

DAVID C. RADLEY, DOUGLAS MCCARTHY, JACOB A. LIPPA, SUSAN L. HAYES, AND CATHY SCHOEN
MAY 2014



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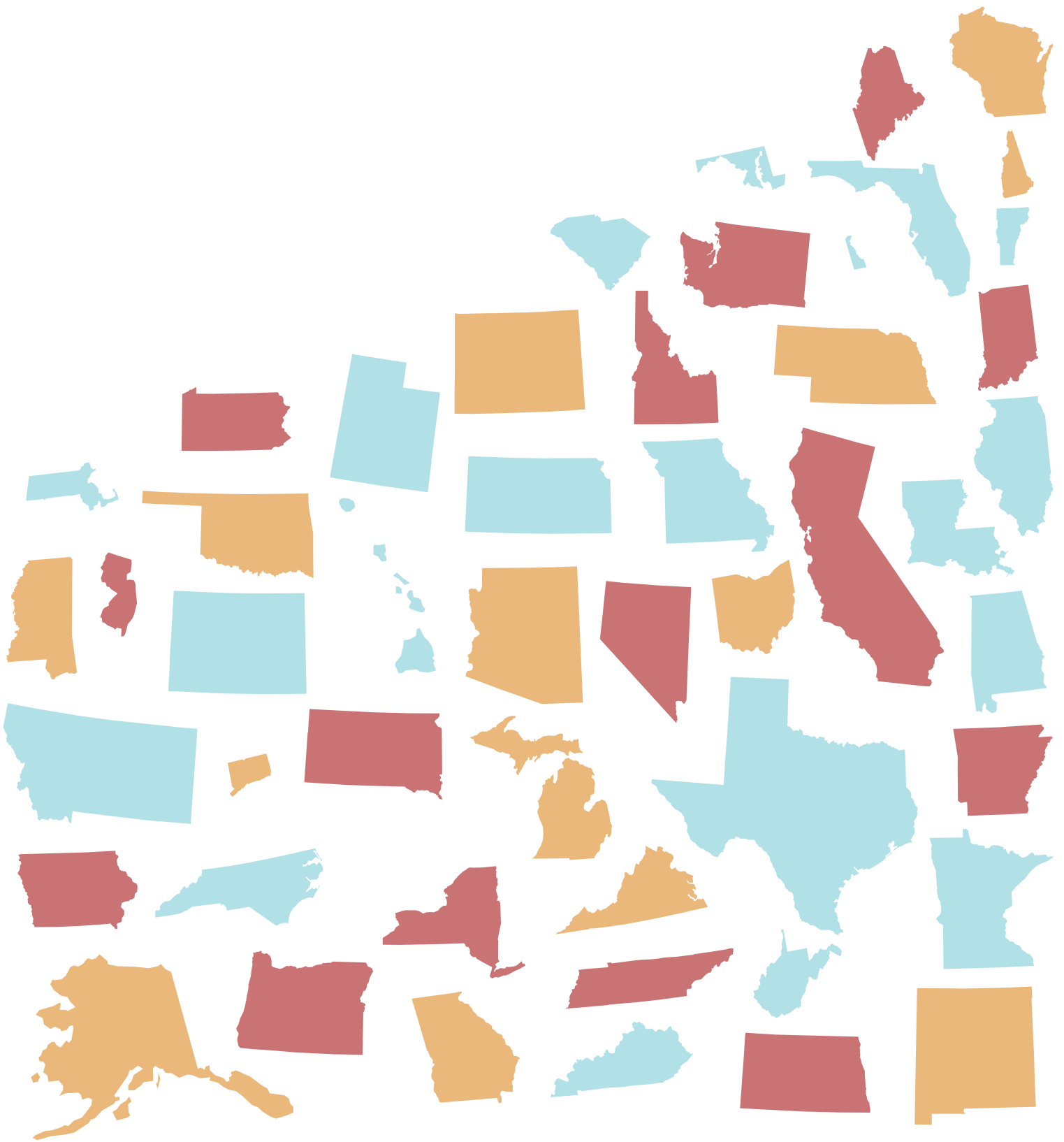
AIMING HIGHER

Results from a Scorecard on State Health System Performance, 2014

DAVID C. RADLEY, DOUGLAS MCCARTHY, JACOB A. LIPPA, SUSAN L. HAYES, AND CATHY SCHOEN
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ABSTRACT

The Commonwealth Fund's *Scorecard on State Health System Performance, 2014*, assesses states on 42 indicators of health care access, quality, costs, and outcomes over the 2007–2012 period, which includes the Great Recession and precedes the major coverage expansions of the Affordable Care Act. Changes in health system performance were mixed overall, with states making progress on some indicators while losing ground on others. In a few areas that were the focus of national and state attention—childhood immunizations, hospital readmissions, safe prescribing, and cancer deaths—there were widespread gains. But more often than not, states exhibited little or no improvement. Access to care deteriorated for adults, while costs increased. Persistent disparities in performance across and within states and evidence of poor care coordination highlight the importance of insurance expansions, health care delivery reforms, and payment changes in promoting a more equitable, high-quality health system.



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OVERVIEW

The mixed performance of states' health systems over the five years preceding implementation of the Affordable Care Act's major reforms sends a clear message that states and the nation are still a long way from becoming places where everyone has access to high-quality, affordable care and an equal opportunity for a long and healthy life. In tracking 42 measures of health care access, quality, costs, and outcomes between 2007 and 2012 for the 50 states and the District of Columbia, The Commonwealth Fund's *Scorecard on State Health System Performance, 2014*, finds that, on a significant majority of measures, the story is mostly one of stagnation or decline. In most parts of the country, performance worsened on nearly as many measures as it improved.

On a positive note, the *Scorecard* also shows that combined national and state action has the potential to promote performance gains across the country. Yet the improvements uncovered in the *Scorecard* are not as widespread as Americans should expect, given the high level of resources the nation devotes to health care.

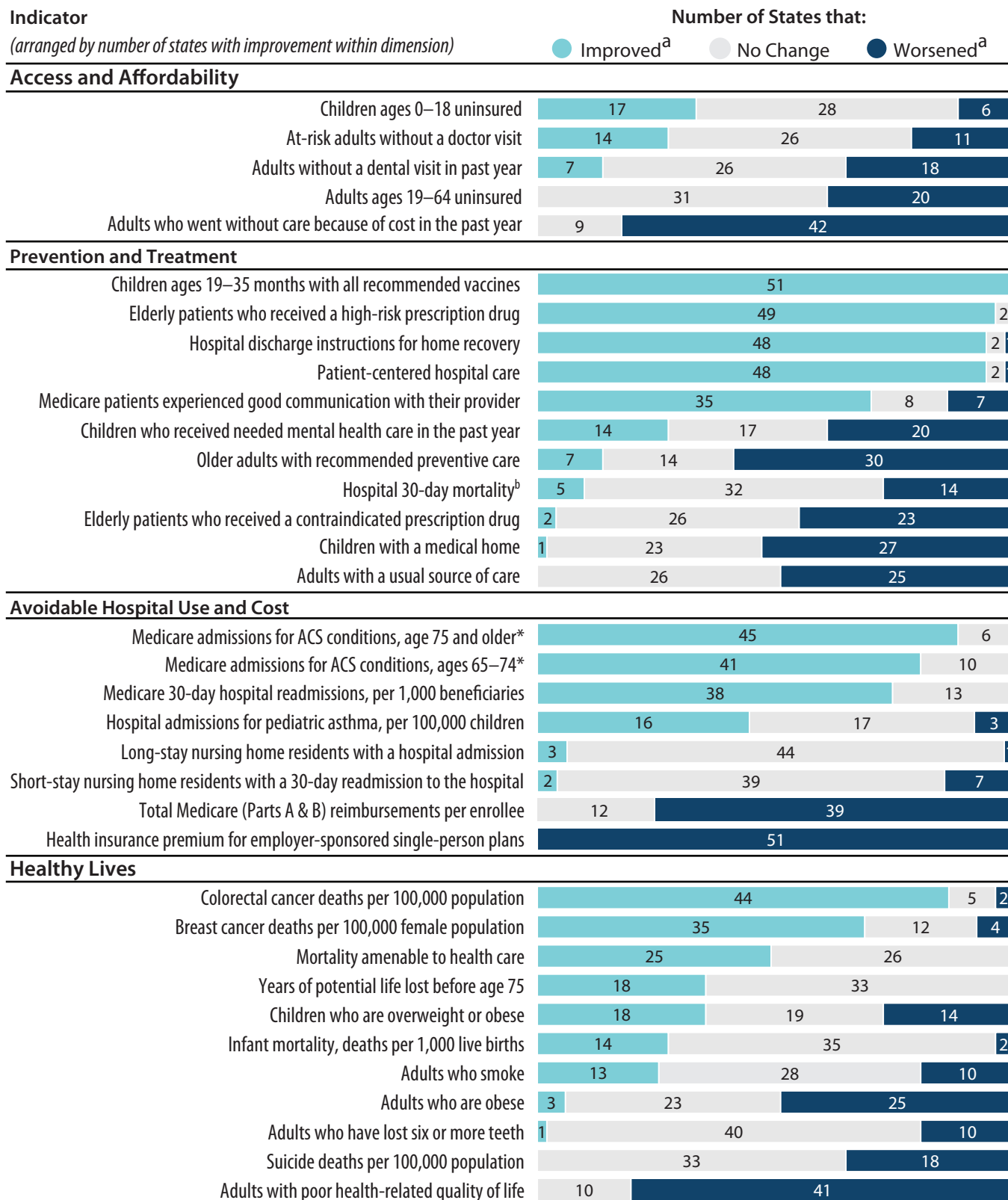
During the *Scorecard's* time frame, a period that encompassed the Great Recession, health care spending rose \$491 billion, reaching \$2.8 trillion nationally according to government estimates.¹ Spending increased in all states on both a per-capita basis and as a share of total state income. And still, the *Scorecard* points to deteriorating access to care for adults, stagnant or worsening performance on other key measures such as preventive care for adults, and widespread disparities in peoples' health

care experience across and within states. These findings together suggest that the return on our nation's health care investment is falling woefully short.

The *Scorecard* also reminds us, however, that that improvement is possible with determined, coordinated efforts. The most pervasive gains in health system performance between 2007 and 2012 occurred when policymakers and health system leaders created programs, incentives, and collaborations to raise rates of children's immunization, improve hospital quality, and lower hospital readmissions (Exhibit 1). These gains illustrate that state health system performance reflects a confluence of national policy and state and local initiatives that together can make a difference for state residents.

Like earlier scorecards in this series, the 2014 *State Scorecard* tracks and compares health care experiences across the states and recent trends in key areas of performance to help policymakers and health system leaders identify opportunities for improvement (Exhibit 2). In comparing the level of performance in each state to that in the top-performing states, it offers attainable benchmarks. Moreover, the *Scorecard* documents the trajectory of states' health system performance in the years leading up to the Affordable Care Act's major insurance coverage reforms, which will allow us to track in future editions how state and local policy and care system responses to health reform may alter this trajectory in the future. (See [Scorecard Methodology](#), page 31, for a detailed description of the *Scorecard's* methods and performance indicators.)

Exhibit 1. Change in State Health System Performance by Indicator



Notes: Trend data generally reflect the five-year period ending in 2011 or 2012; refer to Appendix B for additional detail. Based on trends for 34 of 42 total indicators (* ACS = ambulatory care-sensitive—ACS conditions among Medicare beneficiaries are displayed here separately for two age ranges, but counted as a single indicator in tallies of improvement). Trend data are not available for all indicators. (a) Improvement or worsening refers to a change between the baseline and current time periods of at least 0.5 standard deviations. (b) Risk-adjusted 30-day mortality among Medicare beneficiaries with heart attack, congestive heart failure, or pneumonia.
Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Key Findings

In assessing change over the five years leading up to 2011–12, the *Scorecard* reveals persistent geographic disparity in the performance of state health care systems as well as variation in rates of change. These variations may partly reflect differences in state policies and funding of health care programs such as Medicaid, as well as in local norms and practices (Exhibits 3 and 4). Several themes stand out:

There were some improvements in state health system performance in recent years, but widespread gains remained the exception.

- On two-thirds of the 34 *Scorecard* indicators for which longitudinal data exist, there was no meaningful improvement or decline in performance in most states. On nine of the 34, meaningful improvement occurred in a majority of the states (Exhibit 1).^{*} A few states (Colo., Md., N.H., and N.Y.) stand out for their net improvement across indicators ([Appendix Exhibit A1](#)).
- Most states improved on indicators that have been the focus of national and state attention, including immunizations for children, safe prescribing of medications for the elderly, patient-centered care in the hospital, avoidable hospital admissions and readmissions, and cancer-related deaths.
- Lower premature mortality rates, including lower rates of cancer-related death, suggest that improvements in medical care are contributing to better health outcomes. Fifteen states saw meaningful reductions on each of two measures

of premature death (mortality amenable to health care and years of potential life lost), but even greater progress may be possible through health system improvement.

- States lost ground in insurance coverage for adults and affordability of care. As a consequence, a greater number of adults in 42 states reported going without care because of its cost—a trend that likely reflects lingering effects of the 2007–2009 recession.
- Health care spending continued to rise, but to a greater degree in the private market than in Medicare, which saw a historic moderation in spending.

Troubling disparities and gaps in care persisted for children and other vulnerable populations.

- For children, changes in health system performance were mixed. There have been some promising gains in recent years, such as a lower rate of asthma hospitalizations. But troubling declines on other health care indicators, such as the proportion of children with a primary care “medical home,” emphasize the need for continued diligence to secure the health of future generations.
- Disparities in health care and outcomes remained wide between vulnerable and more-advantaged groups within all states. While states made progress in reducing disparities in premature mortality and certain other key *Scorecard* indicators, disparities also widened for others, such as poor health-related quality of life.

^{*} Changes in an indicator’s value between the historical and current year data points are considered to be meaningful if they were at least one half (0.5) of a standard deviation larger than the indicator’s distribution over the two time points. One indicator—hospitalizations for ambulatory care-sensitive conditions among Medicare beneficiaries—was measured for two age subpopulations: those ages 65 to 74, and those age 75 and older. We consider these a single measure for purposes of scoring and tallying state improvement counts. Refer to the *Scorecard Methodology* on page 31 for additional information.

List of 42 Indicators in the Scorecard on State Health System Performance, 2014

Indicator	U.S. Average Rate		Range of State Performance		2014 Scorecard
	Revised 2009 Scorecard ^a	2014 Scorecard	Revised 2009 Scorecard ^a	2014 Scorecard	Best State(s) ^b
ACCESS AND AFFORDABILITY DIMENSION SUMMARY					
1 Adults ages 19–64 uninsured	19	21	7–31	5–32	MA
2 Children ages 0–18 uninsured	10	10	3–20	3–20	MA
3 Adults who went without care because of cost in past year	13	17	6–19	9–22	HI, MA, ND
4 Individuals under age 65 with high out-of-pocket medical costs relative to their annual household income	— ^c	16	— ^c	10–22	DC, MN
5 At-risk adults without a routine doctor visit in past two years	14	14	7–23	6–23	DE, MA
6 Adults without a dental visit in past year	15	15	9–20	10–20	NH
PREVENTION AND TREATMENT DIMENSION SUMMARY					
7 Adults with a usual source of care	80	78	72–90	63–89	MA
8 Adults age 50 and older who received recommended screening and preventive care	44	42	36–52	34–52	MA
9 Children with a medical home	58	54	45–69	45–69	VT
10 Children with a medical and dental preventive care visit in the past year	— ^c	68	— ^c	56–81	VT
11 Children with emotional, behavioral, or developmental problems who received needed mental health care in the past year	60	61	42–81	40–86	ND
12 Children ages 19–35 months who received all recommended doses of seven key vaccines	44	68	23–59	60–80	HI, NH
13 Medicare beneficiaries who received at least one drug that should be avoided in the elderly	29	20	16–44	12–29	MA, VT
14 Medicare beneficiaries with dementia, hip/pelvic fracture, or chronic renal failure who received a prescription drug that is contraindicated for that condition	20	23	14–27	14–29	ME
15 Medicare fee-for-service patients whose health provider always listens, explains, shows respect, and spends enough time with them	75	76	69–78	72–80	LA
16 Risk-adjusted 30-day mortality among Medicare beneficiaries hospitalized for heart attack, heart failure, or pneumonia	12.7	12.7	11.8–14.1	11.9–13.6	MA
17 Hospitalized patients given information about what to do during their recovery at home	79	83	73–87	77–89	UT
18 Hospitalized patients who reported hospital staff always managed pain well, responded when needed help to get to bathroom or pressed call button, and explained medicines and side effects	62	66	52–69	57–71	LA, SD
19 Home health patients who get better at walking or moving around	— ^c	59	— ^c	49–63	AL, FL, MS, UT
20 Home health patients whose wounds improved or healed after an operation	— ^c	89	— ^c	81–95	DC
21 High-risk nursing home residents with pressure sores	— ^c	6	— ^c	3–9	HI
22 Long-stay nursing home residents with an antipsychotic medication	— ^c	22	— ^c	12–29	HI

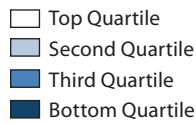
List of 42 Indicators in the Scorecard on State Health System Performance, 2014 (continued)

Indicator	U.S. Average Rate		Range of State Performance		2014 Scorecard
	Revised 2009 Scorecard ^a	2014 Scorecard	Revised 2009 Scorecard ^a	2014 Scorecard	Best State(s) ^b
AVOIDABLE HOSPITAL USE AND COST DIMENSION SUMMARY					
23 Hospital admissions for pediatric asthma, per 100,000 children	156	130	43–284	26–223	VT
24 Hospital admissions for ambulatory care–sensitive conditions per 1,000 beneficiaries:					
Medicare beneficiaries ages 65–74	36	29	20–56	13–50	HI
Medicare beneficiaries age 75 and older	85	70	46–119	41–100	HI
25 Medicare 30-day hospital readmissions, rate per 1,000 beneficiaries	58	49	29–74	26–65	HI, ID
26 Short-stay nursing home residents readmitted within 30 days of hospital discharge to nursing home	20	20	13–24	12–26	UT
27 Long-stay nursing home residents hospitalized within a six-month period	19	19	7–32	7–31	MN
28 Home health patients also enrolled in Medicare with a hospital admission	— ^c	17	— ^c	14–19	UT
29 Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries	— ^c	185	— ^c	129–263	HI
30 Total single premium per enrolled employee at private-sector establishments that offer health insurance	\$4,452	\$5,431	\$3,300–\$5,967	\$4,180–\$7,177	CA
31 Total Medicare (Parts A & B) reimbursements per enrollee	\$8,336	\$8,874	\$5,149–\$10,573	\$5,406–\$10,873	AK
HEALTHY LIVES DIMENSION SUMMARY					
32 Mortality amenable to health care, deaths per 100,000 population	96	86	64–158	57–136	MN
33 Years of potential life lost before age 75	7,153	6,474	5,198–12,276	4,900–9,781	MN
34 Breast cancer deaths per 100,000 female population	24.2	22.1	17.9–29.2	14.8–29.9	HI
35 Colorectal cancer deaths per 100,000 population	17.7	15.8	13.4–21	12–20.5	UT
36 Suicide deaths per 100,000 population	10.9	12.1	5.4–21.7	6.9–22.8	DC
37 Infant mortality, deaths per 1,000 live births	6.8	6.4	4.4–12.2	4.6–10.4	IA, MN
38 Adults ages 18–64 who report fair/poor health or activity limitations because of physical, mental, or emotional problems	24	27	17–31	19–36	ND
39 Adults who smoke	19	19	12–28	10–28	UT
40 Adults ages 18–64 who are obese (BMI ≥ 30)	26	28	20–34	21–37	CO
41 Children ages 10–17 who are overweight or obese (BMI ≥ 85th percentile)	32	31	23–44	22–40	UT
42 Percent of adults ages 18–64 who have lost six or more teeth because of tooth decay, infection, or gum disease	10	10	5–20	5–23	UT

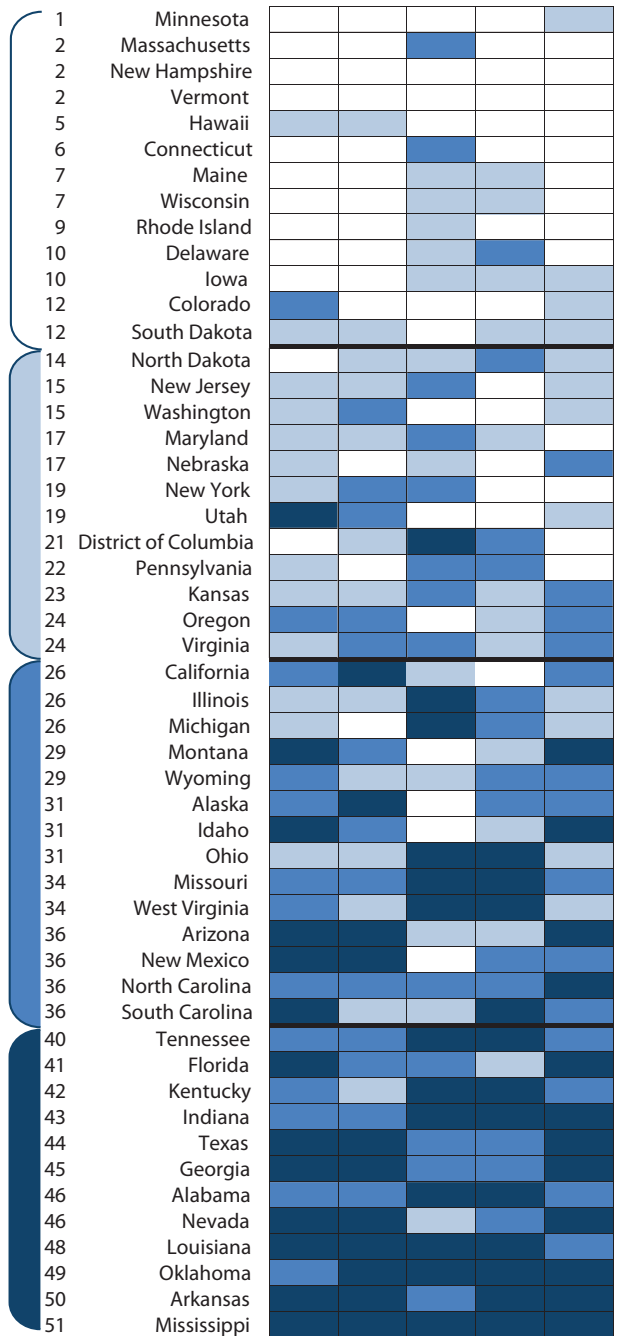
Notes: (a) Several indicators have changed since the 2009 *State Scorecard*. The revised 2009 *Scorecard* ranking generally reflects the period five years prior to the time of observation for the latest year of data available, though this varies by indicator. (b) Multiple states may be listed in the event of ties. (c) Previous data are not shown because of changes in the indicators' definitions or data were not available.

Exhibit 3. State Scorecard Summary of Health System Performance Across Dimensions

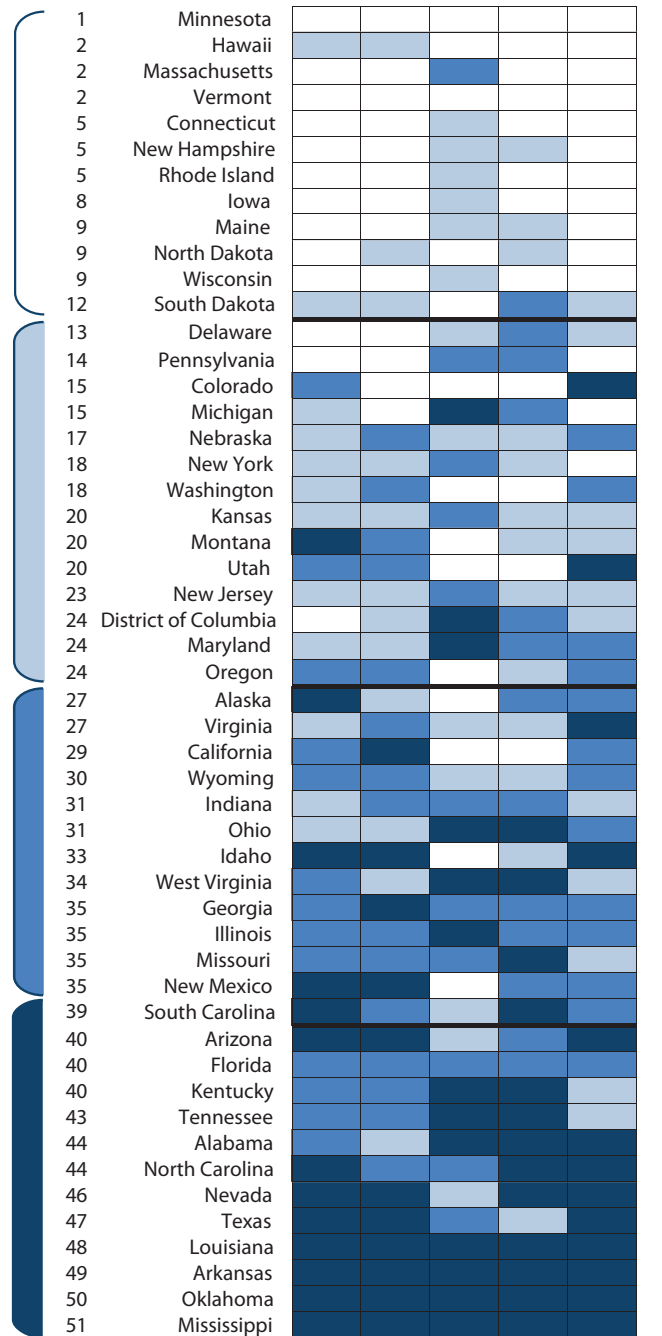
Performance Quartile



2014 Scorecard Ranking



Revised 2009 Scorecard Ranking*



Note: Several indicators have changed since the 2009 *State Scorecard*. Therefore, the 2009 *Scorecard* ranking has been revised to reflect the addition of several new indicators and updated definitions for others. The revised 2009 *Scorecard* ranking generally reflects the period five years prior to the time of observation for the latest year of data available, though this varies by indicator. If historical data were not available for a particular indicator, the most current year of data available were used as a substitute in the revised 2009 *Scorecard* ranking.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

- There were two-to-eightfold gaps between leading and lagging states on multiple indicators of health care access, quality, prevention, costs, and outcomes (Exhibit 2).
- Although the range between top- and bottom-performing states remained wide on most indicators, the gap narrowed for several of the key indicators on which there was also widespread state improvement—illustrating that lagging states can close the gap, even as top states improve.
- The top-performing states—Minnesota, Massachusetts, New Hampshire, Vermont, and Hawaii—lead the nation across most dimensions of care, and have done so over

- ## How National Policies Combined with State and Local Action Can Spur Better Performance

It is notable that those indicators in which more than half the states improved have been the focus of national as well as state policy and attention. Health care gains for Medicare beneficiaries in the quality and use of hospital care occurred in the majority

Overall performance, 2014

- Top quartile (13 states)
- Second quartile (11 states + D.C.)
- Third quartile (14 states)
- Bottom quartile (12 states)

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of states, providing a platform for further state and local action. States can build on national policy—as they did by expanding children’s coverage through the federal–state Children’s Health Insurance Program—to influence health system performance in many ways, such as by promoting accountable care in Medicaid and value-based purchasing of coverage for state employees and by supporting collaboration among public and private stakeholders to consistently measure and improve care.

