



# AIMING HIGHER

Results from a State Scorecard on  
Health System Performance, 2009

THE COMMONWEALTH FUND COMMISSION ON A HIGH PERFORMANCE HEALTH SYSTEM

OCTOBER 2009



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## THE COMMONWEALTH FUND

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The mission of The Commonwealth Fund is to promote a high performing health care system that achieves better access, improved quality, and greater efficiency, particularly for society's most vulnerable, including low-income people, the uninsured, minority Americans, young children, and elderly adults.

The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy. An international program in health policy is designed to stimulate innovative policies and practices in the United States and other industrialized countries.



## *Aiming Higher*

### **RESULTS FROM A STATE SCORECARD ON HEALTH SYSTEM PERFORMANCE, 2009**

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**On behalf of the Commonwealth Fund  
Commission on a High Performance Health System**

**October 2009**

**ABSTRACT:** Focused on identifying opportunities to improve, The Commonwealth Fund's *State Scorecard on Health System Performance* assesses states' performance on health care relative to achievable benchmarks for 38 indicators of access, quality, costs, and health outcomes. The 2009 *State Scorecard* paints a picture of health care systems under stress, with deteriorating health insurance coverage for adults and rising health care costs. On a positive note, there were gains in children's coverage as a result of national reforms, and improvement in some measures of hospital and nursing home care following federal efforts to publicly report quality data. The scorecard highlights persistent wide variation in performance across states and continued evidence of poor care coordination. Increasing cost pressures and deterioration in access across the U.S., together with geographic disparities in performance, underscore the urgent need for comprehensive national reforms to ensure access, change the trajectory of costs, and enhance value.

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PHOTO: JOHN TROHA, SOMERVILLE FAMILY PRACTICE, VIRGINIA

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## Preface

The Commonwealth Fund Commission on a High Performance Health System is pleased to sponsor the 2009 *State Scorecard on Health System Performance*. The second edition of the *State Scorecard*, first published in 2007, provides current information and trends on states' progress toward achieving systems and models of health care that meet their residents' needs.

Building on the first edition and the *National Scorecard on U.S. Health System Performance*, the 2009 *State Scorecard* examines variation across the states on key indicators of health care access, prevention and treatment, potentially avoidable hospital use and costs, and population health. By enabling states to compare themselves with others on critical aspects of their health care systems, we hope to motivate the development of strategies and action toward higher performance across the entire nation.

The 2009 update echoes the troubling conclusion of the first *State Scorecard*—that when it comes to access to care when you need it, the quality of care you receive, and the likelihood of living a healthier life, where you live matters. Wide variations in care and outcomes persist, with top-performing states continuing to surpass their peers on multiple dimensions. Moreover, the state leaders have set new, higher benchmarks on many indicators. These gains underscore opportunities to improve. Yet, even the top states are not performing as well as they could in certain areas.

The scorecard findings of deteriorating coverage and rising costs, combined with broad geographic disparities, point to the need for national reforms as well as state action. In addition, widespread evidence of poorly coordinated care poses a challenge to all states to seek delivery system reforms that integrate care across providers.

Evidence that federal expansions of coverage for children have made a difference across the country highlights the potential of reforms that seek to insure more adults. Federal efforts to provide public information on quality of care have also enabled and stimulated improvement across states. The 2009 *State Scorecard* points to the potential for rapid change, especially when information on improvement is available to support local efforts.

All states face the problem of how to slow the growth in costs while improving value and outcomes and securing access. Doing better is within our grasp. Ensuring access to high-quality, equitable care—regardless of where you live—will require a commitment to aim higher on all levels, as well as national and state reforms and actions.

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The Commonwealth Fund Commission on  
a High Performance Health System

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## Executive Summary

The 2009 edition of The Commonwealth Fund's *State Scorecard on Health System Performance* finds deteriorating health insurance coverage for adults and rising health care costs, but also improved quality of care on dimensions of performance that have been the focus of public reporting and incentive programs. As reported in the inaugural *State Scorecard* in 2007, where you live within the United States makes a difference in your access to care, quality of care, and experiences with care providers. The findings of this report point to the urgency of comprehensive national health system reforms aimed at improving health system performance across the country, eliminating disparities, and enhancing and assisting states' efforts to address population health needs and ensure affordable access.

With a central focus on identifying opportunities to improve, the *State Scorecard* provides a framework for state and federal action to address common concerns as well as specific areas of need. It assesses states' performance relative to what is achievable, based on benchmarks for 38 indicators of access, quality, costs, and health outcomes. The findings highlight continued wide variability in performance across states. But they also show that all states face challenges posed by rising costs of care and poor care coordination. Although the scorecard does not yet reflect the impact of the economic downturn—given the two- to three-year time lag in data reporting—the deterioration seen in access to care across the country underscores the need for coherent reforms that would change the trajectory of costs, ensure access, and enhance value.

