.6	23	25	20	28	39	42	35	23
Louisiana	73	78	78	81	97.3	190.2	51.3	51.8	4.8	10.5	6.3	23	16	21	18	35	47	32	29
Maine	69	—	63	73	65.9	82.5	—	85.0	6.0	—	—	18	—	27	24	31	—	21	32
Maryland	58	68	70	60	75.8	135.6	44.2	41.5	4.5	11.0	3.9	13	14	7	11	29	40	32	20
Massachusetts	64	71	69	61	56.6	87.3	54.2	31.9	2.7	7.4	4.6	14	11	14	9	26	26	30	13
Michigan	67	77	71	70	78.9	190.8	78.3	51.9	5.1	13.8	5.0	18	23	26	22	32	42	35	21
Minnesota	61	71	70	65	51.0	98.0	44.9	78.5	3.6	8.1	4.8	15	21	14	18	30	31	32	27
Mississippi	67	73	—	78	115.7	202.3	43.5	98.4	6.3	11.7	—	21	19	—	28	38	47	—	37
Missouri	64	71	73	72	88.4	175.9	53.2	47.5	5.1	11.6	5.5	19	22	18	25	34	46	53	32
Montana	66	—	70	62	64.5	—	72.2	158.5	4.3	—	—	16	—	21	36	27	—	22	39
Nebraska	61	70	67	71	64.9	153.4	49.5	61.2	5.1	—	5.3	15	29	12	22	34	46	35	28
Nevada	66	76	77	66	101.9	167.1	60.3	78.2	4.7	9.8	5.2	17	22	11	17	28	45	33	20
New Hampshire	68	—	87	72	62.7	84.6	50.2	27.5	3.6	—	—	16	—	14	24	31	—	23	31
New Jersey	61	71	72	66	67.2	141.5	54.6	37.2	2.7	9.6	4.9	14	13	14	7	26	36	28	16
New Mexico	63	77	71	66	78.2	122.7	90.5	101.5	6.3	—	5.1	15	16	16	17	29	—	38	37
New York	73	81	76	70	69.7	136.0	68.0	42.8	3.4	8.7	4.7	13	14	12	9	28	34	31	16
North Carolina	57	65	68	66	80.2	149.2	42.0	70.5	5.1	12.0	6.0	18	17	11	18	31	47	31	34
North Dakota	61	53	72	61	65.6	73.7	—	163.7	4.1	—	—	18	20	25	38	35	29	42	37
Ohio	65	71	67	74	88.4	165.7	61.4	39.9	5.4	14.5	7.6	20	23	19	24	34	37	42	19
Oklahoma	61	74	70	66	124.7	194.9	79.0	145.5	6.5	13.7	7.4	20	21	12	24	37	43	32	34
Oregon	69	62	80	76	64.4	112.0	45.5	58.9	4.8	—	6.3	16	11	12	18	30	38	36	29
Pennsylvania	61	63	68	64	74.2	162.1	70.8	41.1	4.6	11.1	5.9	16	24	19	15	30	44	37	16
Rhode Island	64	74	69	61	69.6	102.3	43.6	55.9	4.2	—	—	16	10	10	18	26	39	32	26
South Carolina	64	71	74	74	83.2	159.0	39.6	50.1	5.1	9.0	6.7	19	17	13	21	33	43	27	31
South Dakota	66	—	75	70	68.9	144.6	—	187.6	7.2	—	—	17	—	31	31	28	—	25	40
Tennessee	72	79	76	77	106.6	177.6	49.6	41.2	6.1	11.7	6.4	21	21	9	24	34	44	34	27
Texas	72	76	81	67	90.4	165.5	85.5	46.9	4.8	10.1	5.6	15	21	12	13	34	38	38	17
Utah	68	73	72	73	64.0	106.1	59.8	71.3	5.6	—	5.5	8	16	12	13	27	43	30	33
Vermont	65	—	65	64	63.4	—	—	—	4.4	—	—	13	—	22	30	29	—	24	20
Virginia	59	70	74	61	73.1	133.8	39.6	39.8	4.8	9.6	4.9	16	18	8	11	30	40	26	20
Washington	62	62	74	63	62.6	106.2	53.0	58.5	3.5	8.8	3.6	12	11	10	13	30	36	37	19
West Virginia	59	61	—	64	108.4	153.5	55.8	—	6.9	—	—	25	27	—	28	42	40	—	28
Wisconsin	71	75	75	73	63.0	169.0	58.9	88.9	4.4	15.9	7.2	16	17	17	16	32	37	41	31
Wyoming	70	—	73	73	65.6	—	60.2	110.9	4.9	—	—	17	—	27	31	29	—	34	32