Looking Toward the Future

Findings from the *Scorecard on State Health System Performance, 2014*, signal both promise and caution for the future. Massachusetts’ experience with insurance coverage expansion suggests that cost-related barriers to care should ease for individuals and families who gain coverage under the Affordable Care Act.² This increased access, in turn,

should support broader improvements in quality of care and health status.³

It is possible, however, that geographic disparities in performance will widen, and health care inequities within states worsen, if such health system reforms and innovations are not evenly spread across states. Throughout this report, we demonstrate that better access to care is associated with better primary and preventive care services and improved health outcomes. To the extent that some states take the lead in expanding health coverage—through Medicaid and high-quality private insurance choices in the new marketplaces—while other states lag, we may see a widening rather than a narrowing of health outcomes and quality of care. Conversely, if many states seize on new federal opportunities and flexibility for creative action and learn from each other, we could hope for accelerated gains in the years ahead.

Visit The Commonwealth Fund’s website to view a [comprehensive set of online tools](#), including state-specific data, state profiles with time trends, benchmarking tools, and a supplemental chart pack with additional *Scorecard* findings. The *Scorecard* methods are described in the [Scorecard Methodology](#) on page 31, and the [Appendix tables](#) provide detailed state-level data by dimension and indicator, as well as indicator definitions and data sources.

SCORECARD FINDINGS IN DETAIL

Performance failed to improve in a meaningful way for most states on two-thirds of the indicators for which trend data exist.

Overall, among the 34 indicators with time trends in the *Scorecard on State Health System Performance 2014*, there was a meaningful improvement among a majority of states on only nine indicators. All states saw meaningful improvement on at least seven of the 34 indicators with time trends, but no state improved on more than half of the indicators and all states experienced declining performance on at least four indicators (Exhibit 5).

In most states, performance worsened on almost as many indicators as it improved. A few states stand out for achieving the greatest net improvement across indicators: Colorado, Maryland, New Hampshire, and New York. Their experiences may offer lessons for other states on how to reach a tipping point of change. Unfortunately, in several states, performance declined on as many or more indicators than it improved ([Appendix Exhibit A1](#)).

Despite a few bright spots, the *Scorecard's* findings point more toward stagnation in health system performance across states over the past five years, rather than clear and widespread improvement.

Many states improved on key indicators of health system performance that have been the focus of national and state commitment, collaborative effort, and expert attention.

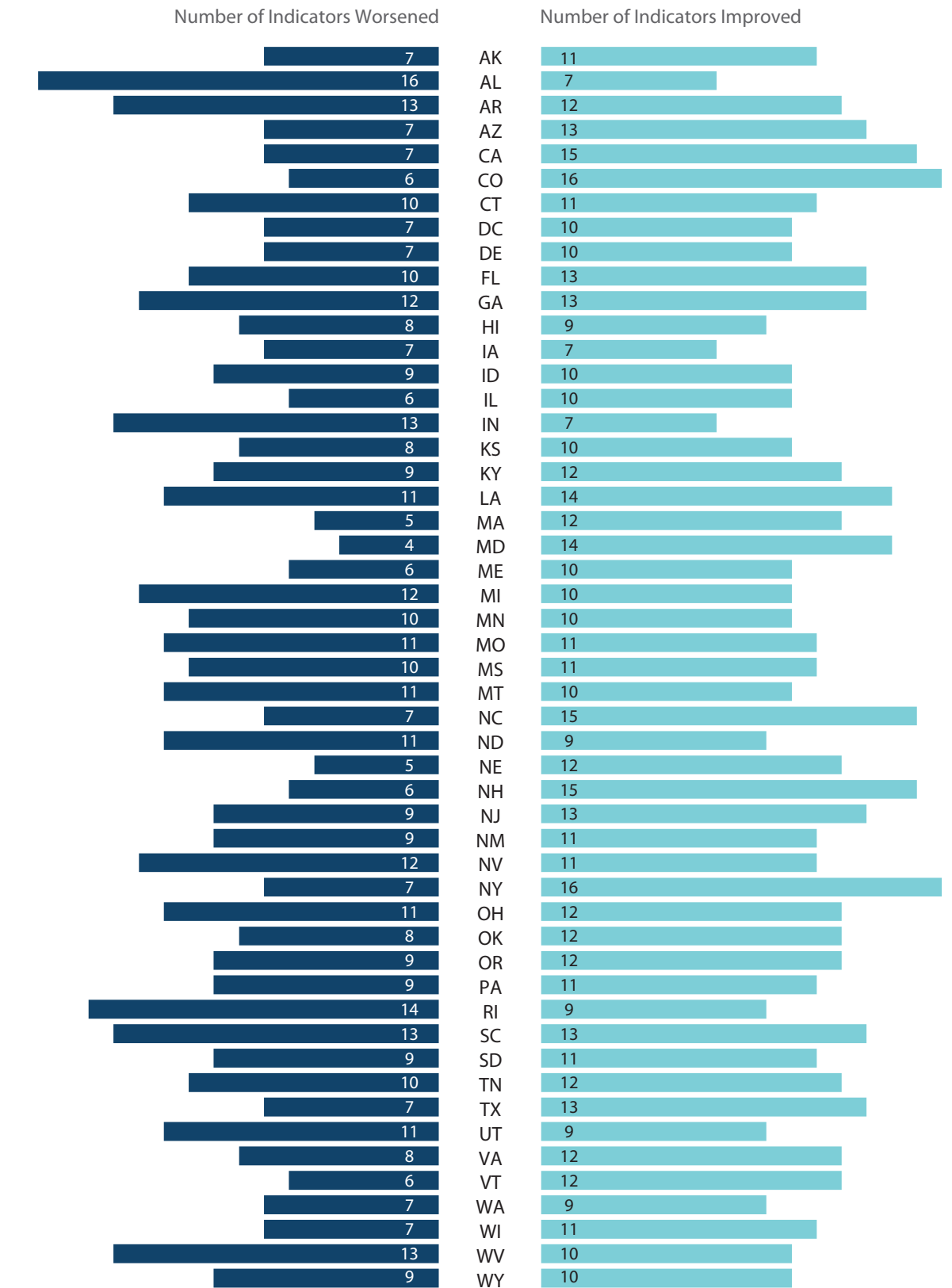
While the 2014 *Scorecard* predates recent coverage expansions under the Affordable Care Act (ACA), it does capture the impact of earlier federal–state policy action to expand coverage for children. In 2009, Congress reauthorized the State Children's Health Insurance Program (CHIP) with added support to cover more children from low-income families.⁴ As a result, the number of uninsured children under age 18 fell by 1.4 million—from

8.8 million in 2007–08 to 7.4 million in 2011–12. Seventeen states saw at least a 2 percentage point reduction in uninsured children (Exhibit 1). And, in a time when the economic recession might have otherwise exacted a greater toll, only six states saw an increase.

As a nation, we have also made strides to ensure that young children receive recommended vaccines. Cooperative initiatives such as the Centers for Disease Control and Prevention's Vaccines for Children Program enable partnership between federal and state governments, primary care physicians, and public health agencies to support widespread vaccination.⁵ Despite a national shortage in one vaccine (*Haemophilus influenzae* type b) that reduced overall vaccination rates from late 2007 to early 2009,⁶ the share of young children (ages 9 months to 35 months) who received all recommended vaccines⁷ rose dramatically after the shortfall ended, both nationally and in each state, from 2009 to 2012—even as a new vaccine was added to the schedule (Exhibit 6).

Efforts to improve the quality of ambulatory care have not received the same level of national attention and public accountability given to improving care in hospitals. Still, there were several bright spots. In 35 states, more Medicare beneficiaries reported having better communications with their doctors in 2013 compared with 2007 (Exhibit 1). In addition, nearly all states experienced a meaningful reduction in the share of elderly Medicare beneficiaries prescribed a high-risk medicine that should be avoided in older adults (Exhibit 7).⁸ Possibly contributing to this improvement were programs to educate patients about their medications, such as Medication Therapy Management Programs offered by Medicare prescription drug plans and some state Medicaid programs, as well as the increased use of electronically assisted prescribing and better clinical decision support.⁹

Exhibit 5. Number of Indicators Improved or Worsened by State



Notes: Based on trends for 34 of 42 total indicators (ambulatory care-sensitive conditions among Medicare beneficiaries from two age groups are considered a single indicator in tallies of improvement). Trend data are not available for all indicators. Improvement or worsening refers to a change between the baseline and current time periods of at least 0.5 standard deviations.
Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

In contrast, 23 states experienced an increase in the proportion of elderly patients who were prescribed a drug contraindicated for a specific medical condition (Exhibit 1). Such mixed results highlight the need for a more consistent approach to improving drug safety.

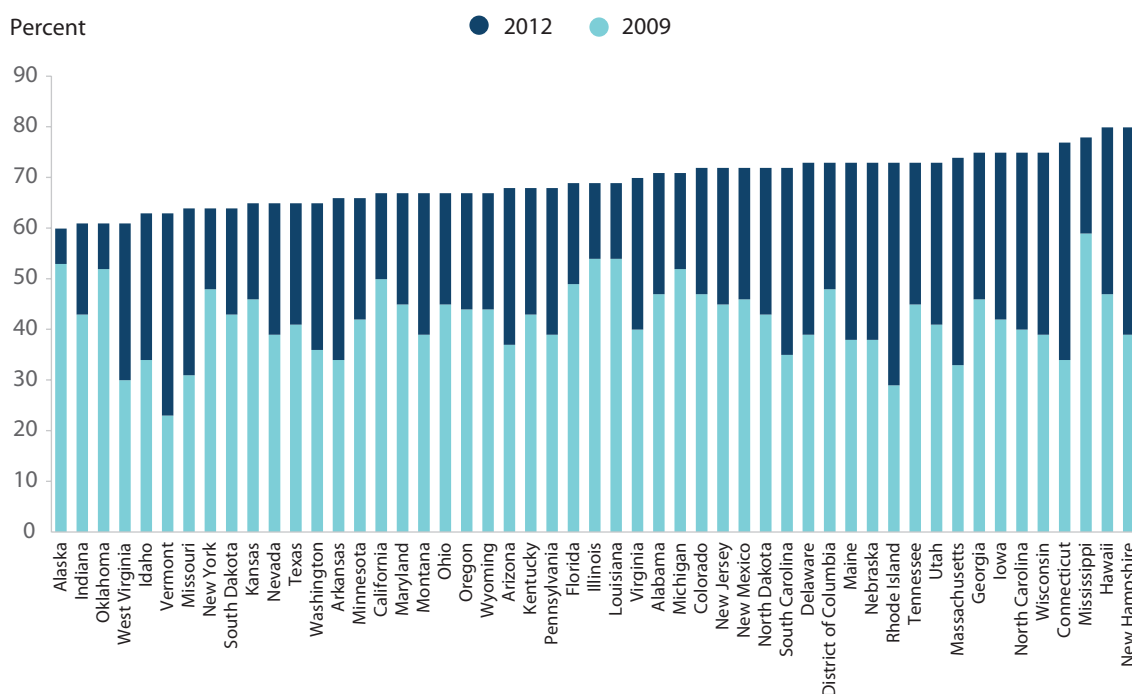
Hospitals across the nation have made substantial gains in providing evidence-based care, particularly for patients with heart attack, congestive heart failure, and community-acquired pneumonia—three conditions at the center of national quality reporting efforts tied to Medicare reimbursement. In 2004, not a single state reached 90 percent compliance on a composite measure of care quality for these three conditions. By 2012, all states were above 95 percent, with only 3 percentage points separating the top and bottom states.¹⁰

The federal government recently released data showing that health care–associated infection

rates are declining in hospitals as well.¹¹ Hospitals are not only providing higher-quality clinical care: surveys indicate that patients’ experiences have also improved across most states, albeit slowly (Appendix Exhibit A6).

Hospital readmissions are often an indication of weak primary care, fragmented care, and failure to coordinate care well during transitions. The result is higher costs, manifested as greater spending in states with higher readmission rates (Exhibit 8). Lowering readmissions has thus become a goal of federal and state payment policy, as well as of private-sector quality improvement efforts.¹² The rate of 30-day readmissions per 1,000 Medicare beneficiaries fell substantially in 38 states between 2008 and 2012 (Exhibits 1 and 9). During this period there were focused efforts to reduce readmissions, such as the federal Partnership for Patients initiative, which set a goal to reduce

Exhibit 6. Children Ages 19–35 Months Who Received All Recommended Doses of Seven Vaccines, 2009 vs. 2012

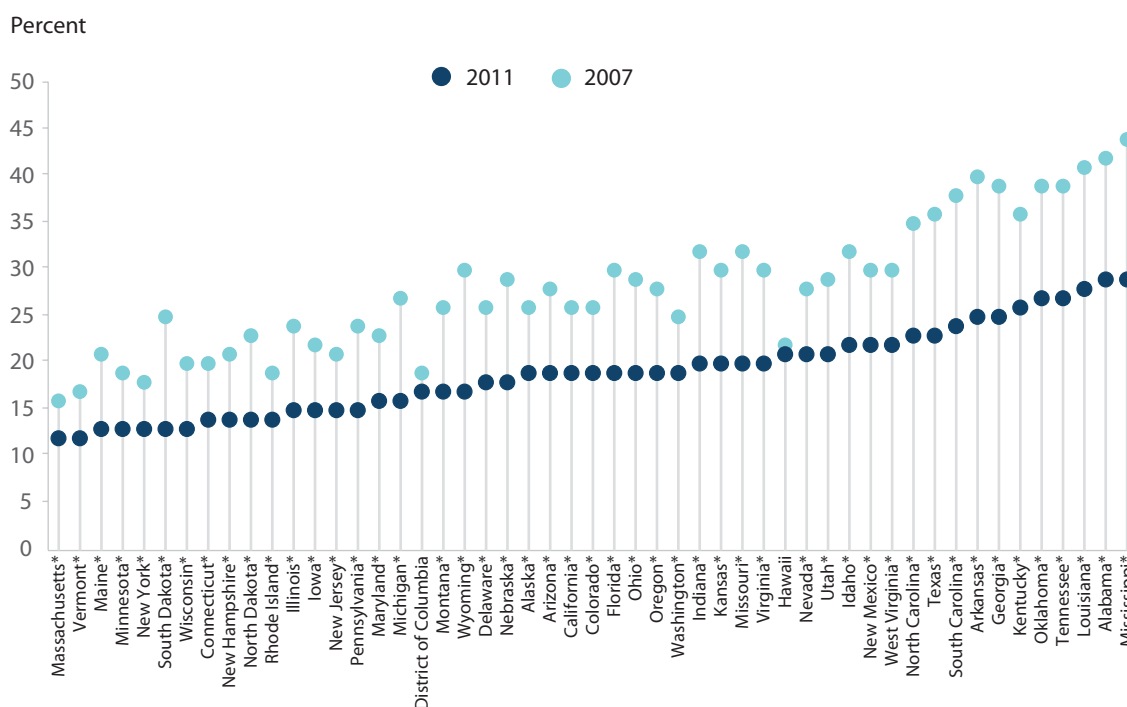


Note: Recommended vaccines are the 4:3:1:3:3:1:4 series, which includes ≥4 doses of DTaP/DT/DTP, ≥3 doses of poliovirus vaccine, ≥1 doses of measles-containing vaccine, full series of Hib (3 or 4 doses, depending on product type), ≥3 doses of HepB, ≥1 dose of varicella vaccine, and ≥4 doses of PCV.

Data: 2009 and 2012 National Immunization Surveys (NIS).

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Exhibit 7. Medicare Beneficiaries Who Received a High-Risk Prescription Medication, 2007 vs. 2011



Note: States are arranged in rank order based on their current data year (2011) value. States with at least a 0.5 standard deviation change (–4 percentage points) between 2007 and 2011 are denoted with (*).

Data: 2007 and 2011 Medicare Part D 5% Sample.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

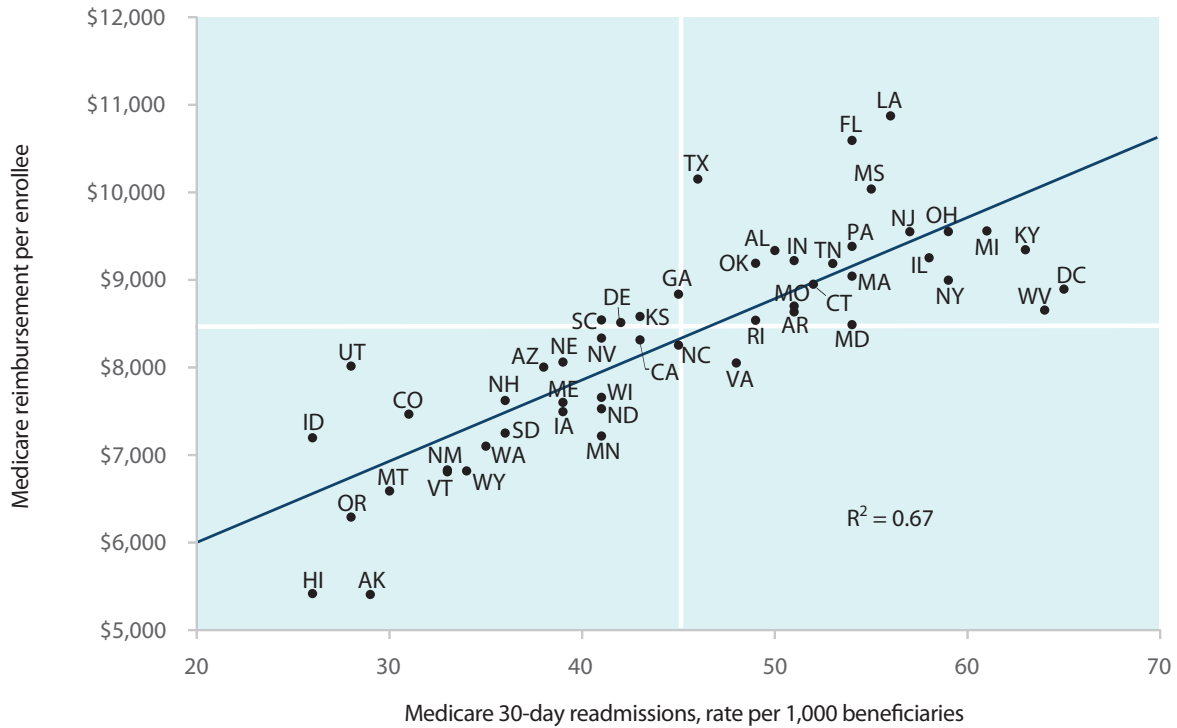
readmissions by 40 percent below 2010 levels within three years, as well as the ACA's financial penalties for "excess" readmissions, starting in October 2012.¹³ Nationally, the readmission rate declined 16 percent, which translates to approximately 197,000 fewer readmissions in 2012 than in 2008. Recently, the federal government released preliminary data from 2013 showing that the ratio of readmissions to admissions has declined,¹⁴ as well as the rate of admissions, indicating that attention to this problem is bearing fruit.¹⁵ (See [Appendix Exhibit A8](#) for readmission rates as a percent of admissions by state through 2012.)

Likewise, rates of hospitalizations for ambulatory care-sensitive conditions (ACS) among elderly Medicare beneficiaries fell nationally and in more than 40 states. These are conditions in which effective ambulatory care can reduce hospitalizations, like asthma, diabetes, pneumonia,

and heart failure. The largest declines (and a narrowing in state variation) were seen among Medicare beneficiaries age 75 and older; modest declines were also seen among beneficiaries ages 65 to 74 (Exhibit 9). There were no states where ACS hospitalization rates were higher in 2012 than in 2008. On the other hand, there is wide variation among states: hospitalizations rates in 2012 were at least two-and-a-half times higher in Kentucky (the state with the highest rate) than in Hawaii (the state with the lowest rates) for both age cohorts.

The 65–74 age group remains one to watch as more members of the baby boomer generation reach retirement age. Although changes in disease prevalence and risk factors may influence these rates, the fact that they declined year-over-year across states and in both age groups suggests that this trend reflects improvements in ambulatory care management, supported by Medicare prescription

Exhibit 8. Medicare Cost per Beneficiary and 30-Day Readmissions by State, 2012

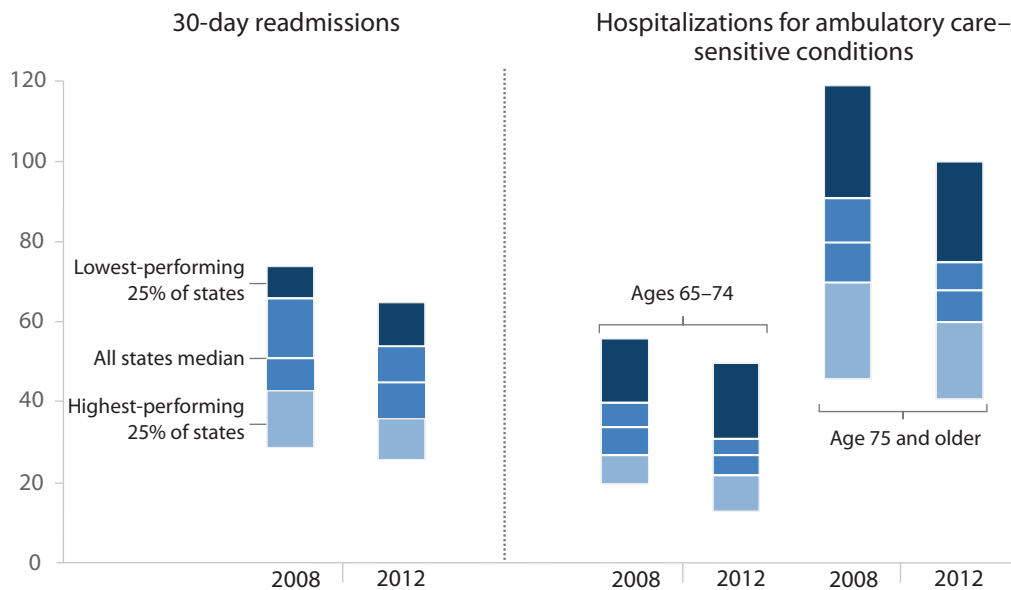


Notes: Medicare spending estimates exclude prescription drug costs and reflect only the age 65+ Medicare FFS population. Estimates are standardized for state differences in input prices using CMS' hospital wage index and extra CMS payments for graduate medical education and for treating low-income patients are removed.

Data: Medicare claims via Dec. 2013 CMS Geographic Variation Public Use File.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Exhibit 9. 30-Day Readmissions and Potentially Avoidable Hospital Admissions Among Medicare Beneficiaries, 2012



Data: Medicare claims via Dec. 2013 IOM/CMS Geographic Variation Database.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

drug coverage¹⁶ that helps patients control chronic conditions and risk factors such as high blood pressure.¹⁷ If these positive trends continue, reduced use of expensive hospital care could result in savings. And that could free up resources for health-promotion efforts in the community.

Reductions in premature mortality suggest improvements in medical care are contributing to better health outcomes.