Overall, the 2009 *State Scorecard* paints a picture of health care systems under stress. Still, improvements made in certain indicators and in certain areas of the U.S. indicate that individual states have the capacity to do much better, especially when their efforts are supported by strong federal policy and national initiatives. In 2009, Vermont, Hawaii, Iowa, Minnesota, Maine, and New Hampshire lead the nation as the top-ranked states (Hawaii and Iowa tied for second place; Maine and New Hampshire tied for fifth). Their performance ranks in the top quartile of states on a majority of scorecard indicators. In particular, the reforms passed by Vermont in 2006 to cover

the uninsured and establish a “blueprint for health” focused on preventing and controlling chronic disease are providing a new model for other states.

Thirteen states—Vermont, Hawaii, Iowa, Minnesota, Maine, New Hampshire, Massachusetts, Connecticut, North Dakota, Wisconsin, Rhode Island, South Dakota, and Nebraska—again rise to the top quartile of the overall performance rankings, outperforming their peers on multiple indicators (Exhibit 1). Conversely, states in the lowest quartile often lag the leaders in multiple areas. The persistent wide geographic variation points to the need for national reforms to ensure high performance across the country.

Following are some of the cross-cutting state findings and key trends gleaned from analysis of the scorecard results:

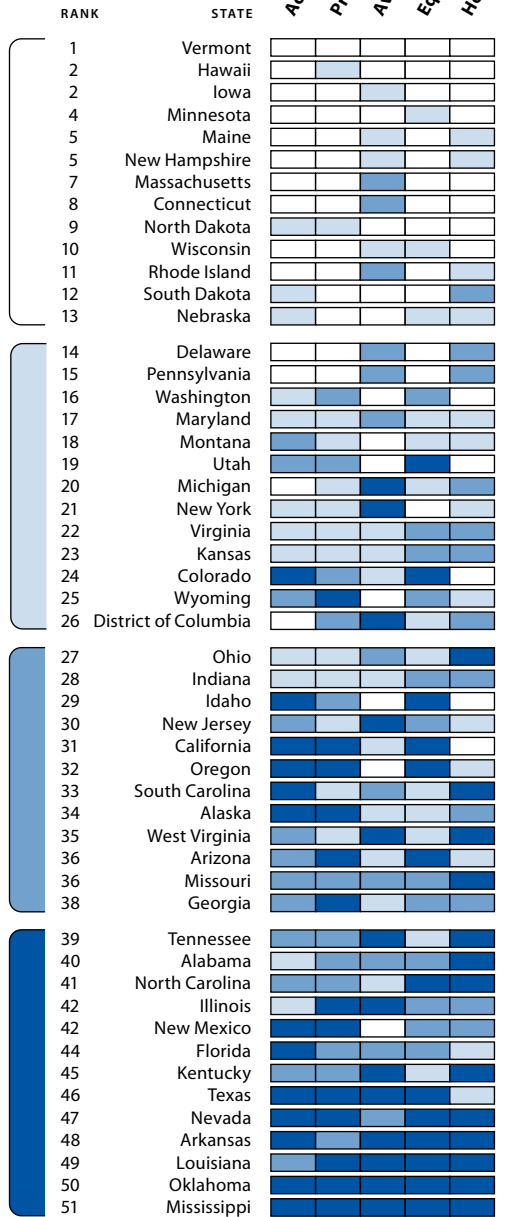
- Since the beginning of the decade, insurance coverage in most states has been eroding for adults while increasing or holding steady for children. This divergence reflects the impact of federal action to expand coverage for children through the Children's Health Insurance Program (CHIP); rates of uninsured children in 2008 were the lowest since 1987. Nevertheless, high and rising rates of uninsured adults in many states underscore the need for comprehensive national reform to expand coverage in all states, and to further the gains made in Massachusetts, Vermont, and other states that have taken a lead in enacting reforms.
- The quality of hospital care for heart attack, heart failure, pneumonia, and the prevention of surgical complications improved dramatically, as all states gained ground and the variation across states narrowed. This improvement reflects the impact of national efforts by Medicare to measure and benchmark performance.
- Key indicators of nursing home and home health care quality improved substantially in nearly all states, with declines in rates of pressure ulcers, physical restraints, and pain for nursing home residents and improved mobility for home care patients. Notably, these long-term care quality