Notes: — Indicates that estimates are not available.

APPENDIX I. State Scorecard Indicator Descriptions and Source Notes

ABBREVIATIONS

ACS PUMS = American Community Survey, Public Use Micro Sample

AHRQ = Agency for Healthcare Research and Quality

BRFSS = Behavioral Risk Factor Surveillance System

CCW = Chronic Conditions Warehouse

CDC = Centers for Disease Control and Prevention

CMS = Centers for Medicare and Medicaid Services

CPS ASEC = Current Population Survey, Annual Social and Economic Supplement

HCAHPS = Hospital Consumer Assessment of Healthcare Providers and Systems Survey

LDS = Limited Data Set

MDS = Minimum Data Set

MedPAR = Medicare Provider and Analytic Review

MEPS-IC = Medical Expenditure Panel Survey, Insurance Component

NCCDPHP = National Center for Chronic Disease Prevention and Health Promotion

NCHS = National Center for Health Statistics

NCIRD = National Center for Immunization and Respiratory Diseases

NIS-PUF = National Immunization Survey, Public Use Data File

NSCH = National Survey of Children's Health

NSDUH = National Survey of Drug Use and Health

NVSS-I = National Vital Statistics System—Linked Birth and Infant Death Data

NVSS-M = National Vital Statistics System—Mortality Data

OASIS = Outcome and Assessment Information Set

SAF = Standard Analytic Files

SAMHSA = Substance Abuse and Mental Health Services Administration

WONDER = Wide-Ranging Online Data for Epidemiologic Research

DEFINITIONS FOR INDICATORS

1. Adults ages 19–64 uninsured: Percent of adults ages 19–64 without health insurance coverage. Authors' analysis of 2014 and 2018 1-year ACS PUMS (U.S. Census Bureau).

2. Children ages 0–18 uninsured: Percent of children ages 0–18 without health insurance coverage. Authors' analysis of 2014 and 2018 1-year ACS PUMS (U.S. Census Bureau).

3. Adults without a usual source of care: Percent of adults age 18 and older who did not have one (or more) person they think of as their personal health care provider. Authors' analysis of 2014 and 2018 BRFSS (CDC, NCCDPHP).

4. 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 2014 and 2018 BRFSS (CDC, NCCDPHP).

5. Individuals with high out-of-pocket medical spending: Percent of individuals residing in households where all residents are under age 65 with out-of-pocket medical spending that equaled 10 percent or more of income, or five percent or more of income if low-income (under 200% of federal poverty level), not including over-the-counter drug costs or health insurance premiums if insured. This measure includes both insured and uninsured individuals. Two years of data are combined to ensure adequate sample size for state-level estimation. Ougni Chakraborty, Robert F. Wagner School of Public Service, New York University, analysis of 2018 and 2019 CPS ASEC (U.S. Census Bureau).

6. Employee health insurance contributions as a share of median income: We compared employees' average contributions to their employer-sponsored health insurance premiums as a percent of state median household incomes for the under-65 population in each state. Premium contribution data are originally reported separately for single-person and family plans; we therefore used a weighted average of single and family premium contributions compared with single and family median household incomes. Authors' analysis of 2014 and 2018 MEPS-IC (AHRQ) and 2015 and 2019 CPS ASEC (U.S. Census Bureau).