Two broad measures of premature mortality fell in almost all states (Exhibit 1). In 25 states, there were meaningful declines in mortality amenable to health care, a measure that captures deaths before age 75 from conditions that can be effectively

treated through early detection and high-quality care. Nationally, rates fell 10 percent between 2004–05 and 2009–10. In 18 states, there were also meaningful declines in “years of potential life lost”—a measure of premature deaths before age 75 that gives more weight to deaths at younger ages. Nationally, that rate fell 9 percent between 2005 and 2010. Fifteen states saw meaningful improvement on both indicators.

In addition, breast and colon cancer mortality rates dropped substantially in the vast majority of states, while infant mortality declined meaningfully in 14 states.

As promising as these trends are, the U.S. has not achieved the same magnitude of reductions

COLORADO: LEADING THE WAY TO HIGHER PERFORMANCE

Colorado's rising performance since the first edition of the *State Scorecard* reflects a collaborative spirit among providers, insurers, and community leaders in the state. With no single care delivery system or insurer dominating the market, there is an imperative for shared leadership. This spirit is evident in health plans' and providers' agreement to follow common clinical guidelines and jointly test the patient-centered medical home as a means to enhance primary care and reduce unnecessary hospital use.ⁱ It can also be seen in Western Colorado, which has garnered national attention for creating one of the first sustainable regional health information exchanges, allowing physicians and hospitals to interconnect for better care coordination.ⁱⁱ

Colorado's relatively healthy population also contributes to the state's performance, including the *Scorecard's* indicators of avoidable hospital use. However, while Coloradans are known for their enthusiasm for the outdoors, the state faces health challenges similar to those faced elsewhere in the United States. In pursuit of the governor's commitment to making the state the healthiest in the nation, Colorado benefits from the grantmaking activities of several state-based foundations that fund initiatives to improve access to care, promote healthy lifestyles, and advance health equity.

A persistently high uninsured rate remains the Achilles' heel of the state's health care system. To address access and affordability, policymakers in 2006 appointed the bipartisan Blue Ribbon Commission on Health Care Reform, which forged consensus on a “Colorado vision” for Medicaid and private insurance reforms. One of its notable achievements was enactment of a hospital provider fee, matched by federal funds, to improve access to care for low-income state residents by enhancing Medicaid reimbursement and expanding coverage. The state also took a proactive approach to implementing the Affordable Care Act, including the creation of a state-based health insurance exchange, building on the federal legislation as an opportunity to accomplish many of the reforms recommended by the Commission.ⁱⁱⁱ These policy achievements were informed by an advocacy community that rallied political support for expanded children's coverage and access for the uninsured.

Colorado continues to innovate in other ways. For example, the state is instituting regional accountable care arrangements in its Medicaid program^{iv} and fostering public–private partnerships to create an all-payer medical claims database. Although not all of these efforts had borne fruit during the period measured by the *State Scorecard*, they presage a hopeful future for a state that is defining its own way to higher performance.

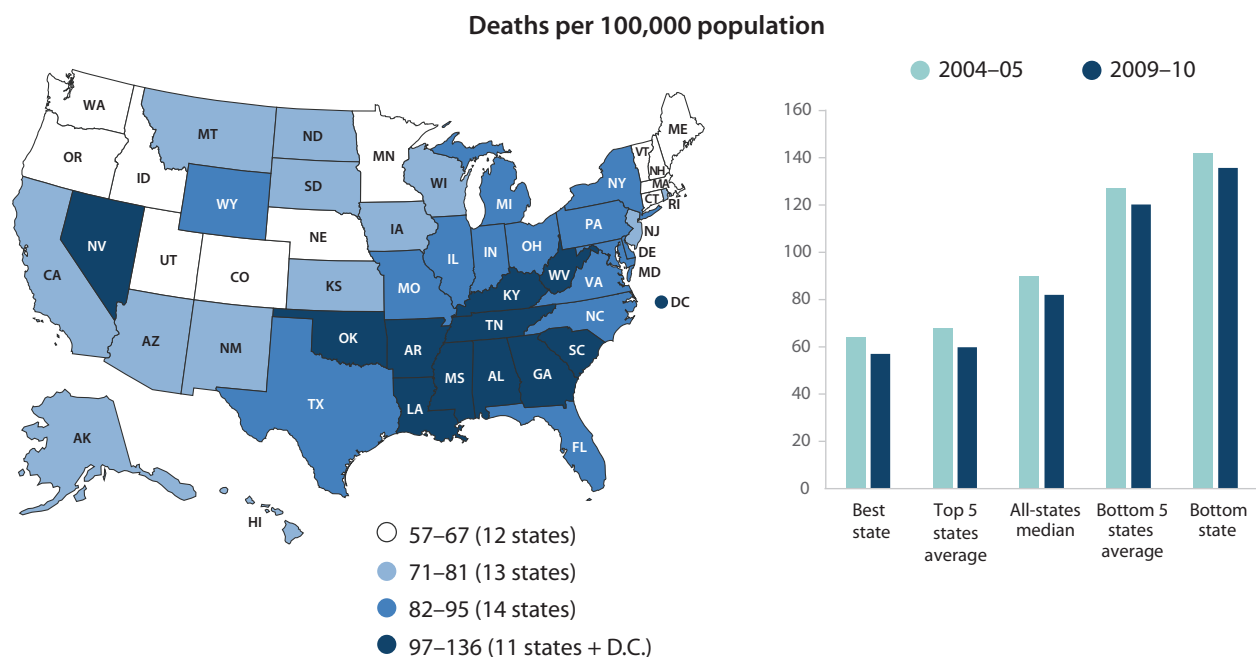
ⁱ M. G. Harbrecht and L. M. Latts, “Colorado's Patient-Centered Medical Home Pilot Met Numerous Obstacles, Yet Saw Results Such as Reduced Hospital Admissions,” *Health Affairs*, Sept. 2012 31(9):2010–17.

ⁱⁱ D. McCarthy and A. Cohen, *The Colorado Beacon Consortium: Strengthening the Capacity for Health Care Delivery Transformation in Rural Communities* (New York: The Commonwealth Fund, April 2013).

ⁱⁱⁱ *Comparison of Provisions from Colorado's Blue Ribbon Commission for Health Care Reform and Federal Health Care Reform* (Denver: Colorado Trust, Oct. 2010).

^{iv} D. Rodin and S. Silow-Carroll, *Medicaid Payment and Delivery Reform in Colorado: ACOs at the Regional Level* (New York: The Commonwealth Fund, March 2013).

Exhibit 10. Mortality Amenable to Health Care



Note: Age-standardized deaths before age 75 from select causes. Mortality rates for the District of Columbia are excluded from the figure on the right.
 Data: 2004–05 and 2009–10 National Vital Statistics System (NVSS) mortality all-county micro data files.
 Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

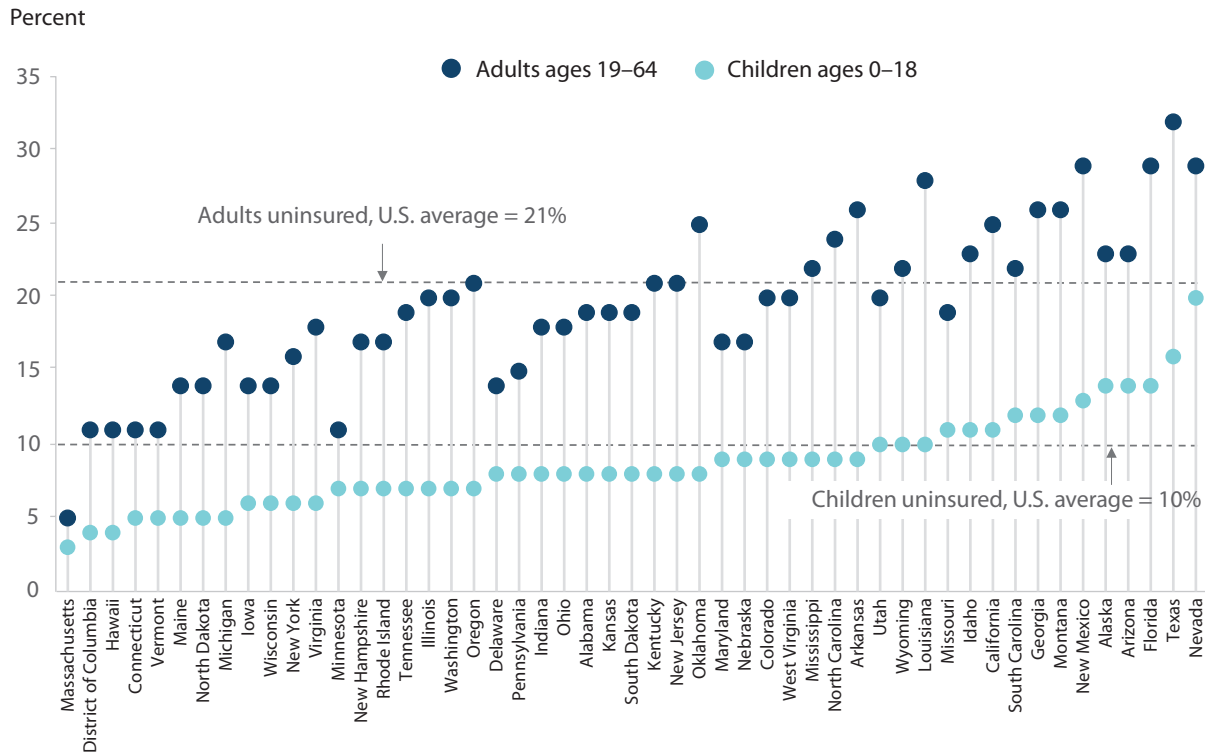
in mortality amenable to health care as have other developed countries that ensure universal access to health care.¹⁸ Moreover, although they declined, rates of premature death remained highly variable across states (Exhibit 10). Mortality amenable to health care was more than twice as high in Mississippi (136 per 100,000) in 2009–10 as it was in Minnesota (57 per 100,000). As we highlight in more detail in the *Equity* section beginning on page 25, the rate was twice as high among blacks as among whites in most states. Even among the white population, state rates varied more than twofold, from a low of 46 deaths per 100,000 in the District of Columbia to a high of 106 per 100,000 in West Virginia ([Appendix Exhibit A12](#)).

Although medical care is only one factor contributing to population health outcomes, it is encouraging that five of the six mortality measures improved in multiple states and that reductions were generally consistent year over year. Even greater improvement may be possible by expanding coverage and reducing disparities.

States lost ground in key areas including access to care, primary and preventive care, obesity, and health-related quality of life.

Between 2007–08 and 2011–12, the years leading up to implementation of the ACA's coverage expansions, the number of uninsured adults swelled by 4.6 million, from 35.6 million to 40.2 million. The rate rose from 19 percent to 21 percent nationally, ranging from 5 percent in Massachusetts to 32 percent in Texas in 2011–12. In 39 states and the District of Columbia, uninsured rates among adults were at least double that of children in the same state, including four states where they were triple (Exhibit 11). Despite the overall increase in uninsured adults, uninsured rates have declined among young adults ages 19 to 26, many of whom have become eligible for continued coverage through their parents' health plans thanks to a provision of the ACA. Nationally, the uninsured rate in this age cohort is down from 31 percent in 2009 to 28 percent in 2012.¹⁹ More recent national data

Exhibit 11. Uninsured Adults and Children, 2011–12



Note: States are arranged in rank order based on the proportion of uninsured children.
 Data: 2012–13 Current Populations Survey (CPS).
 Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

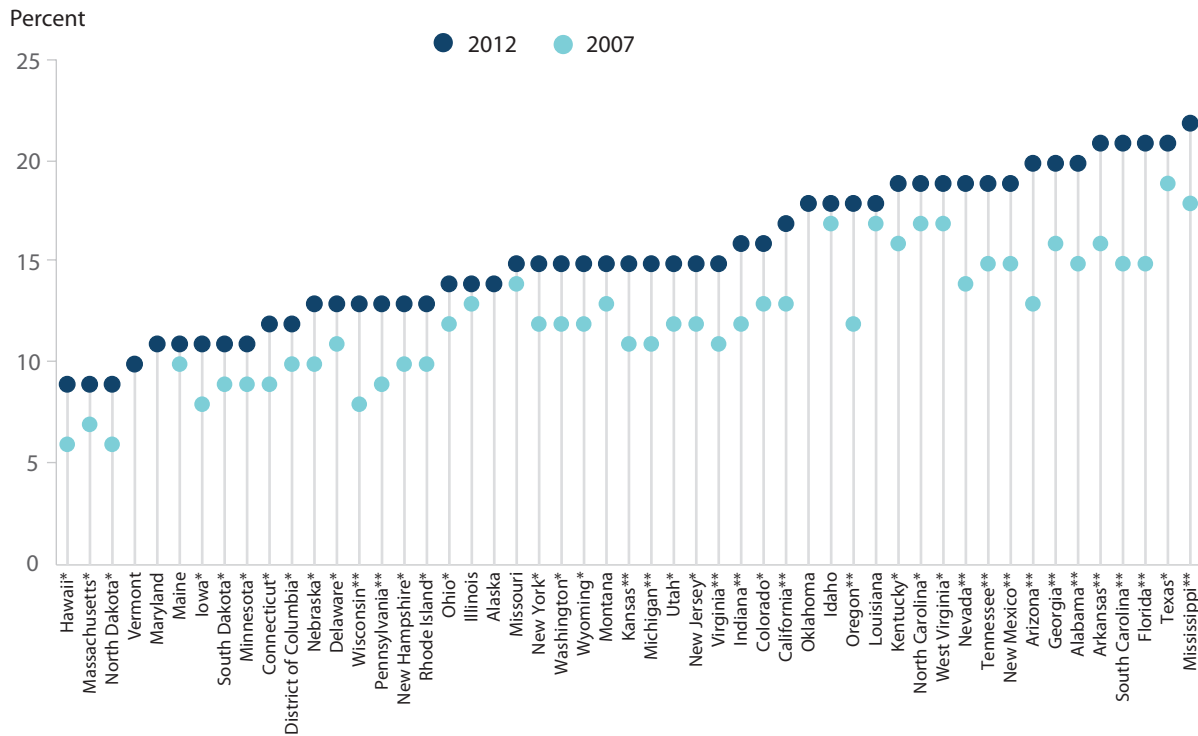
indicate the uninsured rate has begun to decline for all adults.²⁰

Not having health insurance coverage, or having insurance that does not provide adequate protection, puts families at financial risk and may force them to go without needed care. Nationally, in 2011–12, 16 percent of working-age adults and their dependents resided in households where spending on medical care was high relative to annual income, ranging from a low of 10 percent in Minnesota and the District of Columbia to a high of 22 percent in Idaho and Utah ([Appendix Exhibit A4](#)). Nationally, nearly one of five (17%) adults who needed care reported they could not get it because of cost in 2012, up from 13 percent in 2007—before widespread impact of the economic recession. No state did better on this indicator in 2012 than in 2007; cost-related barriers to care in states with the highest rates were twice as great as in states with the lowest rates ([Exhibit 12](#)).

Primary care is essential to efficient and effective health care systems, providing basic and preventive care, coordination, and a gateway to more specialized services.²¹ Yet the *Scorecard* finds that primary care is weak in many states. The proportion of adults who reported having a usual source of care ranged from 63 percent to 89 percent in 2012, falling meaningfully (by at least 3 percentage points) in 25 states since 2007. Perhaps as a consequence of declining coverage among adults and increased cost-related barriers to care, the proportion of older adults who received a complete bundle of recommended preventive services—including screenings for certain cancers and annual flu shots—also declined meaningfully (by at least 2 percentage points) in 30 states between 2006 and 2012 ([Appendix Exhibit A6](#)).

As access deteriorated during the economic recession, the share of adults who reported poor health-related quality-of-life rose from 24 percent

Exhibit 12. Percent of Adults Who Went Without Care Because of Cost, 2007 vs. 2012



Note: States are arranged in rank order based on their current data year (2012) value. States with at least a 0.5 standard deviation change (–2 percentage points) between 2007 and 2012 are denoted with (*); states with at least a 1.0 standard deviation change (–4 percentage points) are denoted with (**).
Data: 2007 and 2012 Behavioral Risk Factor Surveillance System (BRFSS).
Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

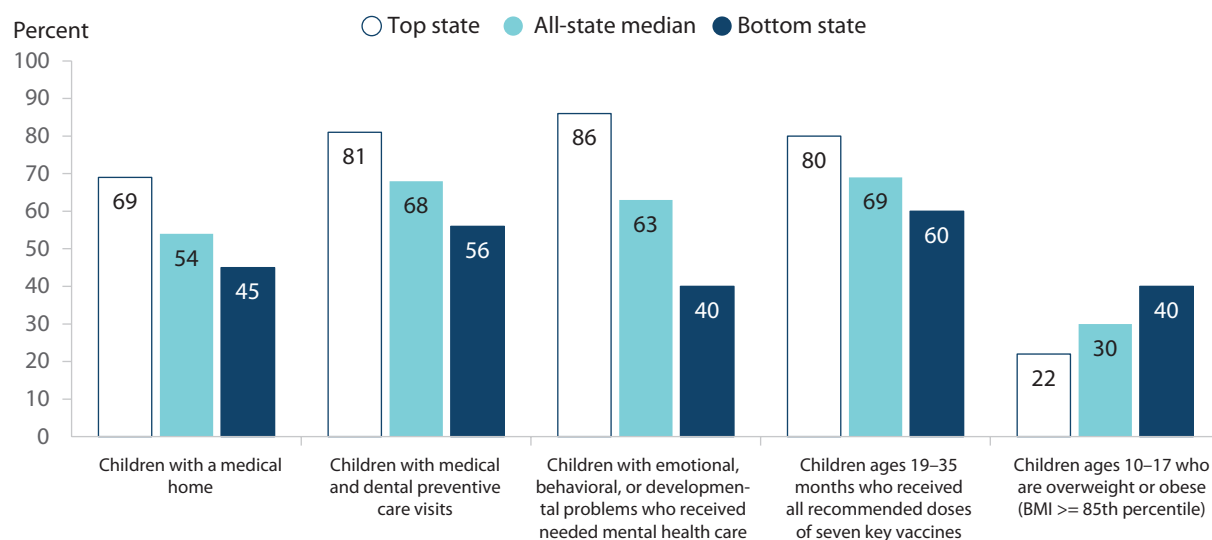
in 2007 to 27 percent in 2012, with 40 states plus the District of Columbia experiencing an erosion in health-related quality of life of least 2 percentage points ([Appendix Exhibit A11](#)).²² Dental health also declined in multiple states: the percentage of adults who reported having lost six or more teeth to gum disease or tooth decay is up in 10 states, topping out at 23 percent in West Virginia. With strong associations between tooth loss and lower quality of life, chronic disease, emergency department use, and hospitalization, these negative dental health trends highlight the need for policy initiatives to consider all aspects of people's health.²³ Meanwhile, adult obesity rose nationally and in 25 states, signaling potential future problems in terms of chronic disease, costs and outcomes.

Health system performance for children is variable: some promising gains in recent years, but also troubling declines.

Performance on the *Scorecard's* seven child-focused indicators varied across states (five of seven indicators are shown in Exhibit 13). In addition to the aforementioned improvements in immunization rates and coverage for children, several states saw meaningful reductions in hospital admissions among children with asthma. Nationally, the rate declined by 17 percent, which translates into 10 admissions per 100,000 children, and rates were down in 16 of the 36 states for which these data are available ([Appendix Exhibit A8](#)).

Other child-focused indicators paint a more troubling picture. For example, the share of children who received primary care in medical homes dropped from 58 percent in 2007 to 54 percent in 2011–12, with declines in more than half of states. Medical homes are patient-centered

Exhibit 13. State Variation: Child Health Indicators, 2012



TOP STATES

1. Vermont	1. Vermont	1. North Dakota	1. Hawaii	1. Utah
2. Iowa	2. New Hampshire	2. Maine	1. New Hampshire	2. Colorado
2. New Hampshire	2. Massachusetts	2. Vermont	3. Mississippi	3. Vermont
4. Wisconsin	2. Connecticut	4. West Virginia	4. Connecticut	3. New Jersey
5. Utah	5. Dist. of Columbia	5. Two tied	5. Four tied	5. Four tied

Data: Children with a medical home and children with preventive and mental health care: 2011–12 National Child Health Survey (NCHS); Children who received recommended vaccines: 2012 National Immunization Survey; Children who are overweight or obese: 2012 Behavioral Risk Factor Surveillance System (BRFSS). Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

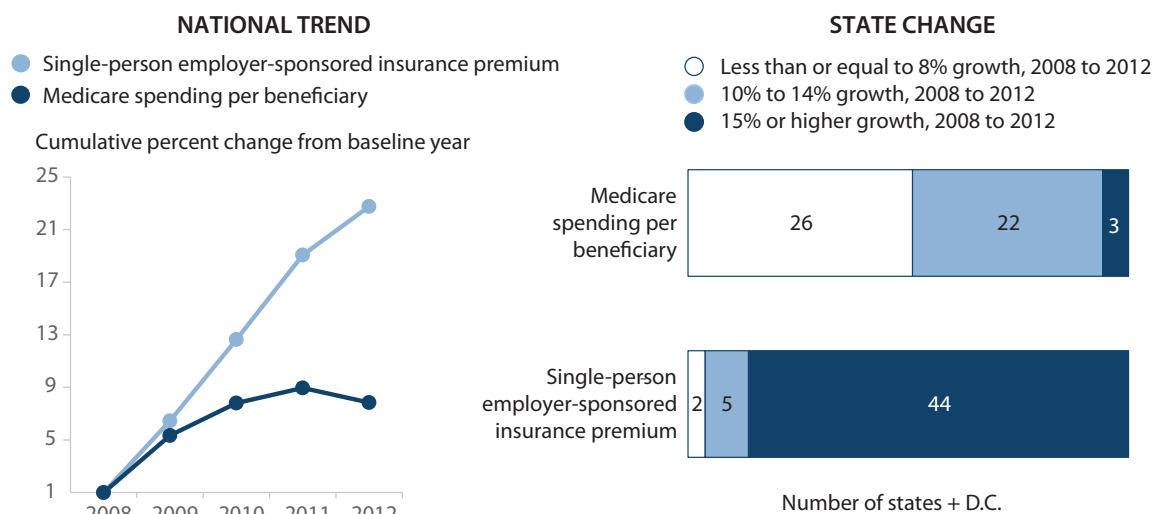
care practices that provide easy access to primary and preventive care and help coordinate care and referrals for specialized care. Of the six states where the uninsured rates among children increased, all but one also saw a decline (not necessarily to the meaningful standard) in the share of children who received care from a medical home (Appendix Exhibits A4 and A6).

The proportion of children with emotional, behavioral, or developmental problems who received needed mental health services increased slightly nationally, but performance changed in both directions among the states. Fourteen states saw improvements of 4 percentage points or more between 2007 and 2011–12, while 20 states saw declines of this same magnitude. There was little overall change in the obesity rate among children ages 10 to 17 between 2007 and 2011–12. Meaningful reductions were seen in 18 states, but rates worsened in 14 others.²⁴

Health care spending continued to rise in the private market, but the Medicare program experienced historic moderation in costs.

Growth in total health care spending among all Medicare beneficiaries has slowed in recent years, with 2.9 percent growth per year from 2007 to 2012 compared with 7.8 percent per year from 2002 to 2007.²⁵ This slowdown is also reflected in the state-level spending estimates used in this *Scorecard*, which are restricted to fee-for-service beneficiaries age 65 and older and exclude prescription drug spending.²⁶ Using this restricted definition of Medicare spending, the *Scorecard* finds that per-beneficiary spending grew an average of 1.9 percent per year between 2008 and 2012, and declined slightly from 2011 to 2012 (Exhibit 14). Still, growth in Medicare spending remained highly variable across states—ranging from 1.1 percent per year in Alabama and Louisiana to more than 4 percent per

Exhibit 14. Change in Employer-Sponsored Insurance Premiums and Medicare Spending, 2008 to 2012



Notes: Medicare spending estimates exclude prescription drug costs and reflect only the age 65+ Medicare fee-for-service population. For measuring trend, Medicare spending and insurance premiums are unadjusted. For of ranking (reported elsewhere in the Scorecard), spending is standardized for state differences in input prices using CMS' hospital wage index, and extra CMS payments for graduate medical education and for treating low-income patients are removed from Medicare spending estimates.

Data: Medicare spending: Medicare claims via Dec. 2013 CMS Geographic Variation Public Use File; Insurance premiums: 2013 Medical Expenditure Panel Survey (MEPS).

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

year in North and South Dakota.²⁷ (See [Appendix Exhibit A9](#) for spending estimates by state.)

Health care spending for the commercially insured population (as measured by single-person health insurance premiums for employer-sponsored coverage) also slowed compared with earlier years but continued to rise more rapidly than Medicare. Average health insurance premiums for an employer-sponsored single-person plan²⁸ increased in every state between 2008 and 2012, with annual growth rates ranging from 2 percent per year in Idaho and New Hampshire to nearly 9 percent per year in North Dakota and Alaska ([Appendix Exhibit A9](#)). Nationally, the average was 5.3 percent per year—nearly three times the increase in Medicare spending per person over the same period ([Exhibit 14](#)).