State Scorecard Summary of Health System Performance Across Dimensions

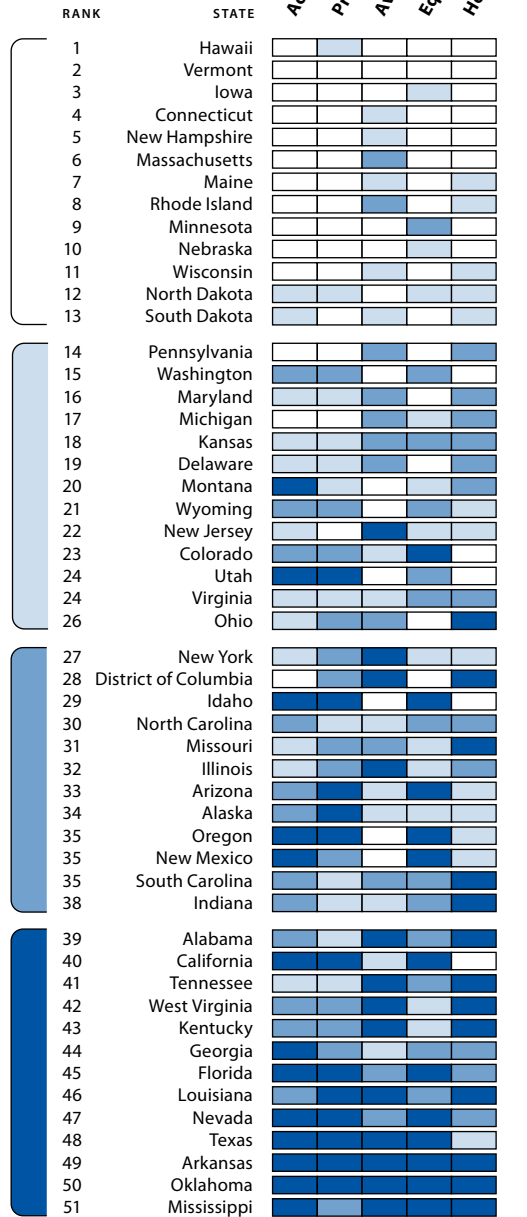
State Rank

- Top Quartile
- Second Quartile
- Third Quartile
- Bottom Quartile

2009 Ranking



Revised 2007 Ranking\*



\* Some state rates from the 2007 edition have been revised to match methodology used in the 2009 edition.  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

metrics have also been the focus of public reporting and collaborative improvement initiatives.

- Ambulatory care quality indicators, including preventive care, changed little or declined in half the states, with wide gaps persisting across states.
- In a majority of states, symptoms of poor care coordination and continued inefficiency in the use of resources are evident in the increasing rates of hospital readmissions. And in most states, there have also been increases in hospital admissions and readmissions from nursing homes, as well as hospital admissions for home health care patients. These indicators point to a lack of incentives for effective transitional care and care management.
- States with the highest readmission rates also tended to have the highest costs of care overall—signaling a need for a systematic approach to addressing cost concerns.
- Rising costs are making care and coverage less affordable for a growing share of families. Across the country, insurance premiums are rising faster than middle-class family incomes.
- Differences in how well the health care system functions for people based on their income level, health insurance status, and race/ethnicity—what is referred to here as the “equity gap”—were more likely to widen than narrow.

Distinct regional patterns and sharp differences in performance across states—with some persistent gaps even in the best-performing states—attest to the reality that our health care system fails to provide reliable access to the affordable, effective, patient-centered, coordinated care that everyone should expect, given the large and growing share of the nation’s economic resources that are invested in the health care sector.

## HIGHLIGHTS AND CROSS-CUTTING THEMES

### **Leading states consistently outperform lagging states across indicators and dimensions; public policy and public-private collaboration can make a difference.**

Thirteen states—Vermont, Hawaii, Iowa, Minnesota, Maine, New Hampshire, Massachusetts, Connecticut, North Dakota, Wisconsin, Rhode Island, South

Dakota, and Nebraska—again rise to the top quartile of the overall performance rankings (Exhibit 1). Though specific rankings shifted, these are the same group of states identified as top performers in the first *State Scorecard* two years ago. Many have been leaders in reforming and improving their health systems—for example, by targeting efforts to reduce rates of uninsured adults and children.

Ten of the 13 states in the lowest quartile of performance—Tennessee, Alabama, Florida, Kentucky, Texas, Nevada, Arkansas, Louisiana, Oklahoma, and Mississippi—also ranked in the bottom quartile in the 2007 *State Scorecard*. Three others—North Carolina, Illinois, and New Mexico—dropped from the third quartile, while California, West Virginia, and Georgia moved up out of the last quartile. The 13 states in the lowest quartile lagged well behind their peers on indicators across dimensions of performance. Rates of uninsured adults and children are, on average, double those in the top quartile of states. Receipt of recommended preventive care is generally lower, and mortality from conditions amenable to health care is, on average, 50 percent higher in these states than in leading states.

Among the states that moved up the most in the overall performance rankings, Minnesota rose within the top quartile to become the fourth-ranked state, with significant improvement on multiple indicators. In three states—Arkansas, Delaware, and West Virginia—plus the District of Columbia, at least half of the performance indicators improved by 5 percent or more. Leading states set new benchmarks for 20 of the 35 indicators with trends.