7. Adults without a dental visit in 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 2014 and 2018 BRFSS (CDC, NCCDPHP).

8. Adults without all age- and gender-appropriate cancer screenings: Percent of adults ages 50–74 who did not receive sigmoidoscopy or colonoscopy in the past 10 years or a fecal occult blood test in the last two years; a mammogram in the last two years (women ages 50–74 only); and a Pap smear in the past three years (women ages 25–64 only). Authors' analysis of 2014 and 2018 BRFSS (CDC, NCCDPHP).

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

9. Adults without all age-appropriate vaccines: Percent of adults age 18 and older who did not receive a flu shot in the past year and a pneumonia vaccine ever if age 65 and older. Authors' analysis of 2014 and 2018 BRFSS (CDC, NCCDPHP).

10. Diabetic adults ages 18–64 without a hemoglobin A1c test: The share of adult diabetic patients ages 18–64 who did not have at least one hemoglobin A1c test during the year (expressed as a rate per 100 employer-insured enrollees). Michael E. Chernew and Andrew Hicks, Harvard Medical School Department of Health Care Policy, analysis of the 2015 and 2017 IBM Watson Health MarketScan Database.

11. Medicare beneficiaries received a high-risk drug: 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. Jie Zheng, Harvard University, analysis of 2016 Medicare Part D claims.

12. Children without all components of a medical home: Percent of children ages 0–17 who did not have all of the following, according to parents' reports: a personal doctor or nurse, a usual source for sick and well care, family-centered care, any problems getting needed referrals, and effective care coordination when needed. For more information, see www.childhealthdata.org. Authors' analysis of 2016 and 2018 NSCH (U.S. Census Bureau & Data Resource Center for Child and Adolescent Health).

13. Children without a medical and dental preventive care visit in the past year: Percent of children ages 0–17 who did not have a preventive medical visit and, if ages 1–17, a preventive dental visit in the past year, according to parents' reports. For more information, see www.childhealthdata.org. Authors' analysis of 2018 NSCH (U.S. Census Bureau & Data Resource Center for Child and Adolescent Health).

14. Children who did not receive needed mental health treatment: Percent of children ages 3–17 who had any kind of emotional, developmental, or behavioral problem that required treatment or counseling and who did not receive treatment from a mental health professional (as defined) during the past 12 months, according to parents' reports. For more information, see www.childhealthdata.org. Authors' analysis of 2016 and 2018 NSCH (U.S. Census Bureau & Data Resource Center for Child and Adolescent Health).

15. Children ages 19–35 months who did not receive all recommended vaccines: Percent of children ages 19–35 months who did not receive at least 4 doses of diphtheria, tetanus, and acellular 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); the full series of Haemophilus influenzae 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 2014 and 2018 NIS-PUF (CDC, NCIRD).

16. Hospital 30-day mortality: 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 2011 and June 2014, and July 2015 and June 2018. 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 2019 and 4th Quarter 2015 Hospital Compare (CMS).

17. Central line-associated bloodstream infections (CLABSI), Standardized Infection Ratio (SIR): All CLABSIs reported to the National Healthcare Safety Network from all applicable hospital locations, including intensive care units, neonatal intensive care units, and wards. The standardized infection ratio compares the observed number of CLABSIs reported by hospitals within the state to the predicted number of infections based on the referent period, adjusting for key risk factors. Data are from the CDC's 2015 and 2018 National and State Healthcare-Associated Infections (HAI) Progress Reports.

18. Hospitals with lower-than-average patient experience ratings: Percent of hospitals in the state with HCAHPS patient experience summary scores lower than the national median. Authors' analysis of 2018 HCAHPS as administered to adults discharged from acute care hospitals. Retrieved from 4th Quarter 2019 Hospital Compare (CMS).