Slower growth in Medicare spending per person was achieved without a cut in benefits. Employer-sponsored insurance premiums, however, are growing faster and premiums are buying less coverage each year, with costs increasingly shifted

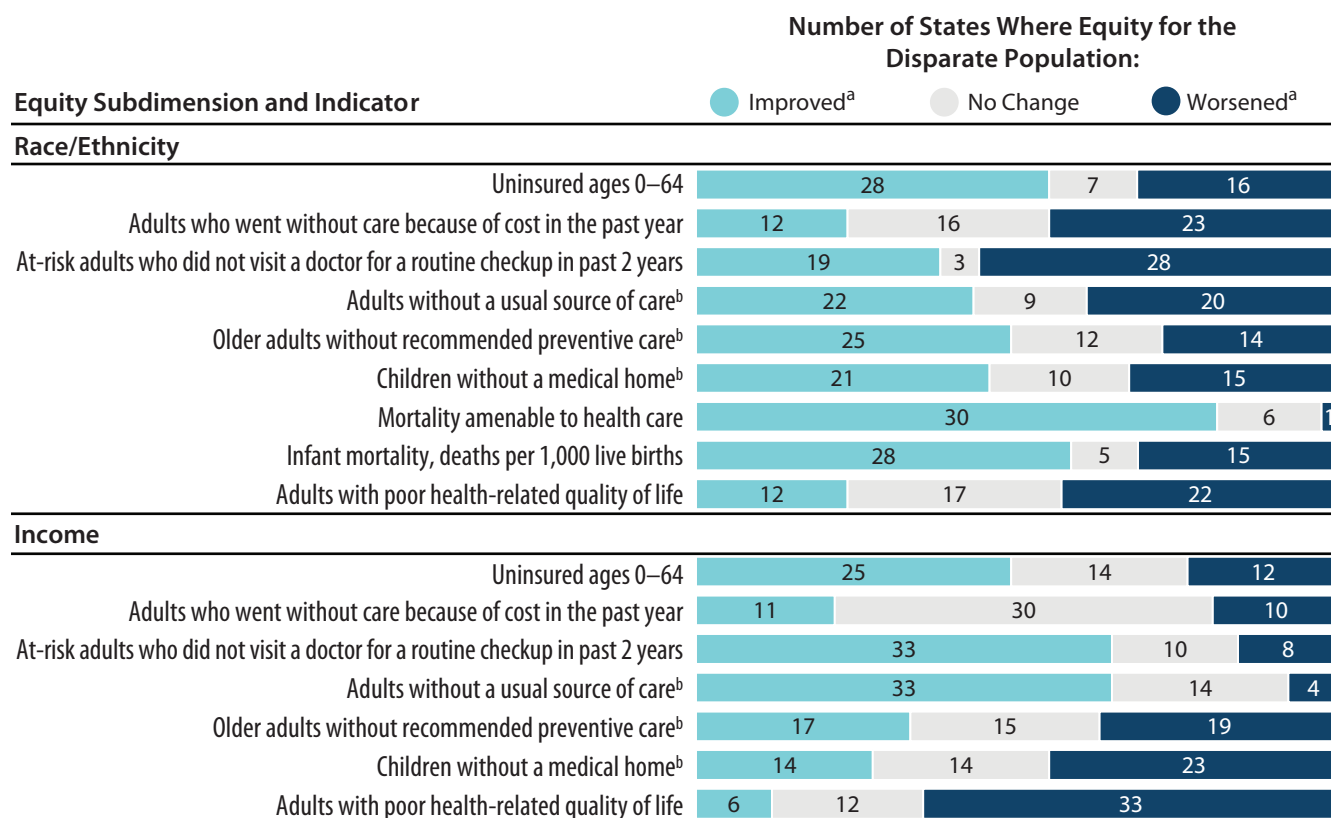
to enrollees through higher deductibles and cost-sharing.²⁹

States' progress was mixed in reducing health care disparities between vulnerable and more advantaged groups

Equitable access to high-quality health care remains an unfulfilled goal across the nation. Despite all states devoting considerable resources to support their low-income populations through Medicaid and CHIP programs, disparities in health and health care within states—as well as geographic disparities across states—remain widespread. (For an in-depth examination of such disparities, see *Health Care in the Two Americas: Findings from the Scorecard on State Health System Performance for Low-Income Populations, 2013*.³⁰)

State progress toward closing equity gaps (see box on next page) varies by indicator. For seven indicators of health system equity for which trend data were available, at least half of all states improved in recent years ([Exhibit 15](#))—meaning the rate improved for the state's most-vulnerable group and

Exhibit 15. Change in Equity Dimension Performance by Indicator



Notes: Selected indicators only. Trend data generally reflect the five-year period ending in 2011 or 2012—refer to Appendix B for additional detail. (a) Improvement indicates that the equity gap between states' disparate population and the U.S. average narrowed and that the rate among the states' disparate population improved. Worsening indicates that the equity gap between states' disparate population and the U.S. average widened and that the rate among the states' disparate population got worse.

(b) Directionality of these indicators is reversed from how reported elsewhere in the report.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

the gap narrowed between that vulnerable group and the U.S. average. All states closed the equity gap and improved care for their most-vulnerable group on at least two indicators, and five states (D.C., La., Md., Mass., and Va.) improved on 10 to 12 indicators ([Appendix Exhibit A14](#)). Unfortunately, for all equity indicators, there were states that

declined—meaning the rate worsened for the most-vulnerable group and the gap widened between that group and the U.S. average.

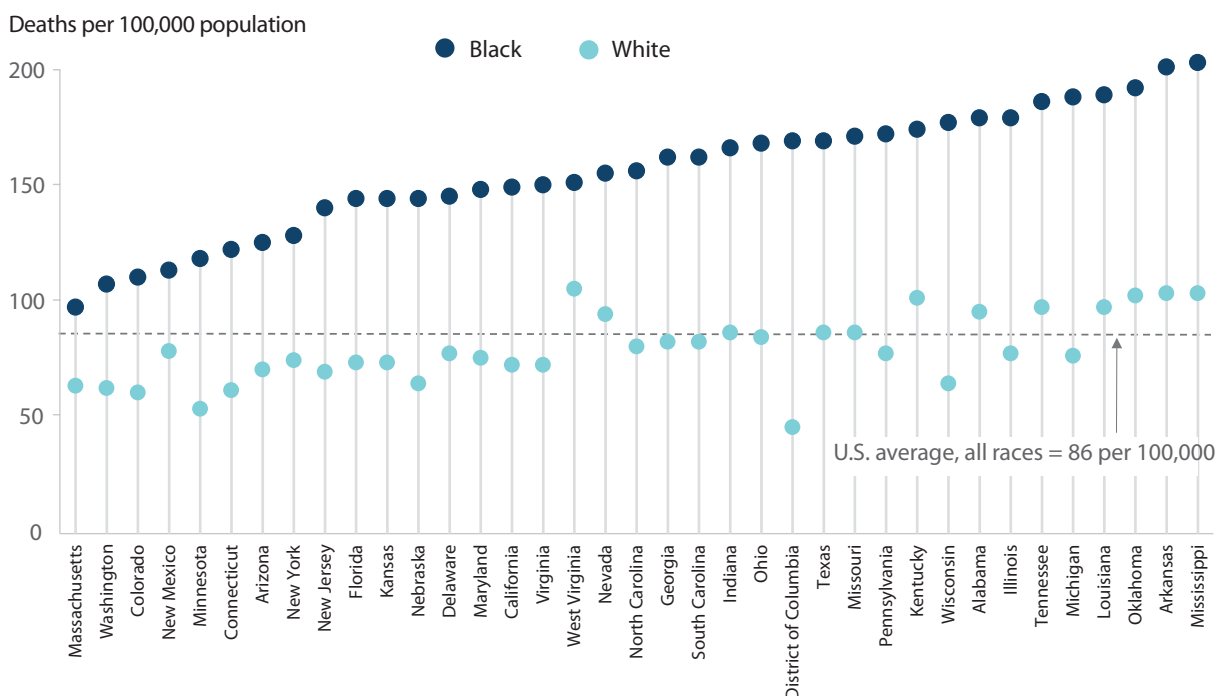
Racial and ethnic minorities face significant barriers to care. For example, rates of premature death were higher among blacks than whites in all states where mortality data are available for both

HOW THE STATE SCORECARD DEFINES EQUITY

The *Scorecard* evaluates states on the equity of their health systems along two dimensions: race and ethnicity (10 indicators) and income (nine indicators). Equity indicators are a subset of indicators chosen to represent care across three of four performance domains. For each state, health system performance on each indicator as it pertains to low-income populations (under 200% of the federal poverty level) and racial or ethnic minority groups (black/other race or Hispanic ethnicity) is compared with the national average. The resulting difference in performance is the “equity gap,” which forms the basis of our state rankings for this domain.

To assess change over time, we count how often the equity gap narrowed across indicators for each state during the five years of data available for this *Scorecard*. We consider improvement to have occurred only if the equity gap narrowed and health care for the states' vulnerable group improved. (See [state profiles](#) and [supplemental data tables](#) online for state equity rankings and indicators by income and racial or ethnic group for each state.)

Exhibit 16. Mortality Amenable to Health Care by Race, State Variation, 2009–10



Notes: Data for Black population are not available for Alaska, Hawaii, Idaho, Iowa, Maine, Montana, New Hampshire, North Dakota, Oregon, Rhode Island, South Dakota, Utah, Vermont, or Wyoming. States are arranged in rank order based on black mortality. Data: 2004–05 and 2009–10 National Vital Statistics System (NVSS) mortality all-county micro data files. Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

racessometimes more than twice as high (Exhibit 16). But geography matters, too: in five states (Ark., Ky., Miss., Okla., W.Va.) premature death rates for whites were higher than the rate for blacks in the best-performing state (Mass.). Although the racial disparity narrowed overall between 2004–05 and 2009–10 on this indicator, the gap in death rates between whites and blacks remained wider in states with the highest overall death rates than in states with lower overall death rates (Appendix Exhibit A12). Also, in three-quarters of states for which data are available, the infant mortality rate among children born to black parents was twice the rate of children born to white parents.

Disparities also persist for Hispanics. In 27 states and the District of Columbia, Hispanics were twice as likely to go without care because of cost compared with non-Hispanic whites. In Maryland and the District of Columbia, Hispanics were more than three times as likely to face cost-related barriers. Racial and ethnic minorities in Arkansas,

Georgia, Indiana, Mississippi, and North Carolina faced some of widest disparities relative to the national average across all of the indicators assessed in our Equity dimension.

Disparities by income were equally troubling. With regard to the share of adults with poor health-related quality-of-life, the equity gap widened and the experience of low-income individuals worsened in more than half of states. In four states (Ala., La., Ore., and W.Va.), half of all low-income adults reported poor health-related quality-of-life in 2012, nearly twice the national average. (See supplemental data tables for indicators by income and racial or ethnic group for each state.)

Widespread geographic variation in health system performance illustrates what may be achieved and highlights opportunities for improvement.

Minnesota, Massachusetts, New Hampshire, Vermont, and Hawaii lead the nation across most dimensions of care currently and in prior time

periods (Exhibits 3 and 4). Their consistently high performance may be credited in part to their wherewithal to invest in health and social initiatives and their willingness to address health system change. In contrast, consistently lagging performance among states at the bottom of the rankings—concentrated among those in the South and Southeast—reflects high rates of uninsured, deteriorating affordability, and inconsistent quality and patient outcomes. Lagging states may benefit from the examples set by other states, particularly neighbors with similar socioeconomic challenges, that are doing better on particular areas of performance and by advancing policies that help ensure affordable coverage and quality care.

State variation narrowed for 11 indicators for which lagging states improved faster than leading states (Exhibit 2). Most of these were indicators on which there was also widespread state improvement—illustrating that states can close the performance gap, even as the top states improve. At the same time, variation widened for 16 indicators, as leading states pulled ahead or lagging states worsened, or both. Even leading states did not perform consistently well or consistently improve across all performance indicators.

Opportunities for improvement abound. Only two states (N.H. and Vt.) ranked in the top quartile across all five dimensions of care; none ranked near the top on all 42 indicators. All states, even top-performers, had at least one indicator that ranked in the bottom quartile—well below what is achievable. In fact, all 10 top-ranked states had at least five indicators in the bottom half of the state distribution ([Appendix Exhibit A1](#)).

Capitalizing on opportunities for improvement would expand access to care, save lives, and improve care experiences for patients. If all states achieved the benchmarks set by top-performing states, nationally we might expect:

- More than 35 million adults and children would gain health insurance, helping to reduce cost barriers to receiving needed care.
- More than 13 million fewer individuals would be burdened by high medical spending relative to their income, and nearly 19 million fewer adults would forgo needed care because of cost.
- About 10 million additional older adults would receive key recommended preventive care services such as cancer screenings and flu shots.
- More than a million fewer Medicare beneficiaries would receive an unsafe prescription drug.
- Medicare beneficiaries would have nearly 1.5 million fewer emergency room visits for nonemergent and/or primary-care treatable conditions.
- There would be approximately 84,000 fewer premature deaths before age 75 for conditions that can be detected early and effectively treated with good follow-up care.
- Nearly 10 million fewer adults (ages 18–64) would lose six or more teeth to decay, infection, or gum disease.

(See [Appendix Exhibit A2](#) for additional examples of the potential gains that might be expected if all states achieved benchmark levels.)

These are ambitious—even aspirational—targets. But by aiming high, policymakers and delivery system leaders are more likely to succeed in raising the bar.

IMPLICATIONS

Health system performance as measured by the *State Scorecard* in large part reflects a confluence of national policy and state and local initiatives. States, in particular, influence health system performance in many ways: by purchasing care for low-income populations and their own employees; by regulating providers and establishing rules that guide health care and insurance markets; by setting statewide strategy for health information technology and exchange; by supporting public health; and, increasingly, by acting as conveners and collaborators for improvement initiatives with other health care stakeholders. The *Scorecard* findings of isolated improvement but, just as often, also stagnation or decline underscore the need for concerted action by all states.

Policymakers in several top-performing states have articulated a clear vision of what health care should look like and are working hard to realize that vision. Vermont, ranked second overall in 2014 and consistently near the top in previous years, has a history of enacting policies that promote better performance. A national leader in guaranteeing access to care and investing in primary care, the state most recently established a “blueprint for health” that emphasizes disease prevention, chronic disease management, and care coordination through a community-based medical home model.³²

Looking across states, a high rate of uninsured adults is often associated with low rates of preventive care and with poor health outcomes. Increased access has been shown to support broader improvements in quality of care and health

MORE KEY FINDINGS

ACCESS

- Performance stagnated nationally on two access measures with mixed results at the state level: at-risk adults (i.e., those 50 and older with a chronic condition or with “fair” or “poor” self-reported health status) who did not see a doctor for a routine checkup in two years (14 states improved while 11 worsened), and adults without a dental visit in the past year (seven states improved while 18 worsened) ([Appendix Exhibit A4](#)).

PREVENTION AND TREATMENT

- There were stark gaps across states in the proportion of children who received routine preventive medical and dental visits in the previous year, as measured in 2011–2012. Rates ranged from a high of 81 percent in Vermont to a low of 56 percent in Nevada.
- From 2007 to 2011, nearly all states saw meaningful improvement on an indicator that tracks patients’ ratings of their hospital experience, including whether hospital staff always managed their pain well, explained medicines, and responded when the call button was pushed. There were similar gains among 48 states in the proportion of hospitalized patients given information about what to do during their recovery at home.

AVOIDABLE HOSPITAL USE AND COST

- The proportion of short-stay nursing home residents with a readmission to the hospital and the share of long-stay residents with a hospital admission were unchanged between 2006 and 2010, with two- to fourfold variation persisting across states ([Appendix Exhibit A8](#)).
- Twofold variation across states in rates of potentially avoidable visits to hospital emergency departments highlights the opportunity for improving access to primary care. Rates ranged from less than 150 avoidable visits per 1,000 Medicare beneficiaries in Hawaii, Utah, and Nebraska to at least 230 per 1,000 in West Virginia, Maine, and the District of Columbia.

HEALTHY LIVES

- Suicide deaths were up substantially in 18 states, while no states saw a meaningful reduction, a concerning reminder that mental health services may be difficult to access or that they are not being delivered adequately.³¹

status.³³ The implications of these findings may play out across the nation as states choose whether and how to move forward with the Affordable Care Act's coverage expansions. To date, 16 of the 26 bottom-performing states (those in the third and fourth performance quartiles) have so far chosen not to expand Medicaid eligibility (Exhibit 3). States that reject expansion will forgo an infusion of federal dollars to support low-income populations and traditionally underserved and rural areas, and they will miss important opportunities to lower the costs of uncompensated care for their hospitals.³⁴

It will be important to continue tracking health system performance as health reforms are implemented, paying close attention to states that are expanding Medicaid and participating in other reforms, such as health homes and accountable care.³⁵ In particular, states like Kentucky, Nevada,

and Arkansas, which are currently ranked in the *Scorecard's* bottom quartile but are expanding Medicaid and prepared to take advantage of the new federal resources and delivery system reforms, could see greater improvements in coming years relative to other states at the bottom that are not fully participating in the ACA's reforms. (See sidebar to learn about Arkansas's approach.) Local health system leaders can also make a difference by choosing to participate in Medicare and private-sector-based accountable care and value-based payment initiatives, which are beginning to yield promising results.³⁶

The *Scorecard's* findings remind us that where you live matters. The sobering truth is that residents of certain states continue to realize greater benefits from their health care systems than those in other states do. But it doesn't have to be this way. By

ARKANSAS: ON THE MOVE

In this and previous *State Scorecards*, Arkansas ranked in the bottom quartile, lagging other states on indicators of health system performance. But Arkansas is quickly developing another reputation, as a state at the forefront of the effort to achieve the "triple aim" of better care, better health, and lower costs.

In 2011, spiraling health care costs and a gaping shortfall in the state Medicaid budget prompted Arkansas Medicaid and the state's two largest private insurers to launch the Arkansas Health Care Payment Improvement Initiative. Its goal is to move Arkansas's health system from a payment model that rewards volume to one that rewards high-quality, efficient care. The initiative pays providers for "episodes" that require coordinated care for a given length of time. So far, these episodes have included upper respiratory infections, pregnancy, and joint replacements, with more set to roll out this year. Providers must meet quality standards, and depending on their average costs per episode, may share in the savings or be on the hook for some of the excess costs. The model also includes transforming primary care practices into patient-centered medical homes that provide patients with extended office hours, recommended preventive services, care coordination, and management of chronic conditions and creating health homes for high-need, high-cost patients who require a more intensive range of services.

The state is working to maximize the number of payers involved in the initiative. Two of the largest self-insured employers have signed on. In addition, insurance carriers participating in Arkansas's customized approach to expanding Medicaid under the Affordable Care Act also must participate. This approach, known as the "private option," uses federal dollars earmarked for Medicaid expansion to purchase private insurance plans in the state's health insurance marketplace for eligible nonelderly adults with incomes below 138 percent of the federal poverty level.ⁱ As of February 2014, about 100,000 people had gained coverage through the private option.ⁱⁱ

As states test various avenues to expanding coverage and controlling health care costs, Arkansas is one to watch to see whether its approach linking coverage and delivery system reforms measurably improves health system performance for its residents in coming years.

ⁱ T. Garber and S. R. Collins, "The Affordable Care Act's Medicaid Expansion: Alternative State Approaches," *The Commonwealth Fund Blog*, March 28, 2014.

ⁱⁱ Arkansas Department of Human Services, Media Release, "Private Option Enrollments Continue to Increase in Every County, More Than Half Under 40," Feb. 10, 2014.

acknowledging that access to care is the foundation of a high-performing health system and by focusing on the needs of low-income and other vulnerable populations, all states can safeguard and promote the health of their residents.³⁷ And all states can strive to enhance patient care experiences, improve health outcomes, and lower health care spending, such as by enacting policies that promote public

health and leading by example through value-based purchasing in state Medicaid and employee health benefit programs.

Only by aiming high can the U.S. reach its potential as a nation where geography is not destiny, and where everyone, everywhere, has the opportunity to live a long and healthy life.

SCORECARD METHODOLOGY

The Commonwealth Fund's *Scorecard on State Health System Performance, 2014*, evaluates 42 key indicators grouped into four dimensions (Exhibit 2):

- ◇ **Access and Affordability** (six indicators): includes rates of insurance coverage for children and adults, as well as individuals' out-of-pocket expenses for medical care and cost-related barriers to receiving care.
- ◇ **Prevention and Treatment** (16 indicators): includes measures of receiving preventive care and the quality of care in ambulatory, hospital, and long-term care and postacute settings.
- ◇ **Potentially Avoidable Hospital Use and Cost** (nine indicators, with one indicator, hospital admissions for ambulatory care-sensitive conditions, reported separately for two distinct age groups): includes indicators of hospital use that might have been reduced with timely and effective care and follow-up care, as well as estimates of per-person spending among Medicare beneficiaries and the cost of employer-sponsored insurance.
- ◇ **Healthy Lives** (11 indicators): includes indicators that measure premature death and health risk behaviors.

In addition, the **Equity** dimension includes differences in performance associated with patients' income level (nine indicators) or race or ethnicity (10 indicators) that span the four other dimensions of performance.

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

Performance Metrics. The 42 performance metrics selected for this report span the health care system, representing important dimensions of care. Where possible, indicators align with those used in previous state scorecards. Since the 2009 *Scorecard*, several indicators have been dropped either because all states improved to the point where no meaningful variations existed or the data to construct the measures were no longer available. Several new indicators have been added, including measures of premature death, out-of-pocket spending on medical care relative to income, and potentially avoidable emergency department use.

Measuring Change over Time. We were able to construct a time series for 34 of 42 indicators. There was generally five years between a historical and current year data observation, though the starting and ending points, as well as total length of time, varied somewhat between indicators. We considered a change in an indicator's value between the historical and current year data points to be meaningful if it was at least one half (0.5) of a standard deviation larger than the indicator's combined distribution over the two time points—a common approach in social science research.³⁸

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. [Appendix B](#) provides detail on the data sources and time frames.

Scoring and Ranking Methodology. The scoring method follows previous state scorecards. States are first ranked from best to worst on each of the 42 performance indicators. We averaged rankings for indicators within each dimension to determine a state's dimension rank and then averaged dimension rankings to determine overall ranking. This approach gives each dimension equal weight, and within dimensions weights indicators equally. Ranking in the earlier period (i.e., revised 2009 data) was based on 34 of 42 indicators; if historical data were not available for a particular indicator, the most current year of data available was used as a substitute ensuring that ranks in each time period were based on the same number of indicators and as similar as possible.

NOTES

- ¹ National health expenditure data (Table 1): <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/tables.pdf>; State health expenditure data: <http://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/Downloads/res-tables.pdf>.
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- ³ P. J. van der Wees, A. M. Zaslavsky, and J. Z. Ayanian, “Improvements in Health Status After Massachusetts Health Care Reform,” *Milbank Quarterly*, Dec. 2013 91(4):663–89.
- ⁴ Kaiser Commission on Medicaid and the Uninsured, “State Children’s Health Insurance Program (CHIP): Reauthorization History,” Publication #7743-02 (Washington, D.C.: Henry J. Kaiser Family Foundation, revised Feb. 2009), <http://kaiserfamilyfoundation.files.wordpress.com/2013/01/7743-02.pdf>.
- ⁵ Centers for Disease Control and Prevention, “VFC Program: Vaccines for Uninsured Children” (Atlanta: CDC), <http://www.cdc.gov/features/vfcprogram/>.
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- ⁷ Recommended vaccines are the 4:3:1:3:3:1:4 series, which includes ≥4 doses of DTaP/DT/DTP, ≥3 doses of poliovirus vaccine, ≥1 doses of measles-containing vaccine, full series of Hib (3 or 4 doses, depending on product type), ≥3 doses of HepB, ≥1 dose of varicella vaccine, and ≥4 doses of PCV.
- ⁸ Certain medications that are commonly taken by younger patients without incident can put those age 65 and older at increased risk for experiencing severe side effects and complications, regardless of the dose, frequency, or how healthy the patient is. These adverse drug events can include confusion, sedation, immobility, falls, and fractures. The National Committee for Quality Assurance (NCQA) has identified more than 100 “high-risk medications in the elderly” that should be avoided by those 65 and older. The drugs fall into numerous categories, ranging from antianxiety drugs and antihistamines to narcotics and muscle relaxants. Safer alternatives may be available, but as the *Scorecard* finding makes clear, these potentially harmful medications are still frequently prescribed to the elderly. To view the NCQA list of high-risk medications, visit http://www.ncqa.org/Portals/0/newsroom/SOHC/Drugs_Avoided_Elderly.pdf.
- ⁹ N. L. Rucker, “Medicare Part D’s Medication Therapy Management: Shifting from Neutral to Drive,” *Insight on the Issues*, No. 64 (Washington, D.C.: AARP Public Policy Institute, June 2012), http://www.aarp.org/content/dam/aarp/research/public_policy_institute/health/medicare-part-d-shifting-from-neutral-to-drive-insight-AARP-ppi-health.pdf; D. C. Radley, M. R. Wasserman, L. E. Olsho et al., “Reduction in Medication Errors in Hospitals Due to Adoption of Computerized Provider Order Entry Systems,” *Journal of the American Medical Informatics Association*, May 1, 2013 20(3):470–76; and C. J. Hsiao, E. Hing, T. C. Socey et al., “Electronic Health Record Systems and Intent to Apply for Meaningful Use Incentives Among Office-Based Physician Practices: United States, 2001–2011,” NCHS Data Brief, No. 79 (Hyattsville, Md.: National Center for Health Statistics, Nov. 2011), <http://www.cdc.gov/nchs/data/databriefs/db79.htm>.
- ¹⁰ Data from 2004 as reported in J. C. Cantor, C. Schoen, D. Belloff, S. K. H. How, and D. McCarthy, *Aiming Higher: Results from a State Scorecard on Health System Performance* (New York: The Commonwealth Fund, June 2007) and reproduced from 2004 Hospital Compare data. Data from 2012 are from Hospital Compare (analysis by IPRO). Hospital process quality measures for heart attack, heart failure, pneumonia, and surgical patients receiving surgery have been reported in all previous Commonwealth Fund scorecards. Given the progress that has been made in recent years and the narrow distribution between states, these measures have been retired from our report.
- ¹¹ Centers for Disease Control and Prevention, *National and State Healthcare Associated Infections: Progress Report* (Atlanta: CDC, March 2014).
- ¹² C. Marks, S. Loehrer, and D. McCarthy, *Hospital Readmissions: Measuring for Improvement, Accountability, and Patients* (New York and Cambridge, Mass.: The Commonwealth Fund and the Institute for Healthcare Improvement, Sept. 2013).
- ¹³ Centers for Medicare and Medicaid Services, “Readmissions Reduction Program,” <http://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program.html>.
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- ¹⁶ R. Kaestner, C. Long, and G. C. Alexander, *Effects of Prescription Drug Insurance on Hospitalization and Mortality: Evidence from Medicare Part D*, NBER Working Paper No. 19948 (Cambridge, Mass.: National Bureau of Economic Research, Feb. 2014), <http://www.nber.org/papers/w19948>.