These patterns indicate that public policies, plus state and local health care systems, can make a difference. Vermont, Maine, and Massachusetts, for example, have enacted comprehensive reforms to expand coverage and put in place initiatives to improve population health and benchmark providers on quality. Minnesota is a leader in bringing public- and private-sector stakeholders together in collaborative initiatives to improve the overall value of health care—an approach that is gaining traction in other states. As New York and Utah have made concerted efforts to improve their performance in priority areas, these states’ performance on key indicators has improved. Yet socioeconomic factors also play a

role. Many of the states that ranked low on multiple performance indicators have high levels of poverty, making it difficult to provide affordable coverage without federal action.

**Wide variations in access, quality, costs, and health outcomes persist across states.**

Overall, the range of performance remains wide across states and across dimensions of performance, with a two-to-three-fold spread between top- and bottom-performing states on multiple indicators (Exhibit 2). On many indicators, the leading states have improved substantially since the 2007 *State Scorecard*—setting new benchmarks.

The divergence in performance is particularly wide when it comes to the following indicators: percentage of insured; diabetic patients receiving recommended care; mental health care for children; pressure ulcers in nursing homes; preventable hospital admissions; and mortality amenable to health care. To reach the level of top-performing states, bottom-performing states would need to improve by an average of 40 to 50 percent.

Improving the performance of all states to the levels achieved by the best states could save thousands of lives, improve access and quality of life for millions of people, and reduce costs. In turn, this would free up funds to pay for improved care and expanded insurance coverage—producing a net gain in value from a higher-performing health care system. If all states could match benchmarks set by the top-performing state, the cumulative effect would mean:

- Nearly 78,000 fewer adults and children would die prematurely (before age 75) each year from conditions amenable to health care.
- The number of people without health coverage would be more than halved, with 29 million more people insured.
- Nine million more adults (age 50 and older) would receive all recommended preventive care, and almost 800,000 more young children would receive key vaccinations on time.
- Four million more diabetic patients across the nation would receive basic services to help avoid complications such as blindness, kidney failure, or limb amputation.

- At least \$5 billion would be saved from avoiding preventable hospitalizations and readmissions for chronically ill or frail elderly nursing home patients.
- Savings of \$20 billion to \$37 billion per year would be possible if annual per-person costs for Medicare in higher-cost states fell to the median state rate or to the average rate achieved in the top quartile of states.

Geographic variations remain striking, repeating the same general patterns seen in the first *State Scorecard*. States in the Upper Midwest and New England continue to lead, and states across the South, the Southwest, and the Lower Midwest continue to trail those in other regions on overall performance rankings. This pattern generally holds for the access, quality, and equity dimensions, though western states tend to perform better on avoidable hospital use and costs of care and on the “healthy lives” dimensions (Exhibit 1). Yet exceptions also exist, especially where states and care systems have made a concerted effort to improve.

**Improvements in key areas of health care quality are promising.**

The *State Scorecard* also documents widespread improvement across states on selected indicators, especially quality indicators for which there has been a national commitment to reporting performance data and collaborative efforts to improve. Notably, for some indicators of hospital clinical processes, the average performance of the bottom-ranked states now exceeds the median state rate of three years ago, with virtually all states improving (Exhibits 2 and 3). These indicators include treatment for heart attack, heart failure and pneumonia, prevention of surgical complications, and provision of written discharge instructions for heart failure patients.

Publicly reported quality measures related to the delivery of patient-centered care in nursing homes also improved substantially across states. The average state performance on reported pain and use of physical restraints on residents improved by at least 5 percent in all states, and in the majority of states average performance improved by the same amount for a measure of pressure ulcers; the range of performance between states narrowed as well. One key