19. Home health patients who did not get better at walking or moving around: Percent of all home health episodes in which a person did not improve 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 2014 and 2018 OASIS. Data retrieved from 3rd quarter 2019 and 2nd quarter 2015 Home Health Compare (CMS).

20. Nursing home residents with an antipsychotic medication: Percent of long-stay nursing home residents who received an antipsychotic medication, excluding residents with Schizophrenia, Tourette's syndrome, and Huntington's disease. Authors' analysis of 2013–2017 MDS. Data retrieved from June 2018 and June 2014 Nursing Home Compare (CMS).

21. Adults with any mental illness (AMI) reporting unmet need: Percent of adults age 18 and older with AMI (defined below) who reported a perceived need for mental health treatment or counseling in the past 12 months that was not received. This measure could include adults who reported that they received some type of mental health service in the past 12 months; an unmet need for services after adults had received some services would indicate a perceived need for additional services that they did not receive. Data are from the 2012–2014 and 2016–2017 NSDUH (SAMHSA), as reported in Mental Health America's *2019 and 2020 State of Mental Health in America* reports (www.mhanational.org).

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

22. Adults with any mental illness (AMI) who did not receive treatment: Percent of adults age 18 and older with AMI (defined below) who reported they did not receive mental health treatment in the past 12 months. Mental health treatment is defined as receiving treatment or counseling for any problem with emotions, nerves, or mental health in the 12 months prior to the interview in any inpatient or outpatient setting, or the use of prescription medication for treatment of any mental or emotional condition that was not caused by the use of alcohol or drugs. Data are from the 2012–2014 and 2016–2017 NSDUH (SAMSHA), as reported in Mental Health America's *2019 and 2020 State of Mental Health in America* reports (www.mhanational.org).

Note: Adults with any mental illness (AMI) is defined as adults age 18 and older who currently or at any time in the past year have had a diagnosable mental, behavioral, or emotional disorder (other than a developmental or substance use disorder) of sufficient duration to meet diagnostic criteria specified within the Diagnostic and Statistical Manual of Mental Disorders, 4th edition, regardless of the level of impairment in carrying out major life activities. AMI was estimated based on a statistical model of a clinical diagnosis and responses to questions on distress, impairment, past year major depressive episode, past year suicidal thoughts, and age. For more information, see: SAMHSA, NSDUH, Methodological Summary and Definitions, www.samhsa.gov/data/sites/default/files/cbhsq-reports/NSDUHMethodSummDefs2017/NSDUHMethodSummDefs2017.htm.

23 & 24. Potentially avoidable emergency department (ED) visits: Potentially avoidable ED visits were those that, based on diagnoses recorded during the visit and the health care service the patient received, were considered to be either non-emergent (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 ED visit that resulted in an admission, as well as ED visits where the level of care provided in the ED was clinically indicated. This approach uses the New York University Center for Health and Public Service Research emergency department algorithm developed by John Billings, Nina Parikh, and Tod Mijanovich (see: *Emergency Room Use—The New York Story*, Commonwealth Fund, Nov. 2000, www.commonwealthfund.org/publications/issue-briefs/2000/nov/emergency-room-use--the-new-york-story).

Ages 18–64, per 1,000 employer-insured enrollees: Michael E. Chernew and Andrew Hicks, Harvard Medical School Department of Health Care Policy, analysis of the 2015 and 2017 IBM Watson Health MarketScan Database.

Age 65 and older, per 1,000 Medicare beneficiaries: Jie Zheng, Harvard University, analysis of 2013 and 2016 Medicare Enrollment and SAF Claims Data 20% sample of fee-for-service Medicare beneficiaries age 65 and older (CMS, CCW).

25 & 26. Admissions for ambulatory care–sensitive conditions: Hospital admissions 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.