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Appendix Exhibit A1. Summary of Indicator Rankings by State

Overall Rank	State	No. of indicators scored (of 42)	Top 5 States	Top Quartile	2nd Quartile	3rd Quartile	Bottom Quartile	Bottom 5 States	No. of indicators with trend (of 34)	No. of indicators improved	No. of indicators worsened	Net change
46	Alabama	41	2	2	9	8	22	13	33	7	16	-9
31	Alaska	40	5	7	15	8	10	7	31	11	7	4
36	Arizona	42	1	9	10	13	10	5	34	13	7	6
50	Arkansas	42	0	2	2	14	24	18	34	12	13	-1
26	California	42	5	14	10	10	8	2	34	15	7	8
12	Colorado	42	9	19	13	8	2	0	34	16	6	10
6	Connecticut	42	11	24	11	5	2	0	34	11	10	1
10	Delaware	41	7	15	14	9	3	2	33	10	7	3
21	District of Columbia	39	12	14	8	5	12	9	31	10	7	3
41	Florida	42	2	6	8	16	12	9	34	13	10	3
45	Georgia	42	1	3	6	18	15	3	34	13	12	1
5	Hawaii	40	17	25	6	5	4	3	32	9	8	1
31	Idaho	41	10	16	8	6	11	5	33	10	9	1
26	Illinois	42	0	6	13	17	6	3	33	10	6	4
43	Indiana	42	0	0	11	21	10	3	34	7	13	-6
10	Iowa	42	6	14	22	5	1	1	34	7	7	0
23	Kansas	42	2	5	22	13	2	0	34	10	8	2
42	Kentucky	42	1	4	5	15	18	9	34	12	9	3
48	Louisiana	42	3	5	3	8	26	23	33	14	11	3
7	Maine	42	11	23	9	8	2	1	33	10	6	4
17	Maryland	42	8	11	15	12	4	3	34	14	4	10
2	Massachusetts	42	20	28	6	6	2	0	34	12	5	7
26	Michigan	42	2	7	16	11	8	2	34	10	12	-2
1	Minnesota	42	18	32	5	2	3	2	34	10	10	0
51	Mississippi	41	4	4	2	4	31	25	33	11	10	1
34	Missouri	42	0	2	13	19	8	1	34	11	11	0
29	Montana	42	4	13	10	10	9	4	33	10	11	-1
17	Nebraska	42	7	17	16	7	2	1	34	12	5	7
46	Nevada	42	2	4	9	11	18	11	34	11	12	-1
2	New Hampshire	41	15	24	11	4	2	1	33	15	6	9
15	New Jersey	42	5	18	10	5	9	5	34	13	9	4
36	New Mexico	41	2	7	11	10	13	9	33	11	9	2
19	New York	42	4	12	14	8	8	6	34	16	7	9
36	North Carolina	42	1	4	13	16	9	2	34	15	7	8
14	North Dakota	41	8	13	15	7	6	2	33	9	11	-2
31	Ohio	42	0	0	17	15	10	3	34	12	11	1
49	Oklahoma	42	0	2	6	9	25	9	33	12	8	4
24	Oregon	42	9	11	15	8	8	3	34	12	9	3
22	Pennsylvania	42	3	11	12	14	5	1	33	11	9	2
9	Rhode Island	42	7	18	16	6	2	1	34	9	14	-5
36	South Carolina	42	2	6	7	16	13	4	34	13	13	0
12	South Dakota	42	8	17	15	7	3	1	34	11	9	2
40	Tennessee	42	0	2	10	14	16	8	34	12	10	2
44	Texas	42	1	4	8	15	15	10	34	13	7	6
19	Utah	42	14	21	4	9	8	5	34	9	11	-2
2	Vermont	42	21	29	3	6	4	2	34	12	6	6
24	Virginia	42	0	6	19	15	2	1	34	12	8	4
15	Washington	42	4	14	15	7	6	2	34	9	7	2
34	West Virginia	42	2	6	3	17	16	13	34	10	13	-3
7	Wisconsin	42	9	18	15	7	2	0	34	11	7	4
29	Wyoming	42	4	13	7	13	9	5	33	10	9	1

Notes: Improvement or worsening refers to a change between the baseline and current time periods of at least 0.5 standard deviations. In [Appendix Exhibit A8](#), hospital admissions for ambulatory-care sensitive conditions among Medicare beneficiaries are displayed separately for two age ranges, but counted as a single indicator in tallies of indicators and improvement. In instances when the state rates for the two age ranges rank in different quartiles, the higher (better) rank is used to determine state quartile ranking on this indicator.

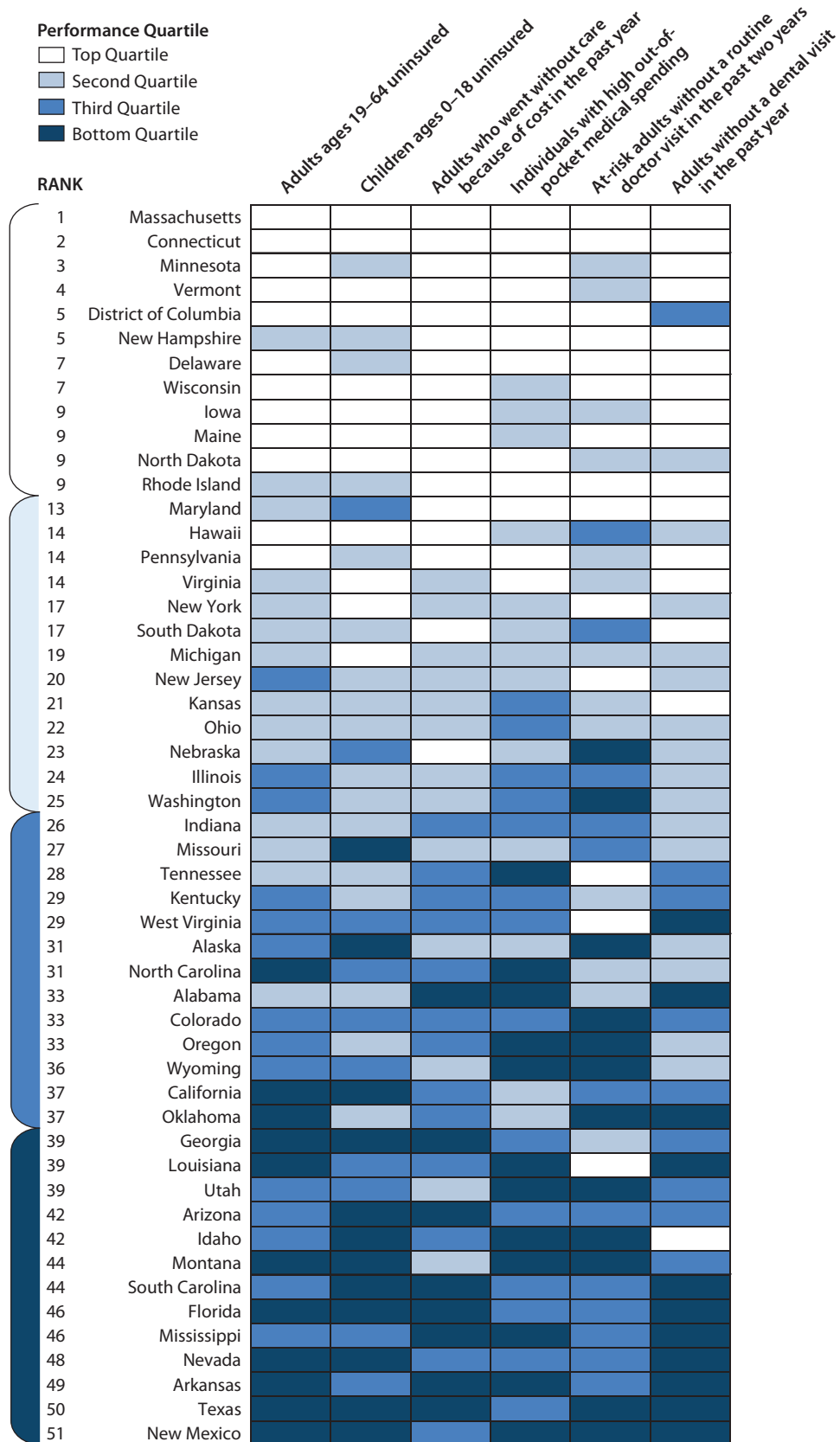
Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A2. 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	30,229,859	more adults (ages 18–64) would be covered by health insurance (public or private), and therefore would be more likely to receive health care when needed.
Insured Children	5,486,872	more children (ages 0–17) would be covered by health insurance (public or private), and therefore would be more likely to receive health care when needed.
High Out-of-Pocket Medical Spending	13,197,478	fewer individuals would be burdened by high out-of-pocket spending on medical care.
Went Without Care Because of Cost	18,777,552	fewer adults (age 18 and older) would go without needed health care because of cost.
Adult Usual Source of Care	25,819,134	more adults (age 18 and older) would have a usual source of care to help ensure that care is coordinated and accessible when needed.
Older Adult Preventive Care	10,184,954	more adults (age 50 and older) would receive recommended preventive care, such as colon cancer screenings, mammograms, pap smears, and flu shots at appropriate ages.
Children with a Medical Home	11,116,179	more children (ages 0–17) would have a medical home to help ensure that care is coordinated and accessible when needed.
Children with Preventive Medical and Dental Visits	9,634,022	more children (ages 0–17) would receive annual preventive medical and dental care visits each year.
Medicare Received a High-Risk Drug	1,052,042	fewer Medicare beneficiaries would receive an inappropriately prescribed medication.
Preventable Hospital Admissions Among Children	77,072	fewer children ages 2 to 17 would be hospitalized for asthma exacerbations.
Hospital Readmissions	191,527	fewer hospital readmissions would occur among Medicare beneficiaries (age 65 and older).
Hospitalizations of Nursing Home Residents	118,521	fewer long-stay nursing home residents would be hospitalized.
Potentially Avoidable Emergency Department Visits	1,488,131	fewer emergency department visits for nonemergent or primary care–treatable conditions would occur among Medicare beneficiaries.
Mortality Amenable to Health Care	84,777	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	11,509	fewer women might lose their lives fighting breast cancer.
Colon Cancer Deaths	11,735	fewer individuals might die from colon cancer.
Suicides	16,059	fewer individuals might take their own lives.
Infant Mortality	7,435	more infants might live to see their first birthday.
Adults Who Smoke	21,124,746	fewer adults would smoke, reducing their risk of lung and heart disease.
Adults Who Are Obese	13,524,885	fewer adults would be obese, with body weights that increase their risk for disease and long-term complications.
Children Who Are Overweight or Obese	3,022,371	fewer children (ages 10–17) would be overweight or obese, thus reducing the potential for poor health as they transition into adulthood.
Adults with Tooth Loss	9,660,632	fewer adults (ages 18–64) would have lost six or more teeth to decay, infection, or gum disease.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A3. Access & Affordability: Dimension and Indicator Ranking



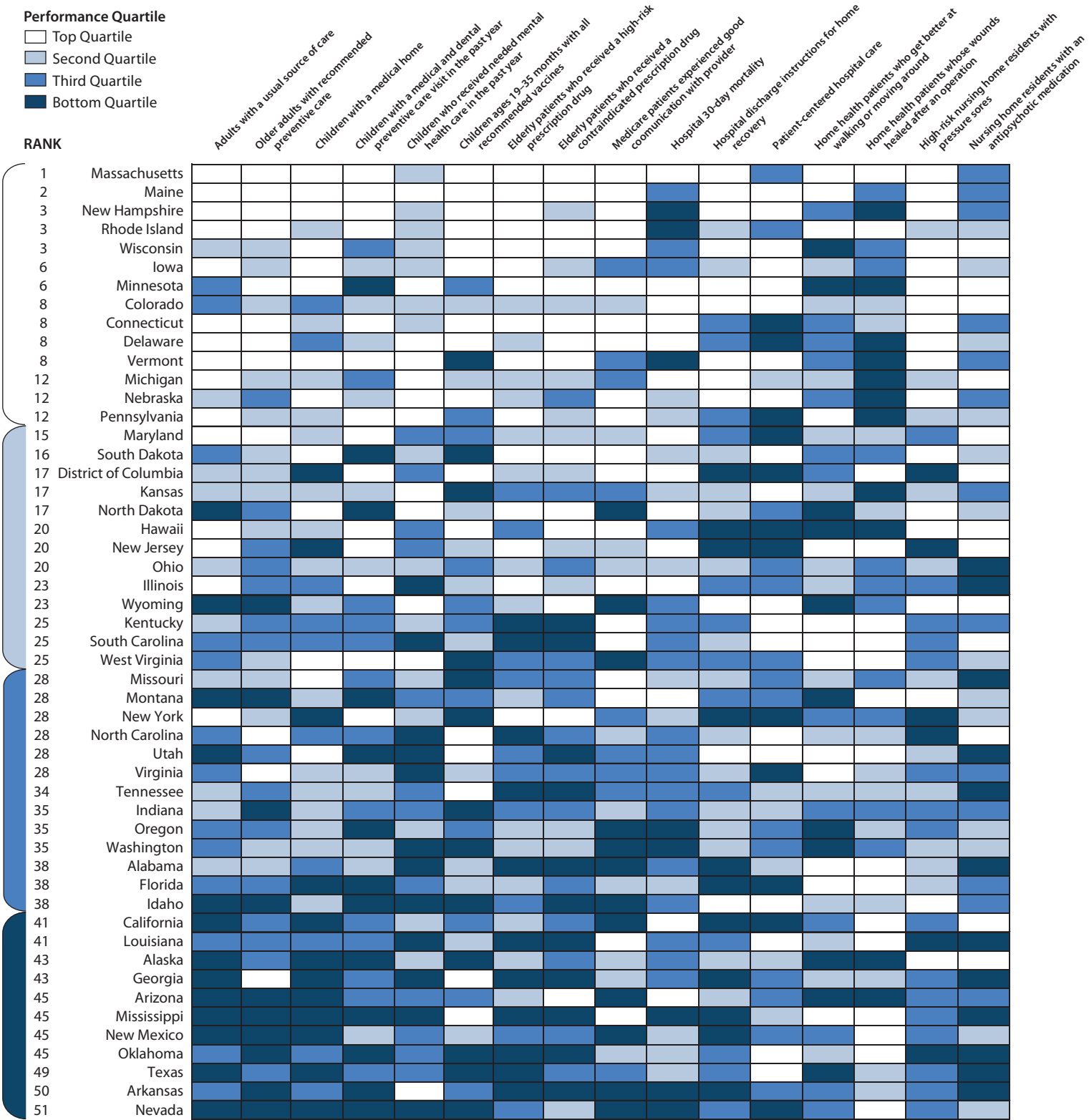
Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A4. Access & Affordability: Dimension Ranking and Indicator Rates

	Adults ages 19–64 uninsured			Children ages 0–18 uninsured			Adults who went without care because of cost in the past year			Individuals with high out-of-pocket medical spending	At-risk adults without a routine doctor visit in past two years			Adults without a dental visit in the past year	
	2007–08	2011–12		2007–08	2011–12		2007	2012		2011–12	2007	2012		2006	2012
United States	19%	21%		10%	10%		13%	17%	**	16%	14%	14%		15%	15%
Alabama	16	19	*	6	8	*	15	20	**	19	11	13	*	15	18
Alaska	23	23		13	14		14	14		15	21	19	*	16	14
Arizona	23	23		15	14		13	20	**	16	15	17	*	16	17
Arkansas	24	26		8	9		16	21	**	20	20	17	*	16	19
California	24	25		11	11		13	17	**	15	16	16		16	16
Colorado	19	20		13	9	**	13	16	*	17	20	18	*	13	16
Connecticut	12	11		6	5		9	12	*	12	11	10		10	11
Delaware	14	14		8	8		11	13	*	13	7	6		10	12
District of Columbia	12	11		6	4	*	10	12	*	10	9	7	*	16	16
Florida	25	29	*	18	14	**	15	21	**	17	10	15	**	15	18
Georgia	22	26	*	11	12		16	20	**	17	14	14		13	16
Hawaii	10	11		5	4		6	9	*	15	15	15		14	15
Idaho	20	23	*	10	11		17	18		22	21	23	*	15	13
Illinois	17	20	*	7	7		13	14		16	16	15		16	15
Indiana	16	18		5	8	*	12	16	**	16	15	17	*	13	15
Iowa	12	14		5	6		8	11	*	14	13	13		12	12
Kansas	16	19	*	9	8		11	15	**	16	14	12	*	13	13
Kentucky	20	21		9	8		16	19	*	17	13	14		18	16
Louisiana	26	28		12	10	*	17	18		18	8	11	*	18	20
Maine	13	14		5	5		10	11		15	12	11		12	13
Maryland	16	17		8	9		11	11		12	12	8	**	13	13
Massachusetts	7	5		3	3		7	9	*	11	8	6	*	10	11
Michigan	16	17		5	5		11	15	**	14	13	14		11	14
Minnesota	10	11		6	7		9	11	*	10	11	12		9	11
Mississippi	24	22		13	9	**	18	22	**	21	16	15		18	20
Missouri	16	19	*	9	11	*	14	15		15	16	16		17	15
Montana	20	26	**	12	12		13	15	*	18	21	20		15	17
Nebraska	15	17		9	9		10	13	*	14	17	18		12	15
Nevada	21	29	**	16	20	**	14	19	**	17	22	15	**	16	20
New Hampshire	14	17	*	5	7	*	10	13	*	11	12	10	*	10	10
New Jersey	18	21	*	11	8	*	12	15	*	14	10	10		14	14
New Mexico	29	29		16	13	*	15	19	**	19	18	20	*	17	18
New York	17	16		8	6	*	12	15	*	14	12	11		15	15
North Carolina	21	24	*	11	9	*	17	19	*	19	13	12		16	14
North Dakota	14	14		8	5	*	6	9	*	13	15	14		11	14
Ohio	15	18	*	7	8		12	14	*	17	14	13		12	14
Oklahoma	22	25	*	10	8	*	18	18		15	23	20	*	19	18
Oregon	21	21		11	7	**	12	18	**	19	17	19	*	14	15
Pennsylvania	12	15	*	7	8		9	13	**	13	12	12		12	13
Rhode Island	14	17	*	8	7		10	13	*	13	7	8		10	12
South Carolina	20	22		14	12	*	15	21	**	17	14	16	*	17	18
South Dakota	15	19	*	9	8		9	11	*	14	16	15		13	11
Tennessee	20	19		9	7	*	15	19	**	20	8	10	*	17	17
Texas	31	32		20	16	**	19	21	*	17	15	18	*	20	18
Utah	15	20	*	10	10		12	15	*	22	22	20	*	15	16
Vermont	13	11		7	5	*	10	10		13	14	13		12	11
Virginia	17	18		9	6	*	11	15	**	13	14	12	*	13	12
Washington	15	20	*	7	7		12	15	*	16	17	18		13	14
West Virginia	21	20		5	9	**	17	19	*	17	10	11		14	18
Wisconsin	12	14		6	6		8	13	**	14	15	9	**	11	12
Wyoming	18	22	*	9	10		12	15	*	19	23	20	*	14	14
Change		20			23			42		—		25			25
States Improved		0			17			0		—		14			7
States Worsened		20			6			42		—		11			18

Notes: * denotes a change of at least 0.5 standard deviation; ** denotes a change of 1.0 standard deviation or more.
Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A5. Prevention & Treatment: Dimension and Indicator Ranking



Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A6. Prevention & Treatment: Dimension Ranking and Indicator Rates

	Adults with a usual source of care			Older adults with recommended preventive care			Children with a medical home			Children with a medical and dental preventive care visit in the past year	Children who received needed mental health care in the past year		
	2007	2012		2006	2012		2007	2011/12		2011/12	2007	2011/12	
United States	80%	78%		44%	42%	*	58%	54%	*	68%	60%	61%	
Alabama	82	80		39	43	*	56	54		70	62	54	*
Alaska	72	63	**	40	39		52	52		59	63	63	
Arizona	76	75		42	35	**	50	46	*	65	62	60	
Arkansas	84	78	**	37	34	*	61	55	**	62	56	67	**
California	72	73		38	41	*	50	45	*	65	54	63	**
Colorado	79	77		47	44	*	59	55	*	70	65	65	
Connecticut	87	86		51	47	*	62	58	*	79	79	65	**
Delaware	90	87	*	52	48	*	60	56	*	72	77	67	**
District of Columbia	80	79		43	44		50	50		77	56	59	
Florida	78	76		41	39	*	57	50	**	60	52	58	*
Georgia	80	75	*	45	46		58	52	**	65	51	53	
Hawaii	88	85	*	41	44	*	60	57	*	73	63	58	*
Idaho	73	71		37	35	*	56	57		59	63	56	*
Illinois	82	83		38	39		56	56		74	53	55	
Indiana	84	82		39	37	*	62	58	*	69	64	58	*
Iowa	84	83		46	45		67	67		70	75	66	**
Kansas	84	79	*	43	45	*	61	59		70	72	72	
Kentucky	85	81	*	43	41	*	62	56	**	68	66	66	
Louisiana	79	77		38	41	*	55	56		67	55	40	**
Maine	89	88		49	47	*	66	63	*	73	71	78	*
Maryland	84	84		50	48	*	59	57		73	59	59	
Massachusetts	89	89		50	52	*	66	63	*	79	67	65	
Michigan	86	84		51	45	**	63	59	*	68	60	68	*
Minnesota	80	76	*	52	47	**	63	61		60	67	72	*
Mississippi	77	74	*	37	38		52	49	*	60	43	53	**
Missouri	84	79	*	46	43	*	65	62	*	65	74	63	**
Montana	72	73		45	36	**	62	58	*	61	68	60	*
Nebraska	84	82		42	41		69	61	**	70	71	71	
Nevada	72	67	*	40	37	*	45	45		56	53	49	*
New Hampshire	88	88		49	48		69	67		79	63	66	
New Jersey	86	83	*	44	41	*	57	53	*	76	55	58	
New Mexico	75	70	*	39	36	*	49	48		70	53	58	*
New York	84	83		46	44	*	57	53	*	73	61	64	
North Carolina	78	76		48	46	*	61	55	**	67	62	54	*
North Dakota	78	74	*	43	42		64	62		61	72	86	**
Ohio	85	81	*	46	41	**	66	57	**	71	66	66	
Oklahoma	79	76	*	36	38	*	56	56		62	54	61	*
Oregon	78	78		44	39	**	63	57	**	63	46	66	**
Pennsylvania	90	87	*	45	44		62	59	*	73	81	69	**
Rhode Island	85	87		51	46	**	64	60	*	76	76	66	**
South Carolina	82	78	*	43	42		59	54	*	64	63	50	**
South Dakota	81	78	*	46	43	*	63	62		59	69	64	*
Tennessee	85	79	**	46	41	**	61	60		70	64	60	*
Texas	72	68	*	40	39		50	52		68	42	59	**
Utah	78	74	*	40	40		63	64		61	67	49	**
Vermont	87	88		49	47	*	67	69		81	69	78	**
Virginia	80	78		51	46	**	59	57		70	72	53	**
Washington	79	77		46	43	*	60	59		72	62	54	*
West Virginia	79	76	*	43	44		65	61	*	74	72	74	
Wisconsin	86	82	*	47	43	*	63	66	*	68	61	65	*
Wyoming	74	69	*	38	36	*	59	59		65	68	67	
Change		25			37			28		—		34	
States Improved		0			7			1		—		14	
States Worsened		25			30			27		—		20	

Notes: * denotes a change of at least 0.5 standard deviation; ** denotes a change of 1.0 standard deviation or more.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A6. Prevention & Treatment: Dimension Ranking and Indicator Rates (continued)