## List of 38 Indicators in State Scorecard on Health System Performance

Access	All States Median		Range of State Performance (Bottom State Rate– Top State Rate)		Best State
	Revised 2007 Scorecard <sup>a</sup>	2009 Scorecard	Revised 2007 Scorecard <sup>a</sup>	2009 Scorecard	2009 Scorecard
<b>Access</b>					
1 Nonelderly adults (ages 18–64) insured	82.4	82.2	70.4–89.6	68.5–92.8	MA
2 Children (ages 0–17) insured	91.5	91.4	80.2–95.4	80.4–96.8	MA
3 At-risk adults visited a doctor for routine checkup in the past two years	87.0	84.1	79.1–94.2	75.0–93.0	RI
4 Adults without a time in the past year when they needed to see a doctor but could not because of cost	87.6	87.5	80.8–93.7	80.7–93.1	HI
<b>Prevention &amp; Treatment</b>					
5 Adults age 50 and older received recommended screening and preventive care	39.7	42.4	32.6–50.1	35.0–52.5	DE
6 Adult diabetics received recommended preventive care	44.4	44.8	28.7–62.4	33.3–66.9	MN
7 Children ages 19–35 months received all recommended doses of five key vaccines	81.6	80.1	66.7–93.5	66.7–93.2	NH
8 Children with both a medical and dental preventive care visit in the past year <sup>b</sup>	— <sup>b</sup>	71.0	— <sup>b</sup>	60.2–85.3	RI
9 Children who received needed mental health care in the past year	61.9	63.0	43.4–77.2	41.7–81.5	PA
10 Hospitalized patients received recommended care for heart attack, heart failure, and pneumonia	84.4	91.6	78.4–88.4	84.9–95.6	NH & ND
11 Surgical patients received appropriate care to prevent complications	70.5	85.3	50.7–90.0	78.3–92.7	ME
12 Home health patients who get better at walking or moving around	36.2	40.5	31.4–41.8	33.8–48.2	UT
13 Adults with a usual source of care	81.5	81.8	65.6–89.0	69.2–89.0	DE & PA
14 Children with a medical home <sup>b</sup>	— <sup>b</sup>	60.7	— <sup>b</sup>	45.4–69.3	NH
15 Heart failure patients given written instructions at discharge	50.6	75.1	14.2–84.1	53.8–91.4	SD
16 Medicare patients whose health care provider always listens, explains, shows respect, and spends enough time with them	68.7	74.5	63.1–74.9	68.7–78.0	DE
17 Medicare patients giving a best rating for health care received in the past year	70.2	61.1	61.2–74.4	54.0–69.3	DE
18 High-risk nursing home residents with pressure sores	13.2	11.5	19.3–7.6	17.2–7.5	ND & MT
19 Long-stay nursing home residents who were physically restrained	6.2	4.0	15.9–1.9	11.0–1.5	DE & NE
20 Long-stay nursing home residents who have moderate to severe pain	6.3	4.2	11.4–1.6	8.2–0.9	DC
<b>Avoidable Hospital Use &amp; Costs</b>					
21 Hospital admissions for pediatric asthma per 100,000 children	152.6	125.5	289.5–55.0	253.5–48.6	OR
22 Adult asthmatics with an emergency room or urgent care visit in the past year <sup>c</sup>	16.3	— <sup>c</sup>	29.7–10.8	— <sup>c</sup>	UT
23 Medicare hospital admissions for ambulatory care sensitive conditions per 100,000 beneficiaries	6,845	6,291	10,548–4,214	9,331–3,725	UT
24 Medicare 30-day hospital readmissions as a percent of admissions	17.1	17.5	22.6–12.9	22.7–12.9	OR
25 Long-stay nursing home residents with a hospital admission	16.6	18.7	29.4–7.2	31.4–6.9	MN
26 Short-stay nursing home residents with hospital readmission within 30 days	18.2	20.8	26.5–12.4	26.8–13.2	UT
27 Home health patients with a hospital admission	26.9	28.7	46.4–18.3	43.3–21.2	UT
28 Hospital Care Intensity Index, Based on inpatient days and inpatient visits among chronically ill Medicare beneficiaries in last two years of life	0.959	0.958	1.565–0.495	1.548–0.509	UT
29 Total single premium per enrolled employee at private- sector establishments that offer health insurance	\$3,706	\$4,360	\$4,379– \$3,034	\$5,293– \$3,830	ND
30 Total Medicare (Parts A & B) reimbursements per enrollee	\$6,371	\$7,698	\$8,565– \$4,778	\$9,564– \$5,311	HI
<b>Healthy Lives</b>					
31 Mortality amenable to health care, deaths per 100,000 population	95.6	89.9	174.2–71.6	158.3–63.9	MN
32 Infant mortality, deaths per 1,000 live births	7.1	6.8	11.0–4.3	13.7–4.5	UT
33 Breast cancer deaths per 100,000 female population	25.3	23.7	34.1–16.2	29.8–17.7	AK
34 Colorectal cancer deaths per 100,000 population	20.0	17.8	24.6–15.3	21.1–13.3	UT
35 Suicide deaths per 100,000 population	11.7	11.8	21.8–5.9	21.5–5.5	DC
36 Nonelderly adults (ages 18–64) limited in any activities because of physical, mental, or emotional problems	15.7	17.0	23.8–10.2	24.0–12.0	ND
37 Adults who smoke	21.4	20.1	29.0–11.2	28.3–10.7	UT
38 Children ages 10–17 who are overweight or obese	29.9	30.6	39.5–20.8	44.5–23.1	MN & UT

<sup>a</sup> Some state rates from the 2007 edition have been revised to match methodology used in the 2009 edition. See methodology on p. 25 for further details.

<sup>b</sup> Previous year data not shown; data are not comparable over two time periods because of changes in survey design.