Ages 18–64, per 1,000 employer-insured enrollees: Michael E. Chernew and Andrew Hicks, Harvard Medical School Department of Health Care Policy, analysis of the 2015 and 2017 IBM Watson Health MarketScan Database.

Ages 65–74 and older, per 1,000 Medicare beneficiaries: Admissions of fee-for-service Medicare beneficiaries ages 65–74 or age 75 and older (measure reported separately for each age group but combined into a population-weighted average). Authors' analysis of 2014 and 2018 CCW data, retrieved from the March 2020 CMS Geographic Variation Public Use File (CMS, Office of Information Products and Analytics).

27 & 28. 30-day hospital readmissions: All hospital admissions among patients who were readmitted within 30 days of an acute hospital stay for any cause. A correction was made to account for likely transfers between hospitals.

Ages 18–64, per 1,000 employer-insured enrollees: Michael E. Chernew and Andrew Hicks, Harvard Medical School Department of Health Care Policy, analysis of the 2015 and 2017 IBM Watson Health MarketScan Database.

Age 65 and older, per 1,000 Medicare beneficiaries: Readmissions among fee-for-service Medicare beneficiaries age 65 and older. Authors' analysis of 2014 and 2018 CCW data, retrieved from the March 2020 CMS Geographic Variation Public Use File (CMS, Office of Information Products and Analytics).

29. Short-stay nursing home residents with a 30-day readmission to the hospital: Percent of newly admitted nursing home residents who are rehospitalized within 30 days of being discharged from a hospital to the nursing home. Vincent Mor, Brown University, analysis of 2012 and 2016 Medicare enrollment data, MDS, and MedPAR File (CMS).

30. Long-stay nursing home residents with a hospital admission: 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. Vincent Mor, Brown University, analysis of 2012 and 2016 Medicare enrollment data, MDS, and MedPAR File (CMS).

31. Home health patients 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 data from CMS Medicare claims data. Data retrieved from 4th quarter 2019 and 3rd quarter 2015 Home Health Compare (CMS), representing patient experiences in 2018 and 2014.

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

32. Adults ages 18–50 with low back pain who had an imaging study at diagnosis: The share of employer-insured adults ages 18–50 who had a new primary diagnosis of low back pain with an imaging study (plain x-ray, MRI, or CT scan) within 28 days of the diagnosis (expressed as a rate per 100 enrollees). Enrollees who have a diagnosis for which an imaging study may be clinically appropriate (cancer, recent trauma, IV drug abuse, or neurologic impairment) are excluded. Michael E. Chernew and Andrew Hicks, Harvard Medical School Department of Health Care Policy, analysis of the 2015 and 2017 IBM Watson Health MarketScan Database.

33. Total employer-sponsored insurance spending per enrollee: Total spending per enrollee in employer-sponsored insurance plans estimated from a regression model of 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 2017. 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 differences. Michael E. Chernew and Andrew Hicks, Harvard Medical School Department of Health Care Policy, analysis of the 2013 and 2017 IBM Watson Health MarketScan Database.

34. Total Medicare (Parts A and B) reimbursements per enrollee: Total Medicare fee-for-service 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 Medicare fee-for-service population. Authors' analysis of 2014 and 2018 CCW data, retrieved from the March 2020 CMS Geographic Variation Public Use File (CMS, Office of Information Products and Analytics).

35 & 36. Primary care as a share of total medical spending: Share of health care spending attributed to primary care. We based our approach on the method used by Reid, Damberg, and Friedberg (JAMA 2019) that characterizes a “broad” definition for primary care provider types and a “broad” definition of included services. Under this “broad/broad” definition, we include all professional services billed by physicians, physician assistants, and nurse practitioners in family medicine, internal medicine, general practice, geriatric medicine, and obstetrics and gynecology (this can include child birth for women in the age 18–64 age cohort); hospitalists are excluded.