	Children ages 19–35 months with all recommended vaccines			Elderly patients who received a high-risk prescription drug			Elderly patients who received a contraindicated prescription drug			Medicare patients experienced good communication with provider		
	2009	2012		2007	2011		2007	2011		2007	2013	
United States	44%	68%	**	29%	20%	**	20%	23%	*	75%	76%	*
Alabama	47	71	**	42	29	**	27	29	*	75	74	*
Alaska	53	60	*	26	19	*	16	21	**	75	76	*
Arizona	37	68	**	28	19	**	18	18		72	74	*
Arkansas	34	66	**	40	25	**	23	26	*	75	72	**
California	50	67	**	26	19	*	20	22	*	72	74	*
Colorado	47	72	**	26	19	*	18	19		75	76	*
Connecticut	34	77	**	20	14	*	17	17		74	77	**
Delaware	39	73	**	26	18	**	19	16	*	78	79	*
District of Columbia	48	73	**	19	17		14	19	**	75	79	**
Florida	49	69	**	30	19	**	20	22	*	73	76	**
Georgia	46	75	**	39	25	**	25	24		72	76	**
Hawaii	47	80	**	22	21		15	18	*	77	77	
Idaho	34	63	**	32	22	**	21	24	*	73	74	*
Illinois	54	69	**	24	15	**	17	19	*	—a	77	
Indiana	43	61	**	32	20	**	21	22		75	76	*
Iowa	42	75	**	22	15	*	17	19	*	75	75	
Kansas	46	65	**	30	20	**	21	22		76	75	*
Kentucky	43	68	**	36	26	**	26	27		73	77	**
Louisiana	54	69	**	41	28	**	25	26		77	80	**
Maine	38	73	**	21	13	**	14	14		77	77	
Maryland	45	67	**	23	16	*	19	19		75	76	*
Massachusetts	33	74	**	16	12	*	15	16		75	77	*
Michigan	52	71	**	27	16	**	18	20	*	75	75	
Minnesota	42	66	**	19	13	*	15	17	*	77	78	*
Mississippi	59	78	**	44	29	**	26	27		77	78	*
Missouri	31	64	**	32	20	**	21	23	*	72	77	**
Montana	39	67	**	26	17	**	22	22		76	77	*
Nebraska	38	73	**	29	18	**	20	21		73	79	**
Nevada	39	65	**	28	21	*	17	20	*	74	73	*
New Hampshire	39	80	**	21	14	*	18	20	*	74	78	**
New Jersey	45	72	**	21	15	*	18	20	*	74	76	*
New Mexico	46	72	**	30	22	**	19	23	**	72	73	*
New York	48	64	**	18	13	*	16	18	*	75	75	
North Carolina	40	75	**	35	23	**	22	23		74	76	*
North Dakota	43	72	**	23	14	**	15	16		71	73	*
Ohio	45	67	**	29	19	**	21	22		74	76	*
Oklahoma	52	61	*	39	27	**	25	27	*	70	76	**
Oregon	44	67	**	28	19	**	18	19		72	74	*
Pennsylvania	39	68	**	24	15	**	17	19	*	77	78	*
Rhode Island	29	73	**	19	14	*	15	16		78	77	*
South Carolina	35	72	**	38	24	**	24	24		78	77	*
South Dakota	43	64	**	25	13	**	17	18		73	77	**
Tennessee	45	73	**	39	27	**	26	26		75	75	
Texas	41	65	**	36	23	**	22	23		74	75	*
Utah	41	73	**	29	21	**	22	26	**	69	75	**
Vermont	23	63	**	17	12	*	14	17	*	75	75	
Virginia	40	70	**	30	20	**	20	21		75	75	
Washington	36	65	**	25	19	*	18	19		70	74	**
West Virginia	30	61	**	30	22	**	18	22	**	74	73	*
Wisconsin	39	75	**	20	13	*	15	16		75	78	**
Wyoming	44	67	**	30	17	**	21	18	*	71	74	**
Change		51			49			25			42	
States Improved		51			49			2			35	
States Worsened		0			0			23			7	

Notes: * denotes a change of at least 0.5 standard deviation; ** denotes a change of 1.0 standard deviation or more.

(a) Previous data are not shown because of changes in the indicators' definitions or data were not available.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

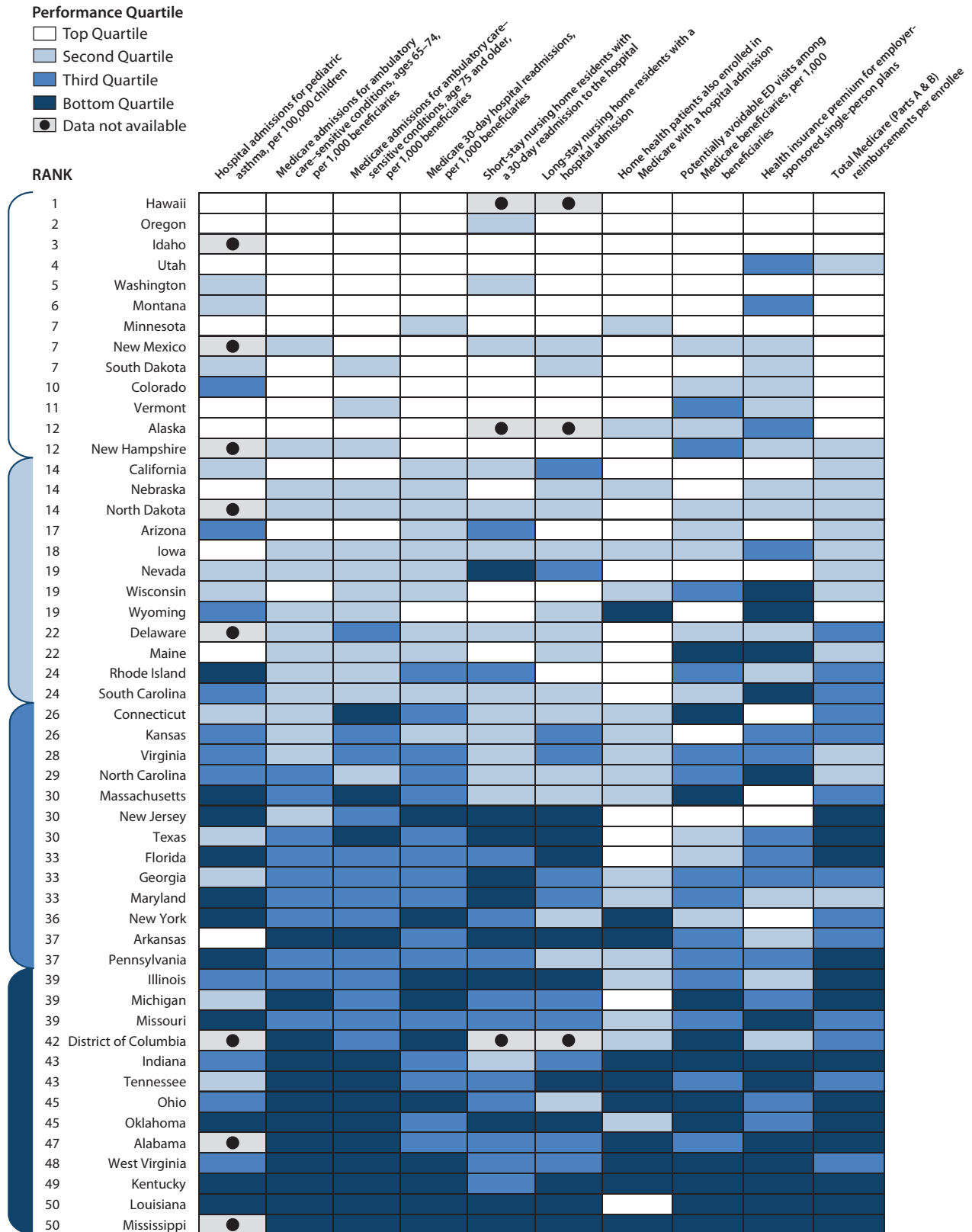
Appendix Exhibit A6. Prevention & Treatment: Dimension Ranking and Indicator Rates (continued)

	Hospital 30-day mortality			Hospital discharge instructions for home recovery			Patient-centered hospital care			Home health patients who get better at walking or moving around	Home health patients whose wounds healed after an operation	High-risk nursing home residents with pressure sores	Nursing home residents with an antipsychotic medication
	07/2005–06/2008	07/2008–06/2011		2007	2011		2007	2011		04/2012–03/2013	04/2012–03/2013	07/2012–03/2013	04/2012–03/2013
United States	13%	13%		79%	83%	**	62%	66%	**	59%	89%	6%	22%
Alabama	12.6	13.1	**	87	81	**	69	67	*	63	92	6	25
Alaska	12.4	12.9	**	82	85	*	63	67	**	49	82	5	13
Arizona	12.5	12.5		78	84	**	61	65	**	56	84	7	22
Arkansas	13.6	13.5		77	81	**	64	66	*	58	90	7	26
California	12.9	12.5	*	76	81	**	57	62	**	58	91	7	19
Colorado	12.1	12.3		81	86	**	63	68	**	60	89	5	19
Connecticut	12.1	12.4	*	80	82	*	61	63	*	57	89	5	24
Delaware	12.4	12.2		80	82	*	62	64	*	57	84	5	20
District of Columbia	11.8	12.2	*	76	77		55	57	*	58	95	9	18
Florida	12.5	12.7		75	81	**	55	61	**	63	92	6	23
Georgia	13.1	13.1		78	81	*	62	66	**	60	89	7	25
Hawaii	13.2	13.1		74	81	**	57	64	**	53	81	3	12
Idaho	13.4	12.9	**	82	87	**	62	69	**	60	90	4	23
Illinois	12.3	12.5		79	83	**	61	65	**	59	88	7	26
Indiana	12.8	12.9		81	84	*	64	67	*	58	88	7	22
Iowa	12.6	12.8		82	85	*	64	68	**	60	87	5	21
Kansas	12.3	12.6	*	79	85	**	63	69	**	59	86	6	24
Kentucky	12.5	13.0	**	79	83	**	64	68	**	62	91	7	24
Louisiana	12.7	13.0	*	79	83	**	66	71	**	59	93	9	29
Maine	12.8	12.9		84	86	*	67	70	*	62	88	5	24
Maryland	12.3	12.2		76	82	**	57	61	**	60	90	7	18
Massachusetts	11.9	11.9		84	86	*	63	66	*	62	91	5	24
Michigan	12.5	12.4		81	86	**	63	67	**	59	86	6	16
Minnesota	11.9	12.2	*	82	86	**	65	69	**	56	83	4	18
Mississippi	12.9	13.2	*	76	79	*	64	67	*	63	92	7	26
Missouri	12.6	12.7		80	84	**	62	65	*	60	88	6	25
Montana	12.0	12.5	**	78	82	**	64	66	*	55	91	5	20
Nebraska	12.6	12.7		82	87	**	66	69	*	57	83	5	23
Nevada	13.4	13.2		73	82	**	52	61	**	58	92	7	20
New Hampshire	13.8	13.3	**	85	88	*	67	69	*	58	86	4	24
New Jersey	12.4	12.3		75	79	**	59	61	*	62	91	9	17
New Mexico	12.6	12.7		77	81	**	61	66	**	58	91	7	21
New York	13.0	12.6	*	79	81	*	59	61	*	58	88	8	20
North Carolina	13.0	13.1		81	84	*	66	68	*	59	89	8	19
North Dakota	11.9	12.4	**	81	84	*	61	65	**	54	89	5	20
Ohio	12.6	12.6		80	85	**	62	66	**	59	88	6	25
Oklahoma	12.7	12.6		81	82		65	68	*	59	91	8	25
Oregon	13.4	13.3		81	84	*	64	66	*	55	89	7	20
Pennsylvania	12.6	12.6		79	83	**	61	64	*	61	86	6	21
Rhode Island	12.7	13.2	**	81	84	*	62	65	*	61	93	6	21
South Carolina	12.9	13.1		79	85	**	62	68	**	62	92	7	19
South Dakota	12.4	12.6		79	85	**	65	71	**	57	87	5	20
Tennessee	13.1	12.9		78	82	**	62	67	**	60	90	6	27
Texas	12.7	12.6		78	83	**	61	68	**	55	89	7	28
Utah	12.5	12.9	*	81	89	**	64	68	**	63	91	6	28
Vermont	14.1	13.6	**	84	87	*	68	68		58	86	5	23
Virginia	13.0	13.1		80	84	**	61	64	*	61	90	7	22
Washington	13.5	13.4		81	85	**	62	65	*	55	88	6	21
West Virginia	12.9	13.0		79	83	**	64	65		62	91	7	21
Wisconsin	12.9	12.9		84	87	*	67	69	*	56	87	5	18
Wyoming	12.0	12.8	**	84	86	*	66	68	*	56	88	5	18
Change		19			49			49		—	—	—	—
States Improved		5			48			48		—	—	—	—
States Worsened		14			1			1		—	—	—	—

Notes: * denotes a change of at least 0.5 standard deviation; ** denotes a change of 1.0 standard deviation or more.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix A7. Avoidable Hospital Use & Cost: Dimension and Indicator Ranking



Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A8. Avoidable Hospital Use & Cost: Dimension Ranking and Indicator Rates

	Hospital admissions for pediatric asthma, per 100,000 children			Medicare admissions for ambulatory care–sensitive conditions, ages 65–74, per 1,000 beneficiaries			Medicare admissions for ambulatory care–sensitive conditions, age 75 and older, per 1,000 beneficiaries			Medicare 30-day hospital readmissions, per 1,000 beneficiaries		
	2004	2010		2008	2012		2008	2012		2008	2012	
United States	156	130	*	36	29	*	85	70	*	58	49	*
Alabama	—a	—a		47	38	**	100	81	**	64	50	**
Alaska	—a	54		26	21	*	68	52	**	34	29	
Arizona	131	121		24	20		62	51	*	47	38	*
Arkansas	117	70	**	41	35	*	103	82	**	59	51	*
California	105	93		26	21	*	70	55	*	49	43	*
Colorado	167	129	*	23	16	*	68	50	**	41	31	*
Connecticut	149	110	*	31	26	*	84	75	*	58	52	*
Delaware	—a	—a		26	27		69	68		51	42	*
District of Columbia	—a	—a		45	37	*	80	73		70	65	
Florida	183	147	*	31	28		76	68	*	57	54	
Georgia	145	91	**	37	31	*	85	73	*	51	45	*
Hawaii	88	56	*	20	13	*	48	41		31	26	
Idaho	—a	—a		23	17	*	63	45	**	30	26	
Illinois	129	116		40	31	**	95	73	**	74	58	**
Indiana	122	113		42	35	*	91	77	*	56	51	
Iowa	81	75		32	24	*	80	64	**	51	39	**
Kansas	147	142		36	27	**	90	70	**	55	43	**
Kentucky	213	184	*	56	50	*	110	100	*	71	63	*
Louisiana	—a	201		52	44	*	119	97	**	69	56	**
Maine	—a	62		30	26		76	65	*	48	39	*
Maryland	161	165		38	29	**	86	69	**	72	54	**
Massachusetts	143	179	*	39	30	**	97	80	**	67	54	**
Michigan	175	112	**	39	33	*	87	73	*	69	61	*
Minnesota	122	71	**	23	20		68	55	*	50	41	*
Mississippi	—a	—a		52	42	**	117	91	**	68	55	**
Missouri	171	159		40	31	**	91	73	**	64	51	**
Montana	—a	77		30	21	**	78	58	**	43	30	**
Nebraska	102	63	*	34	24	**	83	63	**	51	39	**
Nevada	125	112		30	24	*	73	60	*	48	41	*
New Hampshire	54	—a		31	23	*	75	64	*	43	36	*
New Jersey	176	159		36	27	**	88	73	*	71	57	**
New Mexico	—a	—a		28	23	*	69	58	*	38	33	
New York	284	223	**	35	28	*	88	73	*	69	59	*
North Carolina	131	119		35	29	*	78	67	*	51	45	*
North Dakota	—a	—a		31	23	*	76	65	*	45	41	
Ohio	114	136	*	43	38	*	94	82	*	67	59	*
Oklahoma	—a	149		47	38	**	101	80	**	59	49	*
Oregon	49	49		21	17		57	48	*	34	28	*
Pennsylvania	—a	183		36	31	*	89	74	*	66	54	**
Rhode Island	154	192	*	37	27	**	91	66	**	64	49	**
South Carolina	192	143	**	34	27	*	78	65	*	48	41	*
South Dakota	91	84		26	22		80	65	*	41	36	
Tennessee	156	101	**	47	37	**	104	84	**	64	53	*
Texas	159	108	**	38	31	*	92	76	**	54	46	*
Utah	81	66		20	17		46	42		29	28	
Vermont	43	26		27	22	*	70	65		36	33	
Virginia	152	115	*	32	27	*	76	71		52	48	
Washington	92	90		22	18		59	49	*	38	35	
West Virginia	171	117	**	53	49		111	98	*	71	64	*
Wisconsin	100	88		29	22	*	75	60	*	50	41	*
Wyoming	—a	123		33	24	**	79	62	**	43	34	*
Change		19			41			45			38	
States Improved		16			41			45			38	
States Worsened		3			0			0			0	

Notes: * denotes a change of at least 0.5 standard deviation; ** denotes a change of 1.0 standard deviation or more.

(a) Previous data are not shown because of changes in the indicators' definitions or data were not available.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A8. Avoidable Hospital Use & Cost: Dimension Ranking and Indicator Rates (continued)

	30-day hospital readmissions as a percent of Medicare admissions ^b	Short-stay nursing home residents with a 30-day readmission to the hospital			Long-stay nursing home residents with a hospital admission			Home health patients also enrolled in Medicare with a hospital admission	Potentially avoidable ED visits among Medicare beneficiaries, per 1,000 beneficiaries
	2012	2006	2010		2006	2010		2012	2011
United States	18%	20%	20%		19%	19%		17%	185
Alabama	17	21	22		23	21		18	191
Alaska	14	—a	—a		—a	—a		17	181
Arizona	16	22	22		10	12		16	175
Arkansas	18	24	24		28	27		18	185
California	18	20	20		19	21		15	166
Colorado	14	17	15	*	12	12		16	176
Connecticut	18	19	19		18	19		17	195
Delaware	17	22	20	*	20	19		16	175
District of Columbia	21	—a	—a		—a	—a		17	263
Florida	18	21	21		24	25		16	172
Georgia	17	21	23	*	21	20		17	194
Hawaii	15	—a	—a		—a	—a		15	129
Idaho	13	14	14		13	12		15	169
Illinois	19	23	23		26	25		17	191
Indiana	17	18	20	*	21	20		18	200
Iowa	15	18	17		17	16		17	177
Kansas	16	19	19		20	20		17	169
Kentucky	19	21	21		26	24		18	215
Louisiana	18	24	26	*	32	31		16	222
Maine	16	16	16		15	14		16	235
Maryland	19	23	23		21	20		17	185
Massachusetts	18	19	19		16	17		17	218
Michigan	19	23	22		20	20		16	208
Minnesota	16	17	16		7	7		17	165
Mississippi	18	20	23	*	31	31		18	229
Missouri	17	21	22		22	21		17	192
Montana	14	15	14		15	12	*	16	167
Nebraska	15	15	16		17	17		17	149
Nevada	18	22	23		16	20	*	16	167
New Hampshire	16	15	16		12	13		16	194
New Jersey	19	24	23		27	26		16	169
New Mexico	15	18	18		14	15		15	171
New York	20	22	22		21	19		18	172
North Carolina	17	19	19		20	19		17	194
North Dakota	16	15	18	*	15	14		15	179
Ohio	18	21	21		20	17	*	18	215
Oklahoma	17	23	24		26	24		17	196
Oregon	14	17	17		10	10		15	164
Pennsylvania	18	20	21		19	17		17	185
Rhode Island	18	22	21		14	12		15	194
South Carolina	16	18	20	*	20	19		16	172
South Dakota	14	14	13		15	16		15	168
Tennessee	18	21	21		25	24		18	193
Texas	17	22	23		25	24		15	180
Utah	13	13	12		11	11		14	147
Vermont	16	13	15	*	12	13		16	194
Virginia	18	20	20		21	20		17	183
Washington	15	16	17		14	13		16	154
West Virginia	20	22	22		24	20	*	19	230
Wisconsin	16	17	16		14	13		17	184
Wyoming	15	15	15		14	14		18	168
Change			9			4		—	—
States Improved			2			3		—	—
States Worsened			7			1		—	—

Notes: * denotes a change of at least 0.5 standard deviation; ** denotes a change of 1.0 standard deviation or more.

(a) Previous data are not shown because of changes in the indicators' definitions or data were not available. (b) Not a scored indicator, included here for informational purposes only.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

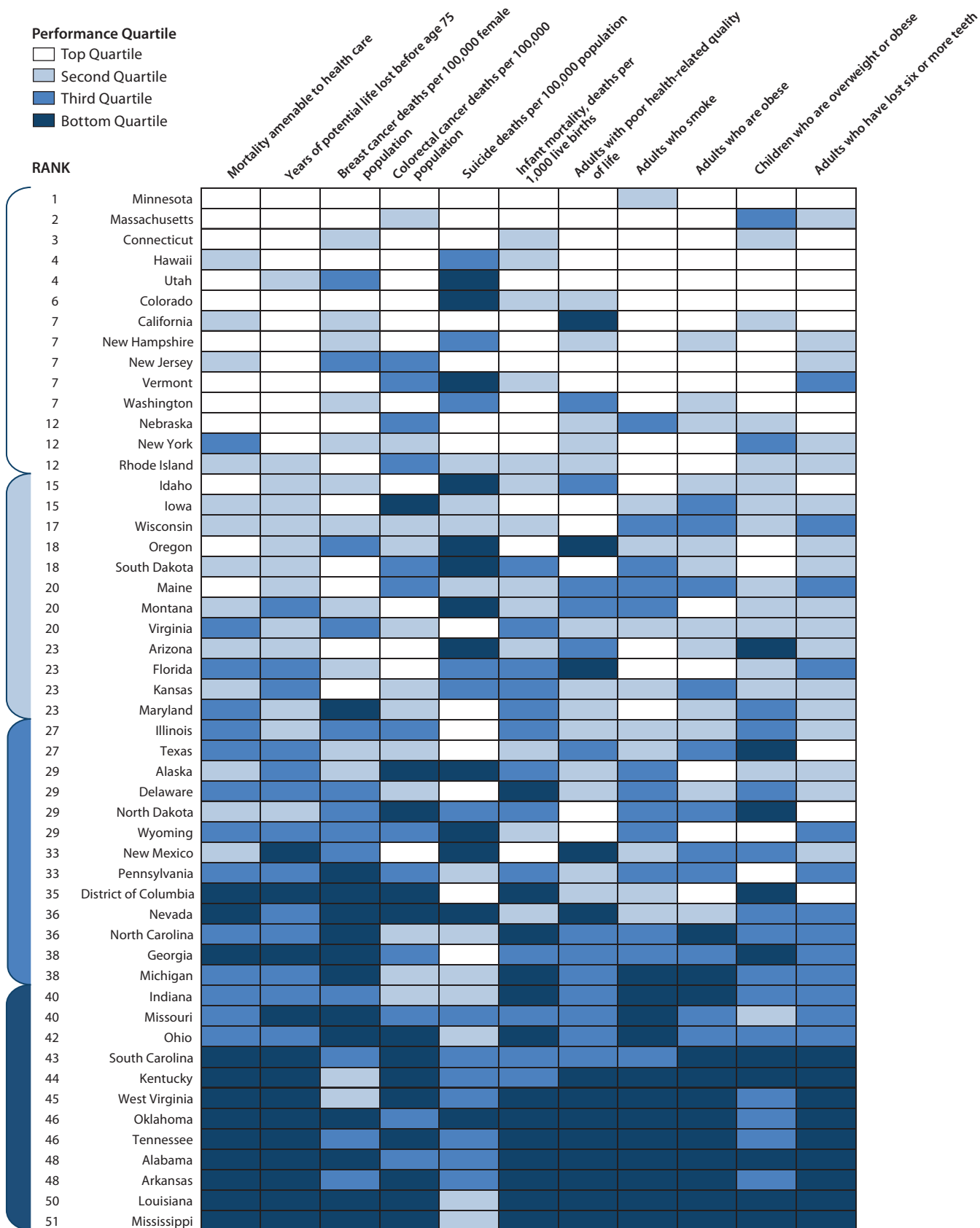
Appendix Exhibit A9. Avoidable Hospital Use & Cost: Cost Indicators