<sup>c</sup> Data not updated; data presented here are used for both past and current ranking.

Notes: All values are expressed as percentages unless labeled otherwise. See Appendix B for data year, source, and definition of each indicator.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

measure of home health care quality—improvement in patients’ mobility—also showed a 5-percent-or-greater improvement in most states.

Currently, all hospitals are required to publicly report selected quality indicators in return for payment updates from Medicare. Several public and private initiatives have further tied payment incentives to hospitals’ improvement on such metrics. The rapid improvement in a relatively short time illustrates the importance of data in guiding and driving change, as well as the necessity of having incentives in place to foster higher performance. In contrast, hospital readmission rates and several quality indicators that generally are not publicly available at the delivery-system level failed to improve or evidenced mixed performance across states.

A general trend toward lower rates of mortality amenable to health care, cancer deaths, and smoking is also promising, although most states’ death rates substantially exceed rates achieved by the benchmark states.

Unfortunately, these large gains were not matched in other areas. For example, there were only modest improvements seen in preventive care for adults—and in only half the states. The majority of states failed to improve on multiple indicators of ambulatory care quality and access over the two-to-four-year trends typically captured by the 2007 and 2009 scorecards. Many indicators of avoidable hospital use and costs of care failed to improve or grew worse, especially hospital admissions and readmissions from nursing homes—highlighting the need for better coordination of care across care settings. It should be noted that the data related to access to care reflect the period prior to the current economic recession, which has likely worsened access for adults. Similarly, the data predate the extension of CHIP, which may be helping to offset the recession’s impact on children.

On 20 of 35 indicators for which trend data are available, the median state rate (representing the middle of the range) failed to improve or declined by 5 percent or more. Only 15 indicators improved by 5 percent or more, mainly in the quality domain (Exhibit A2). Disturbingly, the range of performance across states widened on a third of indicators—often in tandem with a decline across states.

Making continual improvement the norm across all performance indicators and in all states will require national as well as state policies that ensure access to care, realign incentives, set targets, and make available the information needed to effect change. Robust measures of outcomes are needed as well to drive transformative system change; “process” indicators alone are not enough. It is also clear that improving care one disease or process at a time will not be an effective approach to achieving high performance across the board.

**Symptoms of poor care coordination and inefficient or suboptimal use of resources point to opportunities to improve both quality and cost.**

The *State Scorecard* points to evidence of gaps in care and fragmented care that reflects health system dysfunction: the failure to provide timely and effective preventive and chronic care; high and, in many states, increasing hospital readmission rates; and rising hospitalization rates for nursing home residents and home health care patients across most states. Despite improvement, rates of potentially preventable hospitalizations remain relatively high in many states. And the gaps in receipt of recommended preventive care such as cancer screenings and immunizations across states underscore the need for a stronger primary care infrastructure in the United States.

Annual costs of health care (average employer-group premiums for individuals and Medicare spending per beneficiary) vary widely across states, with no apparent systematic relationship to insurance coverage or ability to pay (as measured by median income). Moreover, across states there is no systematic relationship between scorecard indicators of the cost and quality of care across states. Some states in the Upper Midwest (e.g., Iowa, Minnesota, Nebraska, North Dakota, and South Dakota) achieve high quality at lower costs. Although these states are exceptions to the rule, they provide examples for other states to follow in pursuit of both goals.

States with higher medical costs tend to have higher rates of potentially preventable hospital use, including high rates of readmission within 30 days of discharge (Exhibit 4) and high rates of admission for complications of diabetes, asthma, and other chronic conditions. Reducing the use of expensive hospital