Ages 18–64, employer-insured enrollees: Percent of each state's total employer-based insurance medical spending on primary care. Michael E. Chernew and Andrew Hicks, Harvard Medical School Department of Health Care Policy, analysis of the 2018 IBM Watson Health MarketScan Database.

Age 65 and older, Medicare beneficiaries: Percent of each state's total Medicare medical spending on primary care. Angelina Lee and Kevin Neipp, Westat, analysis of the 2017 LDS 5% sample of Medicare claims (CMS).

37. 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 Ellen Nolte and Martin McKee, “Measuring the Health of Nations: Analysis of Mortality Amenable to Health Care,” *British Medical Journal*, Nov. 15, 2003, 327 (7424): 1129–32. Authors' analysis of mortality data from CDC restricted-use Multiple Cause-of-Death file (NCHS) and U.S. Census Bureau population data, 2012–2013 and 2016–2017.

Causes of death (Ages)

Intestinal infections (0–14)
 Tuberculosis (0–74)
 Other infections (diphtheria, tetanus, septicaemia, poliomyelitis) (0–74)
 Whooping cough (0–14)
 Measles (1–14)
 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 ages)
 Congenital cardiovascular anomalies (0–74)
 Perinatal deaths, all causes, excluding stillbirths (all ages)
 Misadventures to patients during surgical and medical care (all ages)
 Ischemic heart disease: 50% of mortality rates included (0–74)

APPENDIX I. State Scorecard Indicator Descriptions and Source Notes (continued)**38. Breast cancer deaths per 100,000 female population:**

Authors' analysis of NVSS–M, 2014 and 2018 (NCHS), retrieved using CDC WONDER.

39. Colorectal cancer deaths per 100,000 population: Authors' analysis of NVSS–M, 2014 and 2018 (NCHS), retrieved using CDC WONDER.

40. Suicide deaths per 100,000 population: Authors' analysis of NVSS–M, 2014 and 2018 (NCHS), retrieved using CDC WONDER.

41. Alcohol-related deaths per 100,000 population: Authors' analysis of NVSS–M, 2014 and 2018 (NCHS), retrieved using CDC WONDER.

42. Drug poisoning deaths per 100,000 population: Authors' analysis of NVSS–M, 2014 and 2018 (NCHS), retrieved using CDC WONDER.

43. Infant mortality, deaths per 1,000 live births: Authors' analysis of NVSS–I, 2013 and 2017 (NCHS), retrieved using CDC WONDER.

44. Adults who report fair/poor health: Percent of adults age 18 and older who reported being in fair or poor health. Authors' analysis of 2014 and 2018 BRFSS (CDC, NCCDPHP).

45. Adults who smoke: Percent of adults age 18 and older who ever smoked 100 or more cigarettes (five packs) and currently smoke every day or some days. Authors' analysis of 2014 and 2018 BRFSS (CDC, NCCDPHP).

46. Adults who are obese: Percent of adults ages 18–64 who are obese (Body Mass Index [BMI] ≥ 30). BMI was calculated based on reported height and weight. Authors' analysis of 2014 and 2018 BRFSS (CDC, NCCDPHP).

47. Children who are overweight or obese: Children ages 10–17 who are overweight or obese (BMI \geq 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. Authors' analysis of 2016 and 2018 NSCH (U.S. Census Bureau & Data Resource Center for Child and Adolescent Health).

48. Adults who have lost six or more teeth: Percent of adults ages 18–64 who have lost 6 or more teeth due to tooth decay, infection, or gum disease. Authors' analysis of 2014 and 2018 BRFSS (CDC, NCCDPHP).

49. Public health funding: State-based public health spending per capita (federal public health funds not included). State public health spending data for 2014/15 and 2017/18 come from Trust for America's Health (TFAH) reports (2017/18 estimates: "The Impact of Chronic Underfunding on America's Public Health System: Trends, Risks, and Recommendations, 2019"; 2014/15 estimates: "Investing in America's Health Public Health Report, 2016").



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