	Total Medicare (Parts A & B) reimbursements per enrollee ^a					Health insurance premium for employer-sponsored single-person plans				
	Unadjusted		Adjusted ^b		Average annual growth rate ^c	Unadjusted		Adjusted ^b		Average annual growth rate ^c
	2008	2012	2008	2012		2008	2012	2008	2012	
United States	\$8,713	\$9,396	\$8,336	\$8,874	1.9%	\$4,386	\$5,384	\$4,452	\$5,431	5.3%
Alabama	8,302	8,675	8,922	9,336	1.1%	4,139	4,961	5,042	6,043	4.6%
Alaska	7,123	7,675	5,631	5,406	1.9%	5,293	7,420	4,096	5,742	8.8%
Arizona	7,804	8,577	7,498	8,004	2.4%	4,214	5,196	4,122	5,082	5.4%
Arkansas	7,580	8,150	8,056	8,635	1.8%	3,923	4,459	4,605	5,235	3.3%
California	9,324	10,231	7,719	8,315	2.3%	4,280	5,422	3,300	4,180	6.1%
Colorado	7,408	7,873	7,202	7,467	1.5%	4,303	5,275	4,203	5,153	5.2%
Connecticut	9,855	10,572	8,231	8,950	1.8%	4,740	5,934	3,848	4,817	5.8%
Delaware	8,775	9,329	8,136	8,513	1.5%	4,733	5,583	4,434	5,231	4.2%
District of Columbia	9,883	10,915	8,279	8,894	2.5%	4,890	5,581	4,637	5,292	3.4%
Florida	10,097	10,679	10,064	10,593	1.4%	4,517	5,179	4,820	5,527	3.5%
Georgia	7,909	8,649	7,915	8,837	2.3%	4,160	5,159	4,511	5,594	5.5%
Hawaii	5,958	6,421	5,149	5,417	1.9%	3,831	5,076	3,361	4,454	7.3%
Idaho	6,502	7,355	6,714	7,196	3.1%	4,104	4,439	4,466	4,830	2.0%
Illinois	9,053	9,785	8,583	9,253	2.0%	4,643	5,404	4,618	5,375	3.9%
Indiana	8,196	9,012	8,333	9,221	2.4%	4,495	5,504	4,795	5,871	5.2%
Iowa	6,933	7,687	7,180	7,494	2.6%	4,146	5,141	4,439	5,505	5.5%
Kansas	7,802	8,467	8,253	8,582	2.1%	4,197	4,968	4,730	5,599	4.3%
Kentucky	8,348	8,962	8,563	9,344	1.8%	4,009	5,397	4,646	6,255	7.7%
Louisiana	9,892	10,322	10,573	10,873	1.1%	4,055	5,381	4,787	6,352	7.3%
Maine	7,341	8,004	7,239	7,601	2.2%	4,910	5,692	5,176	6,000	3.8%
Maryland	9,991	10,655	9,036	8,488	1.6%	4,360	5,302	4,362	5,305	5.0%
Massachusetts	9,954	10,910	8,587	9,042	2.3%	4,836	6,121	3,577	4,527	6.1%
Michigan	9,494	10,118	8,911	9,559	1.6%	4,388	5,365	4,528	5,537	5.2%
Minnesota	7,057	7,916	6,791	7,217	2.9%	4,432	5,338	4,129	4,973	4.8%
Mississippi	8,883	9,485	9,473	10,038	1.7%	4,124	4,713	5,027	5,745	3.4%
Missouri	7,997	8,597	8,225	8,701	1.8%	4,124	5,150	4,636	5,789	5.7%
Montana	6,424	6,932	6,746	6,589	1.9%	4,355	5,585	4,355	5,585	6.4%
Nebraska	7,639	8,371	7,822	8,061	2.3%	4,392	5,101	4,605	5,348	3.8%
Nevada	8,456	9,206	7,838	8,335	2.1%	3,927	4,949	3,457	4,357	6.0%
New Hampshire	7,684	8,437	7,155	7,622	2.4%	5,247	5,688	4,734	5,132	2.0%
New Jersey	10,325	10,958	8,851	9,551	1.5%	4,798	5,837	3,955	4,811	5.0%
New Mexico	6,713	7,240	6,558	6,807	1.9%	4,074	5,035	4,268	5,274	5.4%
New York	10,278	10,944	8,393	8,997	1.6%	4,638	6,033	3,882	5,050	6.8%
North Carolina	7,703	8,288	7,565	8,254	1.8%	4,460	5,632	4,937	6,234	6.0%
North Dakota	6,398	7,635	6,972	7,528	4.5%	3,830	5,377	3,830	5,377	8.9%
Ohio	8,690	9,518	8,703	9,552	2.3%	4,089	5,081	4,477	5,564	5.6%
Oklahoma	8,378	8,874	8,912	9,190	1.4%	4,072	4,851	4,736	5,642	4.5%
Oregon	6,393	7,005	6,056	6,291	2.3%	4,384	5,460	3,973	4,948	5.6%
Pennsylvania	8,958	9,762	8,757	9,383	2.2%	4,499	5,385	4,703	5,629	4.6%
Rhode Island	8,957	9,586	7,965	8,539	1.7%	4,930	5,870	4,343	5,171	4.5%
South Carolina	7,860	8,404	7,918	8,542	1.7%	4,477	5,098	5,046	5,746	3.3%
South Dakota	6,416	7,617	6,622	7,250	4.4%	4,233	5,409	4,176	5,336	6.3%
Tennessee	8,225	8,721	8,584	9,187	1.5%	4,276	5,067	4,939	5,852	4.3%
Texas	9,521	10,143	9,594	10,152	1.6%	4,205	5,124	4,517	5,504	5.1%
Utah	7,296	7,982	7,378	8,015	2.3%	4,197	5,162	4,498	5,532	5.3%
Vermont	7,203	7,886	6,484	6,829	2.3%	4,900	5,580	4,827	5,497	3.3%
Virginia	7,300	8,151	7,330	8,051	2.8%	4,202	5,309	4,466	5,642	6.0%
Washington	7,170	7,908	6,571	7,101	2.5%	4,404	5,368	3,990	4,864	5.1%
West Virginia	7,771	8,511	8,087	8,655	2.3%	4,892	5,884	5,967	7,177	4.7%
Wisconsin	7,497	7,988	7,310	7,658	1.6%	4,777	5,737	4,858	5,834	4.7%
Wyoming	6,637	7,710	6,681	6,818	3.8%	4,622	5,861	4,622	5,861	6.1%

Notes: (a) Medicare spending estimates exclude prescription drug costs and reflect only the age 65+ Medicare fee-for-service population. (b) Spending is standardized for state differences in input prices using CMS' hospital wage index and extra CMS payments for graduate medical education and for treating low-income patients are removed from Medicare spending estimates. (c) Compounded average annual growth rate.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix A10. Healthy Lives: Dimension and Indicator Ranking



Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A11. Healthy Lives: Dimension Ranking and Indicator Rates

	Mortality amenable to health care			Years of potential life lost before age 75			Breast cancer deaths per 100,000 female population			Colorectal cancer deaths per 100,000 population			Suicide deaths per 100,000 population		
	2004-05	2009-10		2005	2010		2005	2010		2005	2010		2005	2010	
United States	96	86	*	7,153	6,474	*	24.2	22.1	*	17.7	15.8	**	10.9	12.1	
Alabama	117	114		9,776	9,254		27.4	23.6	**	18.8	17.1	*	11.5	14.0	*
Alaska	77	74		7,311	7,144		17.9	21.7	**	15.2	17.4	**	19.9	22.8	*
Arizona	88	74	*	7,648	6,539	*	21.2	19.6	*	15.6	14.2	*	16.4	17.0	
Arkansas	121	116		9,272	8,768		24.4	22.9	*	18.8	19.4	*	14.3	15.5	
California	86	75	*	6,147	5,191	*	22.8	20.9	*	16.1	14.5	*	9.1	10.3	
Colorado	72	62	*	6,204	5,615		22.3	20.0	*	16.7	13.7	**	17.2	16.8	
Connecticut	77	67	*	5,618	5,130		23.6	21.1	**	15.4	12.6	**	8.1	9.4	
Delaware	97	90		7,560	7,154		23.6	23.2		18.1	15.0	**	9.7	11.3	
District of Columbia	158	119	**	12,276	8,813	**	29.2	29.9		21.0	19.4	*	5.4	6.9	
Florida	91	83		7,714	6,886	*	22.4	21.5		16.5	14.5	**	12.5	13.7	
Georgia	114	103	*	8,267	7,312	*	23.6	23.8		17.8	16.6	*	10.6	11.7	
Hawaii	80	78		5,877	5,619		19.5	14.8	**	14.8	13.1	*	8.1	15.0	**
Idaho	74	67		6,212	5,943		19.4	21.8	**	15.7	13.6	**	16.5	18.8	*
Illinois	101	90	*	6,911	6,229	*	25.8	22.7	**	18.8	17.1	*	8.6	9.0	
Indiana	101	93		7,621	7,242		22.8	22.9		19.5	16.1	**	11.8	13.1	
Iowa	79	74		5,903	5,691		21.4	19.5	*	18.4	17.8		11.2	12.1	
Kansas	85	78		6,979	6,646		23.8	20.6	**	18.7	15.9	**	13.3	14.0	
Kentucky	110	106		8,655	8,619		23.8	21.9	*	20.9	17.6	**	13.4	14.2	
Louisiana	137	123	*	10,529	9,005	**	29.2	24.8	**	20.1	18.3	*	11.0	12.3	
Maine	78	67	*	6,498	5,893		22.6	20.3	*	17.5	16.4	*	12.4	13.2	
Maryland	107	95	*	7,334	6,371	*	25.9	24.4	*	19.0	15.2	**	8.4	8.3	
Massachusetts	78	65	*	5,565	4,990		23.2	19.2	**	17.9	14.9	**	7.2	8.8	
Michigan	102	90	*	7,352	7,038		24.1	23.8		18.4	15.8	**	11.0	12.5	
Minnesota	64	57		5,198	4,900		22.6	20.2	**	15.0	14.3		10.5	11.2	
Mississippi	142	136		10,898	9,781	*	26.1	25.0		20.2	20.5		12.7	13.0	
Missouri	103	95		7,961	7,492		28.1	23.5	**	18.4	17.2	*	12.5	14.0	
Montana	73	73		7,442	6,967		23.6	21.1	**	17.7	14.0	**	21.7	21.8	
Nebraska	72	67		5,971	5,555		24.0	19.3	**	18.6	17.3	*	10.9	10.4	
Nevada	112	97	*	8,146	6,952	*	24.1	23.8		18.6	17.4	*	19.8	19.8	
New Hampshire	73	60	*	5,655	5,097		23.9	21.7	*	18.3	14.2	**	12.0	14.1	*
New Jersey	90	77	*	6,085	5,360	*	27.0	23.3	**	19.1	16.3	**	6.1	7.8	*
New Mexico	83	81		8,053	7,609		22.5	22.2		16.4	14.3	**	17.8	20.1	*
New York	93	82	*	6,024	5,362	*	24.4	21.8	**	17.1	15.4	*	6.0	7.7	*
North Carolina	108	95	*	7,964	7,021	*	25.1	23.5	*	17.2	14.9	**	11.4	12.0	
North Dakota	73	75		6,097	6,099		22.8	23.0		18.9	17.6	*	13.7	15.6	*
Ohio	106	94	*	7,536	7,158		26.5	24.1	**	19.0	17.5	*	11.5	12.2	
Oklahoma	115	112		9,181	8,864		25.2	24.9		19.5	16.5	**	14.8	16.5	*
Oregon	75	65	*	6,424	5,720	*	21.8	23.1	*	17.0	14.9	**	14.9	17.1	*
Pennsylvania	99	86	*	7,280	6,670		25.0	23.5	*	19.2	17.2	**	11.1	11.9	
Rhode Island	86	74	*	5,961	5,794		24.6	19.5	**	17.4	16.6		6.3	12.3	**
South Carolina	115	102	*	9,156	8,204	*	26.2	22.5	**	19.0	17.6	*	11.8	13.5	*
South Dakota	81	71	*	7,074	6,475		24.0	19.7	**	19.8	17.0	**	15.4	17.5	*
Tennessee	118	110		9,224	8,528	*	26.5	22.6	**	19.3	17.7	*	14.0	14.6	
Texas	100	94		7,224	6,594		23.1	21.0	*	16.9	15.9	*	10.9	11.7	
Utah	64	62		5,885	5,720		24.3	22.4	*	13.4	12.0	*	15.4	18.3	*
Vermont	68	58	*	5,687	4,997	*	20.6	19.3	*	18.0	16.7	*	12.5	15.7	*
Virginia	96	85	*	6,807	6,014	*	25.9	22.3	**	17.3	15.4	**	11.2	11.7	
Washington	74	65		5,895	5,357		23.2	21.2	*	15.5	14.1	*	12.8	13.9	
West Virginia	112	107		9,017	9,038		27.0	20.9	**	19.8	17.4	**	13.2	14.1	
Wisconsin	78	71		6,222	5,656		22.7	21.6		16.5	14.6	**	11.6	13.4	*
Wyoming	75	82		7,490	7,246		21.2	22.6	*	13.9	16.6	**	17.3	22.4	**
Change		25			18			39			46			18	
States Improved		25			18			35			44			0	
States Worsened		0			0			4			2			18	

Notes: * denotes a change of at least 0.5 standard deviation; ** denotes a change of 1.0 standard deviation or more.
Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A11. Healthy Lives: Dimension Ranking and Indicator Rates (continued)

	Infant mortality, deaths per 1,000 live births			Adults with poor health-related quality of life			Adults who smoke			Adults who are obese			Children who are overweight or obese			Adults ages 18–64 who have lost six or more teeth		
	2004	2009		2007	2012		2007	2012		2007	2012		2007	2011/12		2006	2012	
United States	6.8	6.4		24%	27%	*	19%	19%		26%	28%	*	32%	31%		10%	10%	
Alabama	8.7	8.3		30	36	**	22	24	*	32	34	*	36	35		16	17	
Alaska	6.6	6.9		27	26		22	20	*	28	26	*	34	30	**	10	9	
Arizona	6.7	6.0	*	25	29	**	20	17	*	28	27		31	37	**	9	10	
Arkansas	8.4	7.6	*	28	33	**	22	25	*	30	37	**	37	34	*	13	16	*
California	5.2	4.9		26	30	**	14	12	*	24	26	*	31	30		8	7	
Colorado	6.2	6.2		23	26	*	19	17	*	20	21		27	23	**	6	7	
Connecticut	5.4	5.6		20	23	*	15	16		23	26	*	26	30	**	7	8	
Delaware	8.6	8.0		25	24		19	20		29	27	*	33	32		10	10	
District of Columbia	12.2	10.4	**	22	24	*	17	19	*	22	23		35	35		8	7	
Florida	7.0	6.9		23	30	**	19	17	*	25	26		33	28	**	12	12	
Georgia	8.5	7.3	*	23	27	**	16	20	**	27	29	*	37	35	*	10	13	*
Hawaii	5.8	5.9		22	23		17	15	*	23	26	*	28	27		7	6	
Idaho	6.1	5.5		25	27	*	19	16	*	26	27		28	28		9	8	
Illinois	7.5	6.9		24	26	*	19	18		25	28	*	35	34		8	9	
Indiana	7.9	7.8		23	29	**	23	24		27	32	**	30	31		11	13	*
Iowa	5.1	4.6		21	23	*	19	18		27	30	*	26	28	*	9	9	
Kansas	7.3	7.1		21	25	**	17	19	*	29	30		31	30		8	9	
Kentucky	6.8	6.8		29	33	**	28	28		30	32	*	37	36		19	16	*
Louisiana	10.3	8.8	**	25	31	**	23	25	*	31	35	**	36	40	**	12	16	**
Maine	5.7	5.7		24	27	*	20	20		27	29	*	28	30	*	14	13	
Maryland	8.5	7.2	*	22	24	*	17	16		27	28		29	32	*	9	9	
Massachusetts	4.8	5.1		21	23	*	16	16		22	23		30	31		8	9	
Michigan	7.6	7.6		24	29	**	20	23	*	28	32	**	31	33	*	9	11	*
Minnesota	4.6	4.6		18	20	*	16	19	*	25	25		23	27	**	7	7	
Mississippi	9.9	10.1		28	32	**	24	24		34	36	*	44	40	**	18	18	
Missouri	7.5	7.1		24	29	**	23	24		28	30	*	31	28	*	10	12	*
Montana	4.6	6.2	**	25	28	*	19	20		23	24		26	29	*	9	10	
Nebraska	6.5	5.4	*	20	24	**	21	20		27	28		31	29	*	8	7	
Nevada	6.2	5.8		26	30	**	22	18	**	26	27		34	33		12	11	
New Hampshire	5.6	4.9	*	23	24		19	17	*	26	27		29	26	*	10	10	
New Jersey	5.6	5.2		23	23		17	17		24	24		31	25	**	10	9	
New Mexico	6.5	5.3	*	27	31	**	21	19	*	26	29	*	33	33		9	9	
New York	6.2	5.4	*	26	26		18	16	*	25	23	*	33	32		10	10	
North Carolina	8.7	7.9	*	26	27		22	21		30	31		34	31	*	13	13	
North Dakota	5.9	6.3		17	19	*	20	20		27	29	*	26	36	**	7	7	
Ohio	7.5	7.7		25	27	*	23	23		29	30		33	31	*	11	13	*
Oklahoma	7.9	7.9		29	31	*	26	23	*	30	33	*	30	34	**	15	14	
Oregon	5.5	4.9		27	33	**	17	18		27	28		24	26	*	9	10	
Pennsylvania	7.3	7.1		23	26	*	21	21		28	29		30	26	**	11	11	
Rhode Island	5.4	5.9		24	26	*	17	17		22	26	**	30	28	*	8	9	
South Carolina	9.3	7.0	**	24	28	**	22	22		30	33	*	34	39	**	14	15	
South Dakota	7.9	6.7	*	20	22	*	20	21		27	27		28	27		8	9	
Tennessee	8.6	8.0		25	30	**	22	24	*	32	33		36	34	*	12	18	**
Texas	6.3	6.0		27	27		18	18		28	30	*	32	37	**	7	8	
Utah	5.2	5.3		20	23	*	12	10	*	22	24	*	23	22		5	5	
Vermont	4.4	6.2	**	21	22		17	16		22	23		27	25	*	10	11	
Virginia	7.4	7.1		21	26	**	18	19		24	27	*	31	30		8	10	*
Washington	5.5	4.9		26	29	*	17	17		26	27		30	26	**	8	8	
West Virginia	7.6	7.7		31	35	**	26	28	*	32	35	*	36	34	*	20	23	*
Wisconsin	5.9	6.0		19	23	**	20	20		25	30	**	28	29		10	11	
Wyoming	8.8	6.0	**	22	22		23	22		25	25		26	27		11	11	
Change		16			41			23			28			32			11	
States Improved		14			0			13			3			18			1	
States Worsened		2			41			10			25			14			10	

Notes: * denotes a change of at least 0.5 standard deviation; ** denotes a change of 1.0 standard deviation or more.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A12. Mortality Amenable to Health Care by Race, Deaths per 100,000 Population, 2004–05 and 2009–10

	Total				White				Black			
	2004–05	2009–10	Change in rate	2014 rank	2004–05	2009–10	Change in rate	2014 rank	2004–05	2009–10	Change in rate	2014 rank
United States	96	86	–10	—	86	78	–8	—	183	159	–24	—
Alabama	117	114	–3	47	97	96	–1	44	189	180	–9	30
Alaska	77	74	–3	16	67	64	–3	11	112	—	—	—
Arizona	88	74	–14	16	85	71	–14	21	146	126	–20	7
Arkansas	121	116	–5	48	108	104	–4	49	219	202	–17	36
California	86	75	–11	20	84	73	–11	24	175	150	–25	15
Colorado	72	62	–10	4	71	61	–10	5	128	111	–17	3
Connecticut	77	67	–10	9	72	62	–10	7	137	123	–14	6
Delaware	97	90	–7	31	87	78	–9	31	148	146	–2	13
District of Columbia	158	119	–39	49	56	46	–10	1	220	170	–50	24
Florida	91	83	–8	28	81	74	–7	26	167	145	–22	10
Georgia	114	103	–11	42	91	83	–8	37	190	163	–27	20
Hawaii	80	78	–2	23	73	62	–11	7	68	—	—	—
Idaho	74	67	–7	9	74	66	–8	16	—	—	—	—
Illinois	101	90	–11	31	86	78	–8	31	209	180	–29	30
Indiana	101	93	–8	34	95	87	–8	40	186	167	–19	22
Iowa	79	74	–5	16	78	72	–6	23	144	—	—	—
Kansas	85	78	–7	23	80	74	–6	26	170	145	–25	10
Kentucky	110	106	–4	43	106	102	–4	47	176	175	–1	28
Louisiana	137	123	–14	50	106	98	–8	45	221	190	–31	34
Maine	78	67	–11	9	77	67	–10	17	—	—	—	—
Maryland	107	95	–12	37	87	76	–11	29	172	149	–23	14
Massachusetts	78	65	–13	6	77	64	–13	11	125	98	–27	1
Michigan	102	90	–12	31	87	77	–10	30	208	189	–19	33
Minnesota	64	57	–7	1	61	54	–7	2	129	119	–10	5
Mississippi	142	136	–6	51	108	104	–4	49	221	204	–17	37
Missouri	103	95	–8	37	94	87	–7	40	196	172	–24	26
Montana	73	73	0	15	70	69	–1	18	—	—	—	—
Nebraska	72	67	–5	9	69	65	–4	13	167	145	–22	10
Nevada	112	97	–15	40	109	95	–14	43	191	156	–35	18
New Hampshire	73	60	–13	3	73	60	–13	4	86	—	—	—
New Jersey	90	77	–13	22	81	70	–11	20	169	141	–28	9
New Mexico	83	81	–2	25	82	79	–3	34	108	114	6	4
New York	93	82	–11	26	85	75	–10	28	149	129	–20	8
North Carolina	108	95	–13	37	89	81	–8	36	186	157	–29	19
North Dakota	73	75	2	20	70	69	–1	18	—	—	—	—
Ohio	106	94	–12	35	96	85	–11	39	197	169	–28	23
Oklahoma	115	112	–3	46	109	103	–6	48	196	193	–3	35
Oregon	75	65	–10	6	75	65	–10	13	135	—	—	—
Pennsylvania	99	86	–13	30	90	78	–12	31	193	173	–20	27
Rhode Island	86	74	–12	16	84	71	–13	21	141	—	—	—
South Carolina	115	102	–13	41	92	83	–9	37	188	163	–25	20
South Dakota	81	71	–10	13	74	63	–11	9	—	—	—	—
Tennessee	118	110	–8	45	104	98	–6	45	213	187	–26	32
Texas	100	94	–6	35	92	87	–5	40	194	170	–24	24
Utah	64	62	–2	4	64	61	–3	5	86	—	—	—
Vermont	68	58	–10	2	69	58	–11	3	—	—	—	—
Virginia	96	85	–11	29	81	73	–8	24	176	151	–25	16
Washington	74	65	–9	6	73	63	–10	9	119	108	–11	2
West Virginia	112	107	–5	44	111	106	–5	51	171	152	–19	17
Wisconsin	78	71	–7	13	72	65	–7	13	180	178	–2	29
Wyoming	75	82	7	26	75	80	5	35	—	—	—	—

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A13. Summary Changes in Equity Dimension

Race/Ethnicity	Number of states with data	Gap widened and nonwhite group worsened	Gap narrowed and nonwhite group improved	Change in national average
Uninsured ages 0–64	51	16	28	Improved
Adults who went without care because of cost in the past year	51	23	12	No change
At-risk adults who did not visit a doctor for a routine checkup in the past two years	50	28	19	Worsened
Adults without a usual source of care ^c	51	20	22	No change
Older adults without recommended preventive care ^c	46	15	21	Improved
Children without a medical home ^c	51	14	25	No change
Children without a medical and dental preventive care visit in the past year ^{a,c}	— ^a	— ^a	— ^a	— ^a
Mortality amenable to health care	37	1	30	Improved
Infant mortality, deaths per 1,000 live births	48	15	28	Improved
Adults with poor health-related quality of life	51	22	12	No change
Income	Number of states with data	Gap widened and low-income group worsened	Gap narrowed and low-income group improved	Change in national average
Uninsured ages 0–64	51	12	25	Improved
Adults who went without care because of cost in the past year	51	10	11	No change
At-risk adults who did not visit a doctor for a routine checkup in the past two years	51	8	33	No change
Adults without a usual source of care ^c	51	4	33	Improved
Older adults without recommended preventive care ^c	51	23	14	No change
Children without a medical home ^c	51	19	17	No change
Children without a medical and dental preventive care visit in the past year ^{a,c}	— ^a	— ^a	— ^a	— ^a
Elderly patients who received a high-risk prescription drug ^b	— ^b	— ^b	— ^b	— ^b
Adults with poor health-related quality of life	51	33	6	Worsened

Notes: (a) Data not comparable across years. (b) Historical data not available. (c) Directionality of these indicators is reversed from how reported elsewhere in the report.
Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit A14. Summary of Equity Indicator Rankings by State

	Total			Race			Income		
	Number of indicators improved	Number of indicators with data	Percent of indicators improved	Number of indicators improved	Number of indicators with data	Percent of indicators improved	Number of indicators improved	Number of indicators with data	Percent of indicators improved
Alabama	7	16	44%	3	9	33%	4	7	57%
Alaska	7	15	47%	3	8	38%	4	7	57%
Arizona	6	16	38%	3	9	33%	3	7	43%
Arkansas	6	16	38%	5	9	56%	1	7	14%
California	7	16	44%	4	9	44%	3	7	43%
Colorado	8	16	50%	5	9	56%	3	7	43%
Connecticut	7	16	44%	4	9	44%	3	7	43%
Delaware	8	16	50%	5	9	56%	3	7	43%
District of Columbia	11	16	69%	4	9	44%	7	7	100%
Florida	6	16	38%	4	9	44%	2	7	29%
Georgia	5	16	31%	3	9	33%	2	7	29%
Hawaii	5	15	33%	3	8	38%	2	7	29%
Idaho	4	15	27%	2	8	25%	2	7	29%
Illinois	9	16	56%	6	9	67%	3	7	43%
Indiana	2	16	13%	2	9	22%	0	7	0%
Iowa	7	14	50%	3	7	43%	4	7	57%
Kansas	3	16	19%	2	9	22%	1	7	14%
Kentucky	4	16	25%	2	9	22%	2	7	29%
Louisiana	10	16	63%	7	9	78%	3	7	43%
Maine	4	13	31%	2	6	33%	2	7	29%
Maryland	11	16	69%	6	9	67%	5	7	71%
Massachusetts	11	16	69%	6	9	67%	5	7	71%
Michigan	6	16	38%	4	9	44%	2	7	29%
Minnesota	4	15	27%	1	8	13%	3	7	43%
Mississippi	8	16	50%	6	9	67%	2	7	29%
Missouri	6	16	38%	4	9	44%	2	7	29%
Montana	2	15	13%	0	8	0%	2	7	29%
Nebraska	7	16	44%	4	9	44%	3	7	43%
Nevada	8	16	50%	5	9	56%	3	7	43%
New Hampshire	6	14	43%	3	7	43%	3	7	43%
New Jersey	6	16	38%	4	9	44%	2	7	29%
New Mexico	5	16	31%	2	9	22%	3	7	43%
New York	9	16	56%	5	9	56%	4	7	57%
North Carolina	7	16	44%	4	9	44%	3	7	43%
North Dakota	5	13	38%	4	6	67%	1	7	14%
Ohio	7	16	44%	5	9	56%	2	7	29%
Oklahoma	9	16	56%	5	9	56%	4	7	57%
Oregon	4	15	27%	2	8	25%	2	7	29%
Pennsylvania	6	16	38%	4	9	44%	2	7	29%
Rhode Island	3	15	20%	2	8	25%	1	7	14%
South Carolina	8	16	50%	6	9	67%	2	7	29%
South Dakota	5	14	36%	2	7	29%	3	7	43%
Tennessee	4	16	25%	4	9	44%	0	7	0%
Texas	8	16	50%	5	9	56%	3	7	43%
Utah	9	15	60%	5	8	63%	4	7	57%
Vermont	9	14	64%	4	7	57%	5	7	71%
Virginia	12	16	75%	7	9	78%	5	7	71%
Washington	7	16	44%	5	9	56%	2	7	29%
West Virginia	6	16	38%	4	9	44%	2	7	29%
Wisconsin	6	16	38%	4	9	44%	2	7	29%
Wyoming	6	15	40%	3	8	38%	3	7	43%

Note: See state profiles online for state equity dimension rankings.