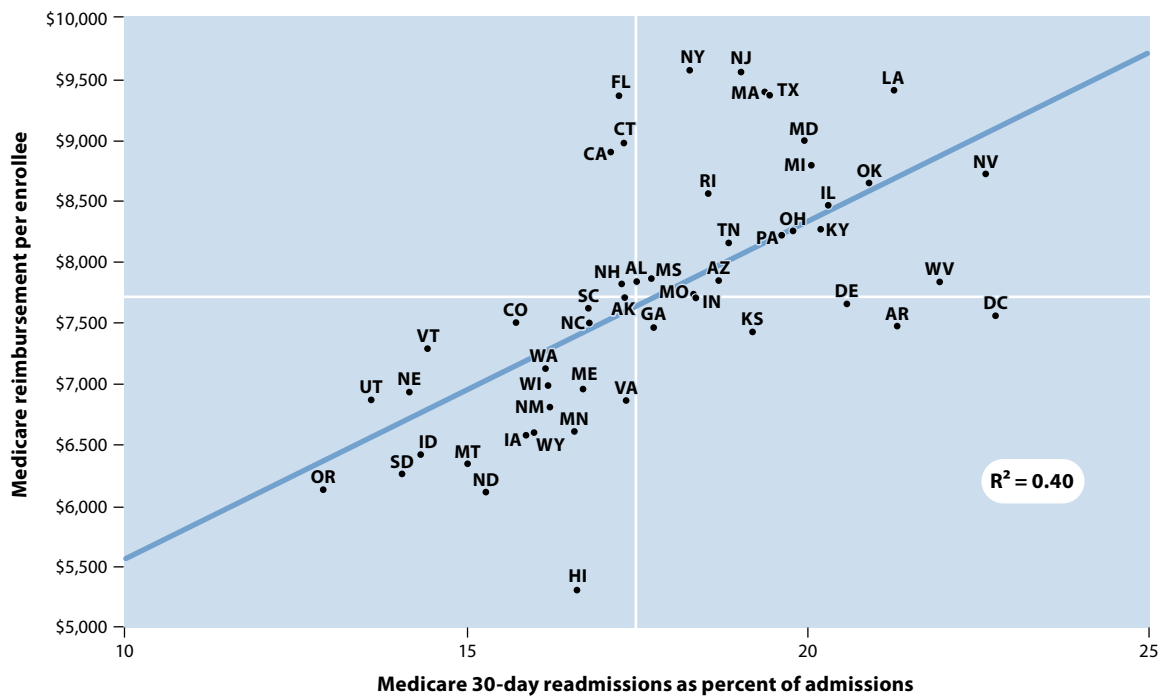
## 2009 Scorecard Compared with 2007 Scorecard: Summary of State Performance on Indicators with Trends

	Number of states with trends	State Rate Improved	State Rate Worsened	No Change in State Rate	State Rate Improved by 5% or More	State Rate Worsened by 5% or More	No Change or Less than 5% Change in State Rate
<b>Access</b>							
Nonelderly adults (ages 18–64) insured	51	20	31	0	2	1	48
Children (ages 0–17) insured	51	28	21	2	0	0	51
At-risk adults visited a doctor for routine checkup in the past two years	51	8	42	1	0	15	36
Adults without a time in the past year when they needed to see a doctor but could not because of cost	51	23	25	3	0	0	51
<b>Prevention &amp; Treatment</b>							
Adults age 50 and older received recommended screening and preventive care	51	48	3	0	26	1	24
Adult diabetics received recommended preventive care	42	26	15	1	18	6	18
Children ages 19–35 months received all recommended doses of five key vaccines	51	20	30	1	9	10	32
Children who received needed mental health care in the past year	51	27	24	0	21	12	18
Hospitalized patients received recommended care for heart attack, heart failure, and pneumonia	51	51	0	0	48	0	3
Surgical patients received appropriate care to prevent complications	51	50	1	0	49	0	2
Home health patients who get better at walking or moving around	51	50	1	0	43	1	7
Adults with a usual source of care	51	31	16	4	3	0	48
Heart failure patients given written instructions at discharge	51	51	0	0	51	0	0
Medicare patients whose health care provider always listens, explains, shows respect, and spends enough time with them	50	48	2	0	41	0	9
Medicare patients giving a best rating for health care received in the past year	50	1	49	0	0	46	4
High-risk nursing home residents with pressure sores	51	47	3	1	38	1	12
Long-stay nursing home residents who were physically restrained	51	51	0	0	51	0	0
Long-stay nursing home residents who have moderate to severe pain	51	51	0	0	51	0	0
<b>Avoidable Hospital Use &amp; Costs</b>							
Hospital admissions for pediatric asthma per 100,000 children	32	26	6	0	24	5	3
Medicare hospital admissions for ambulatory care sensitive conditions per 100,000 beneficiaries	51	48	3	0	36	2	13
Medicare 30-day hospital readmissions as a percent of admissions	51	17	32	2	5	16	30
Long-stay nursing home residents with a hospital admission	48	8	39	1	3	29	16
Short-stay nursing home residents with hospital readmission within 30 days	48	3	44	1	1	37	10
Home health patients with a hospital admission	51	13	38	0	5	27	19
Hospital Care Intensity Index, Based on inpatient days and inpatient visits among chronically ill Medicare beneficiaries in last two years of life	51	27	23	1	7	3	41
Total single premium per enrolled employee at private-sector establishments that offer health insurance	51	0	51	0	0	50	1
Total Medicare (Parts A & B) reimbursements per enrollee	51	0	51	0	0	51	0
<b>Healthy Lives</b>							
Mortality amenable to health care, deaths per 100,000 population	51	50	1	0	45	0	6
Infant mortality, deaths per 1,000 live births	51	28	22	1	14	11	26
Breast cancer deaths per 100,000 female population	51	41	10	0	27	5	19
Colorectal cancer deaths per 100,000 population	51	47	4	0	44	0	7
Suicide deaths per 100,000 population	51	23	26	2	14	18	19
Nonelderly adults (ages 18–64) limited in any activities because of physical, mental, or emotional problems	51	8	42	1	1	33	17
Adults who smoke	51	49	1	1	40	0	11
Children ages 10–17 who are overweight or obese	51	18	33	0	9	20	22