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix Exhibit B1. State Scorecard Data Years and Databases

Indicator	Past year	Current year	Database
Access and Affordability Dimension Summary			
1 Adults ages 19–64 uninsured	2007–08	2011–12	CPS ASEC
2 Children ages 0–18 uninsured	2007–08	2011–12	CPS ASEC
3 Adults who went without care because of cost in past year	2007	2012	BRFSS
4 Individuals under age 65 with high out-of-pocket medical costs relative to their annual household income	— ^a	2011–12	CPS ASEC
5 At-risk adults without a routine doctor visit in past two years	2007	2012	BRFSS
6 Adults without a dental visit in past year	2006	2012	BRFSS
Prevention and Treatment Dimension Summary			
7 Adults with a usual source of care	2007	2012	BRFSS
8 Adults ages 50 and older who received recommended screening and preventive care	2006	2012	BRFSS
9 Children with a medical home	2007	2011/12	NSCH
10 Children with a medical and dental preventive care visit in the past year	— ^a	2011/12	NSCH
11 Children with emotional, behavioral, or developmental problems who received needed mental health care in the past year	2007	2011/12	NSCH
12 Children ages 19–35 months who received all recommended doses of seven key vaccines	2009	2012	NIS
13 Medicare beneficiaries who received at least one drug that should be avoided in the elderly	2007	2011	5% Medicare enrolled in Part D
14 Medicare beneficiaries with dementia, hip/pelvic fracture, or chronic renal failure who received a prescription drug that is contraindicated for that condition	2007	2011	5% Medicare enrolled in Part D
15 Medicare fee-for-service patients whose health provider always listens, explains, shows respect, and spends enough time with them	2007	2013	CAHPS (via AHRQ National Healthcare Quality Report)
16 Risk-adjusted 30-day mortality among Medicare beneficiaries hospitalized for heart attack, heart failure, or pneumonia	07/2005–06/2008	07/2008–06/2011	CMS Hospital Compare
17 Hospitalized patients given information about what to do during their recovery at home	2007	2011	HCAHPS (via CMS Hospital Compare)
18 Hospitalized patients who reported hospital staff always managed pain well, responded when needed help to get to bathroom or pressed call button, and explained medicines and side effects	2007	2011	HCAHPS (via CMS Hospital Compare)
19 Home health patients who get better at walking or moving around	— ^a	04/2012–03/2013	OASIS (via CMS Home Health Compare)
20 Home health patients whose wounds improved or healed after an operation	— ^a	04/2012–03/2013	OASIS (via CMS Home Health Compare)
21 High-risk nursing home residents with pressure sores	— ^a	07/2012–03/2013	MDS (via CMS Nursing Home Compare)
22 Long-stay nursing home residents with an antipsychotic medication	— ^a	07/2012–03/2013	MDS (via CMS Nursing Home Compare)
Avoidable Hospital Use and Cost Dimension Summary			
23 Hospital admissions for pediatric asthma, per 100,000 children	2004	2010	HCUP (via AHRQ National Healthcare Quality Report)
24 Hospital admissions for ambulatory care-sensitive conditions: Medicare beneficiaries ages 65–74 and age 75 and older	2008	2012	CCW (via CMS Geographic Variation Public Use File)
25 Medicare 30-day hospital readmissions, rate per 1,000 beneficiaries	2008	2012	CCW (via CMS Geographic Variation Public Use File)
26 Short-stay nursing home residents readmitted within 30 days of hospital discharge to nursing home	2006	2010	MedPAR, MDS
27 Long-stay nursing home residents hospitalized within a six-month period	2006	2010	MedPAR, MDS
28 Home health patients also enrolled in Medicare with a hospital admission	— ^a	2012	Medicare Claims (via CMS Home Health Compare)
29 Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries	— ^a	2011	5% Medicare SAF
30 Total single premium per enrolled employee at private-sector establishments that offer health insurance	2008	2012	MEPS
31 Total Medicare (Parts A & B) reimbursements per enrollee	2008	2012	CCW (via CMS Geographic Variation Public Use File)
Healthy Lives Dimension Summary			
32 Mortality amenable to health care, deaths per 100,000 population	2004–05	2009–10	CDC NVSS: Mortality Restricted Use File
33 Years of potential life lost before age 75	2005	2010	CDC NVSS: WISQARS
34 Breast cancer deaths per 100,000 female population	2005	2010	CDC NVSS: WONDER
35 Colorectal cancer deaths per 100,000 population	2005	2010	CDC NVSS: WONDER
36 Suicide deaths per 100,000 population	2005	2010	CDC NVSS: WONDER
37 Infant mortality, deaths per 1,000 live births	2004	2009	CDC NVSS: WONDER
38 Adults ages 18–64 who report fair/poor health or activity limitations because of physical, mental, or emotional problems	2007	2012	BRFSS
39 Adults who smoke	2007	2012	BRFSS
40 Adults ages 18–64 who are obese (BMI ≥ 30)	2007	2012	BRFSS
41 Children ages 10–17 who are overweight or obese (BMI ≥ 85th percentile)	2007	2011/12	NSCH
42 Percent of adults ages 18–64 who have lost six or more teeth because of tooth decay, infection, or gum disease	2006	2012	BRFSS

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

Source: Commonwealth Fund Scorecard on State Health System Performance, 2014.

Appendix B2. Scorecard Indicator Descriptions and Source Notes

1. Percent of adults ages 19-64 uninsured: Authors' analysis of Annual Social and Economic Supplement to the Current Population Survey (CPS ASEC) using the CPS Table Creator online at <http://www.census.gov/cps/data/cpstablecreator.html> (U.S. Census Bureau, CPS ASES, 2007, 2008, 2012, 2013).

2. Percent of children ages 0-18 uninsured: Authors' analysis of Annual Social and Economic Supplement to the Current Population Survey (CPS ASEC) using the CPS Table Creator online at <http://www.census.gov/cps/data/cpstablecreator.html> (U.S. Census Bureau, CPS ASES, 2007, 2008, 2012, 2013).

3. Percent of adults who went without care because of cost in the past year: Authors' analysis of 2007 and 2012 Behavioral Risk Factor Surveillance System (NCCDPHP, BRFSS 2007, 2012).

4. Percent of individuals under age 65 with high out-of-pocket medical spending relative to their annual income: This indicator is new to the *State Scorecard*, 2014 edition. Out-of-pocket medical expenses 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 health insurance premiums. C. Solis-Roman, Robert F. Wagner School of Public Service, New York University, analysis of 2012, 2013 Current Population Survey, Annual Social and Economic Supplement (U.S. Census Bureau, CPS ASES 2012, 2013).

5. At-risk adults without a routine doctor visit in past two years: Percent of adults age 50 or older, or in fair or poor health, or ever told they have diabetes or pre-diabetes, acute myocardial infarction, heart disease, stroke, or asthma who did not visit a doctor for a routine checkup in the past two years. Authors' analysis of 2007 and 2012 Behavioral Risk Factor Surveillance System (NCCDPHP, BRFSS 2007, 2012).

6. Percent of adults without a dental visit in the past year: This indicator is new to the *State Scorecard*, 2014 edition. Percent of adults who did not visit a dentist, or dental clinic within the past year. Authors' analysis of 2006 and 2012 Behavioral Risk Factor Surveillance System (NCCDPHP, BRFSS 2006, 2012).

7. Percent of adults with a usual source of care: Percent of adults ages 18 and older who have one (or more) person they think of as their personal healthcare provider. Authors' analysis of 2007 and 2012 Behavioral Risk Factor Surveillance System (NCCDPHP, BRFSS 2007, 2012).

8. Percent of adults age 50 and older received recommended screening and preventive care: Percent of adults age 50 and older who have received: sigmoidoscopy or colonoscopy in the last ten years or a fecal occult blood test in the last two years; a mammogram in the last two years (women only); a pap smear in the last three years (women only); and a flu shot in the past year and a pneumonia vaccine ever (age 65 and older only). Authors' analysis of 2006 and 2012 Behavioral Risk Factor Surveillance System (NCCDPHP, BRFSS 2006, 2012).

9. Percent of children with a medical home: Percent of children who have a personal doctor or nurse, have a usual source for sick and well care, receive family-centered care, have no problems getting needed referrals, and receive effective care coordination when needed. For more information, see www.childhealthdata.org. Authors' analysis of 2007 and 2011/12 National Survey of Children's Health (CAHMI, NSCH 2007, 2011/12).

10. Percent of children with a medical and dental preventive care visit in the past year: Percent of children 0-17 with a preventive medical visit and, if ages 1-17, a preventive dental visit in the past year. Current data (2011-12) and past data (2007), reported in the 2009 *State Scorecard*, are not comparable because of changes in survey design. For more information, see www.childhealthdata.org. Authors' analysis of 2011/12 National Survey of Children's Health (CAHMI, NSCH 2011/12).

11. Percent of children with emotional, behavioral, or developmental problems who received needed mental health care in the past year: Percent of children ages 2-17 who had any kind of emotional, developmental, or behavioral problem that required treatment or counseling and who received treatment from a mental health professional

(as defined) during the past 12 months. For more information, see www.childhealthdata.org. Authors' analysis of 2007 and 2011/12 National Survey of Children's Health (CAHMI, NSCH 2007, 2011/12).

12. Percent of children ages 19-35 months who received all recommended doses of seven key vaccines: Percent of children ages 19-35 months who received at least 4 doses of diphtheria, tetanus, and 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); full series of Haemophilus influenza type b (Hib) vaccine (3 or 4 doses depending on product type); at least 3 doses of hepatitis B vaccine (HepB); at least 1 dose of varicella vaccine, and at least 4 doses of pneumococcal conjugate vaccine (PCV). This indicator is modified from that reported in the 2009 *State Scorecard*, reflecting changes in vaccination standards. Data from the 2009 and 2012 National Immunization Survey (NCHS, NIS 2009, 2012).

13. Percent of Medicare beneficiaries received at least one drug that should be avoided in the elderly: This indicator is new to the *State Scorecard*, 2014 edition. Percent of Medicare beneficiaries age 65 and older received at least one drug from a list of 13 classes of high-risk prescriptions that should be avoided by the elderly. Y. Zhang and S.H. Baik, University of Pittsburgh, analysis of 2007, 2010, and 2011 5% sample of Medicare beneficiaries enrolled in stand-alone Medicare Part D plans. (2010 data used for stratification by income for equity analysis.)

14. Percent of Medicare beneficiaries with dementia, hip/pelvic fracture, or chronic renal failure received prescription in an ambulatory care setting that is contraindicated for that condition: This indicator is new to the *State Scorecard*, 2014 edition. Y. Zhang and S.H. Baik, University of Pittsburgh, analysis of 2007, 2011 5% sample of Medicare beneficiaries enrolled in stand-alone Medicare Part D plans.

15. Medicare fee-for-service patients whose health provider always listens, explains, shows respect, and spends enough time with them: Percent of Medicare fee-for-service patients who had a doctor's office or clinic visit in the last 12 months whose health providers always listened carefully, explained things clearly, respected what they had to say, and spent enough time with them. Data from National Consumer Assessment of Healthcare Providers and Systems (CAHPS) Benchmarking Database (AHRQ, CAHPS n.d.), reported in *National Healthcare Quality Report* (AHRQ 2007, 2013).

16. Risk-adjusted 30-day mortality among Medicare patients hospitalized for heart attack, heart failure or pneumonia: This indicator is new to the *State Scorecard*, 2014 edition. Risk-standardized, all-cause 30-day mortality rates for Medicare patients age 65 and older hospitalized with a principal diagnosis of heart attack, heart failure or pneumonia between July 2005 and June 2008 and July 2008 and June 2011. 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 September 2013 from CMS Hospital Compare (DHHS n.d.).

17. Percent of hospitalized patients who were given information about what to do during their recovery at home: This indicator is modified from that reported in the 2009 *State Scorecard*, expanding from discharges among heart failure patients to include all discharges. Authors' analysis of Hospital Consumer Assessment of Healthcare Providers and Systems Survey data (HCAHPS n.d.) retrieved September 2013 from CMS Hospital Compare (DHHS n.d.).

18. Percent of patients reported hospital staff always managed pain well, responded when needed help to get to bathroom or pressed call button, and explained medicines and side effects: This indicator is new to the *State Scorecard*, 2014 edition. Authors' analysis of Hospital Consumer Assessment of Healthcare Providers and Systems Survey data (HCAHPS n.d.) retrieved September 2013 from CMS Hospital Compare (DHHS n.d.).

19. Home health patients who get better at walking or moving around: Percent of all home health episodes in which a person improved

at walking or moving around compared to a prior assessment. Episodes for which the patient, at start or resumption of care, was able to ambulate independently are excluded. Current data (4/2012-3/2013) and past data (2007), reported in the 2009 *State Scorecard*, are not comparable because of changes in the underlying clinical assessment instrument and data collection processes. Authors' analysis of April 2012 -March 2013 Outcome and Assessment Information Set (CMS, OASIS n.d.) data retrieved September 2013 from CMS Home Health Compare (DHHS n.d.).

20. Home health patients whose wounds improved or healed after an operation: This indicator is new to the *State Scorecard*, 2014 edition. Percent of all home health episodes in which a person's surgical wound is more fully healed compared to a prior assessment. Episodes for which the patient, at start or resumption of care, did not have any surgical wounds or had only a surgical wound that was unobservable are excluded. Authors' analysis of April 2012-March 2013 Outcome and Assessment Information Set (CMS, OASIS n.d.) data retrieved September 2013 from CMS Home Health Compare (DHHS n.d.).

21. High-risk nursing home residents with pressure sores: Percent of long-stay nursing home residents impaired in bed mobility or transfer, comatose, or malnourished who have pressure sores (Stages 1-4) on target assessment. Current data (7/2012-3/2013) and past data (2007), reported in the 2009 *State Scorecard*, are not comparable because of changes in the underlying clinical assessment instrument and data collection processes. Authors' analysis of April 2012 -March 2013 Minimum Data Set (CMS, MDS n.d.) retrieved September 2013 from CMS Nursing Home Compare (DHHS n.d.).

22. Long-stay nursing home residents with an antipsychotic medication: This indicator is new to the *State Scorecard*, 2014 edition. The percent of long-stay nursing home residents that received an antipsychotic medication, excluding residents with Schizophrenia, Tourette's syndrome, and Huntington's disease. Authors' analysis of CMS Minimum Data Set (CMS, MDS n.d.) retrieved September 2013 from CMS Nursing Home Compare.

23. Hospital admissions for pediatric asthma, per 100,000 children (ages 2-17): Excludes patients with cystic fibrosis or anomalies of the respiratory system, and transfers from other institutions. Authors' analysis of 2004 and 2010 Healthcare Cost and Utilization Project State Inpatient Databases; not all states participate in HCUP. Estimates for total U.S. are from the Nationwide Inpatient Sample (AHRQ, HCUP-TSID 2004, 2010). Reported in the *National Healthcare Quality Report* (AHRQ 2004, 2010).

24. Hospital admissions for ambulatory care-sensitive conditions, per 1,000 beneficiaries:

Medicare beneficiaries ages 65-74:

Medicare beneficiaries ages 75 and older:

Hospital admissions of fee-for-service Medicare beneficiaries age 65-74 and 75 and older 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. This indicator is modified from that reported in the 2009 *State Scorecard*, which included 11 ACS conditions in the composite measures. Authors' analysis of 2008 and 2012 Chronic Conditions Warehouse (CCW) data, retrieved from the December 2013 CMS Geographic Variation Public Use File (CMS, Office of Information Products and Analytics (OPIDA) 2013).

25. Medicare 30-day hospital readmissions, rate per 1,000 beneficiaries: All hospital admissions among Medicare beneficiaries age 65 and older that were readmitted within 30 days of an acute hospital stay for any cause. A correction was made to account for likely transfers between hospitals. This indicator is modified from that reported in the 2009 *State Scorecard*, which included readmissions for only select index admission diagnoses. Authors' analysis of 2008 and 2012 Chronic Conditions Warehouse (CCW) data, retrieved from the December 2013 CMS Geographic Variation Public Use File (CMS, Office of Information Products and Analytics (OPIDA) 2013).

26. Percent of short-stay nursing home residents readmitted within 30 days of hospital discharge to the nursing home: Percent of newly

admitted nursing home residents (never been in a facility before) who are re-hospitalized within 30 days of being discharged to nursing home.V. Mor, Brown University, analysis of 2010 Medicare enrollment data and Medicare Provider and Analysis Review (CMS, MEDPAR 2010).

27. Percent of long-stay nursing home residents hospitalized within a six-month period: Percent of long-stay residents (residing in a nursing home for at least 90 consecutive days) who were ever hospitalized within six months of baseline assessment. V. Mor, Brown University, analysis of 2010 Medicare enrollment data, Medicare Provider and Analysis Review File (CMS, MEDPAR 2010).

28. Home health patients also enrolled in Medicare with a hospital admission: Percent of acute care hospitalization for home health episodes that occurred in 2012. Current data (2012) and past data (2007) are not comparable because of changes in the underlying data source and data collection processes. Authors' analysis data from CMS Medicare claims data retrieved September 2013 from CMS Home Health Compare (DHHS n.d.).

29. Potentially avoidable emergency department visits among Medicare beneficiaries, per 1,000 beneficiaries: This indicator is new to the *State Scorecard*, 2014 edition. Potentially avoidable emergency department visits were those that, based on diagnoses recorded during the visit and the health care service the patient received, were considered to be either 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 emergency department visit that resulted in an admission, as well as emergency department visits where the level of care provided in the ED was clinically indicated. J. Zheng, Harvard University, analysis of 2011 Medicare Enrollment and Claims Data 5% sample, Chronic Conditions Warehouse (CMS, CCW 2011), using the New York University Center for Health and Public Service Research emergency department algorithm developed by John Billings.

30. Total single premium per enrolled employee at private-sector establishments that offer health insurance: Data from Medical Expenditure Panel Survey-Insurance Component (AHRQ, MEPS-IC 2008, 2012).

31. Total Medicare (Parts A&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 2008 and 2012 Chronic Conditions Warehouse (CCW) data, retrieved from the December 2013 CMS Geographic Variation Public Use File (CMS, Office of Information Products and Analytics (OPIDA) 2013).

32. Mortality amenable to health care, deaths per 100,000 population: Number of deaths before age 75 per 100,000 population that resulted from causes considered at least partially treatable or preventable with timely and appropriate medical care (see list), as described in Nolte and McKee (Nolte and McKee, BMJ 2003). Authors' analysis of mortality data from CDC restricted-use Multiple Cause-of-Death file and U.S. Census Bureau population data, 2004-2005 and 2009-2010 (NCHS, MCD n.d.).

Causes of death	Age
Intestinal infections.....	0-14
Tuberculosis.....	0-74
Other infections (diphtheria, tetanus, septicaemia, poliomyelitis).....	0-74
Whooping cough.....	0-14
Measles.....	1-14
Malignant neoplasm of colon and rectum.....	0-74
Malignant neoplasm of skin.....	0-74
Malignant neoplasm of breast.....	0-74
Malignant neoplasm of cervix uteri.....	0-74
Malignant neoplasm of cervix uteri and body of uterus.....	0-44
Malignant neoplasm of testis.....	0-74
Hodgkin's disease.....	0-74
Leukemia.....	0-44
Diseases of the thyroid.....	0-74
Diabetes mellitus.....	0-49
Epilepsy.....	0-74

Chronic rheumatic heart disease	0–74
Hypertensive disease.....	0–74
Cerebrovascular disease	0–74
All respiratory diseases (excluding pneumonia and influenza)	1–14
Influenza.....	0–74
Pneumonia	0–74
Peptic ulcer	0–74
Appendicitis.....	0–74
Abdominal hernia.....	0–74
Cholelithiasis and cholecystitis.....	0–74
Nephritis and nephrosis	0–74
Benign prostatic hyperplasia	0–74
Maternal death	All
Congenital cardiovascular anomalies.....	0–74
Perinatal deaths, all causes, excluding stillbirths	All
Misadventures to patients during surgical and medical care.....	All
Ischaemic heart disease: 50% of mortality rates included.....	0–74

33. Years of potential life lost before age 75: This indicator is new to the *State Scorecard*, 2014 edition. Robert Wood Johnson Foundation analysis of National Vital Statistics System Mortality Data, 2005 and 2010, using the Centers for Disease Control and Prevention (CDC) National Center for Injury Prevention and Control Web-based Injury Statistics Query and Reporting System (WISQARS). Retrieved July 2013 from Robert Wood Johnson Foundation National DataHub. (NVSS 2005 and 2010).

34. Breast cancer deaths per 100,000 female population: Authors' analysis of NVSS–Mortality Data, 2005 and 2010 (NCHS, NVSS n.d.), retrieved using the CDC Wide-ranging OnLine Data for Epidemiologic Research (WONDER). (NVSS 2005 and 2010)

35. Colorectal cancer deaths per 100,000 population: Authors' analysis of NVSS–Mortality Data, 2005 and 2010 (NCHS, NVSS n.d.), retrieved using the CDC Wide-ranging OnLine Data for Epidemiologic Research (WONDER). (NVSS 2005 and 2010)

36. Suicide deaths per 100,000 population: Authors' analysis of NVSS–Mortality Data 2005 and 2010 (NCHS NVSS), retrieved using the CDC Wide-ranging OnLine Data for Epidemiologic Research (WONDER). (NVSS 2005 and 2010).

37. Infant mortality, deaths per 1,000 live births: Authors' analysis of National Vital Statistics System–Linked Birth and Infant Death Data, 2004 and 2009 (NCHS, NVSS, 2004, 2009), retrieved using the CDC Wide-ranging OnLine Data for Epidemiologic Research (WONDER).(NVSS 2004 and 2009).

38. Percent of adults ages 18–64 report being in fair or poor health, or who have activity limitations because of physical, mental, or emotional problems: This indicator is new to the *State Scorecard*, 2014 edition. Authors' analysis of 2007 and 2012 Behavioral Risk Factor Surveillance System (NCCDPHP, BRFSS 2007, 2012).

39. Percent of adults who smoke: Percent of adults age 18 and older who ever smoked 100+ cigarettes (five packs) and currently smoke every day or some days. Authors' analysis of 2007 and 2012 Behavioral Risk Factor Surveillance System (NCCDPHP, BRFSS 2007, 2012).

40. Percent of adults ages 18–64 who are obese (Body Mass Index [BMI] \geq 30): Authors' analysis of 2007 and 2012 Behavioral Risk Factor Surveillance System (NCCDPHP, BRFSS 2007, 2012).

41. Children (ages 10–17) who are overweight or obese (Body Mass Index [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. Data from the National Survey of Children's Health, assembled by the Child and Adolescent Health Measurement Initiative (CAHMI, NCHS 2007, 2011/2012).

42. Percent of adults ages 18–64 who have lost 6 or more teeth due to tooth decay, infection, or gum disease: This indicator is new to the *State Scorecard*, 2014 edition. Authors' analysis of 2006 and 2012 Behavioral Risk Factor Surveillance System (NCCDPHP, BRFSS 2006, 2012).

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