Note: Three indicators are excluded because data do not allow assessment of trends: children with medical and dental preventive care visits, children with a medical home, and adult asthmatics with emergency room visit. See Appendix B for the two time periods covered for each indicator. SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009



### Medicare Cost Per Beneficiary and 30-Day Readmissions by State



DATA: Medicare readmissions—2006–07 Medicare 5% SAF Data; Medicare reimbursement—2006 Dartmouth Atlas of Health Care  
SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

care by preventing complications, controlling chronic conditions, and providing effective transitional care following discharge has the potential to improve outcomes and lower costs.

#### Affordability is a growing concern throughout the states.

In most states, health insurance premiums have been rising faster than household incomes. Using average employer-sponsored insurance premiums (including the employee share) for individual employees as a proxy for average insurance costs in each state, the *State Scorecard* finds that by 2008, average premiums amounted to 16 percent or more of median household income in 37 states, compared with 16 states five years earlier (Exhibit 5). In 18 states, premiums amounted to 18 percent or more of median income for the under-65 population. By 2008, only three states (Colorado, New Jersey, and Maryland) had premiums averaging under 14 percent of median income.

This upward pressure on the cost of health coverage has led to erosion in the generosity of insurance benefits, which in turn has increased the number of “underinsured” individuals and caused others to lose their coverage entirely. Reversing these trends will require a dual focus on “bending the cost curve” as well as action to secure affordable coverage for all.

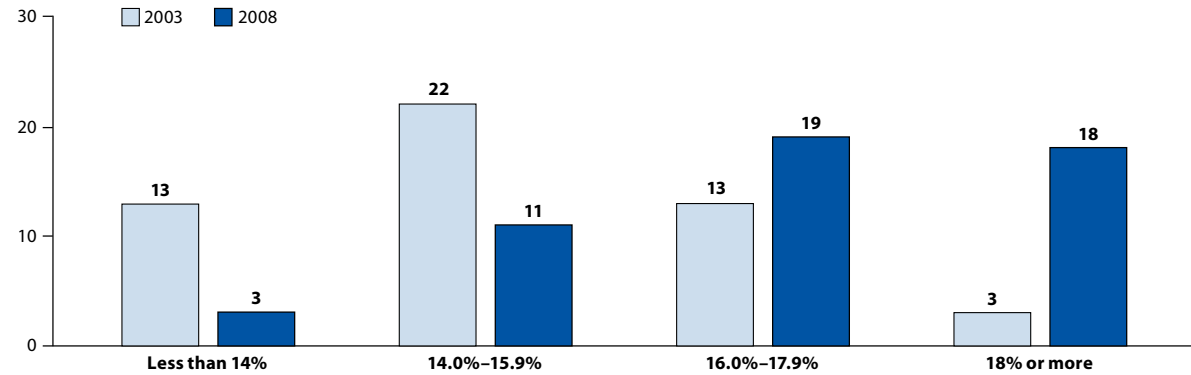
#### There is room for improvement across all states.

All states have substantial room to improve. No state ranked in the top quartile across all performance indicators. On some indicators, even the top rates are well below what should be achievable. In each of the states with the highest overall rankings, several indicators declined by 5 percent or more; each also had some indicators in the bottom quartile or half of performance. At the same time, in each of the lowest-ranked states, there were certain areas of performance that improved—some quite significantly.

While leading states such as Massachusetts, Minnesota, and Vermont have enacted policy reforms

### Average Employer Premiums as Percentage of Median Household Income for Under-65 Population, Distribution by State, 2003 and 2008

Number of states with premiums amounting to following percentages of income



DATA: Average premiums for employer-based health insurance plans (weighted by single and family household distribution)—2003 and 2008 Medical Expenditure Panel Survey; Median household incomes for under-65 population—2004–05 and 2008 Current Population Survey ASEC Supplement (representing 2003–04 and 2007 data). SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

that are extending coverage, promoting community health, and building value-based purchasing strategies through public–private collaboration, this has not been the case in the vast majority of states. Encouraging the adoption of systemic improvements will likely require Medicare’s participation in state payment initiatives and will require collaborative federal and state efforts to develop the information and shared resources infrastructure necessary to achieve high performance.

## KEY FINDINGS AND STATE VARIATIONS, BY DIMENSION OF PERFORMANCE

### Access

- For the most part, performance on the *State Scorecard’s* health care access indicators failed to improve from 2003 to 2008. Gaps in health insurance coverage between the top and bottom states remained wide, with uninsured rates for children ranging from 3 percent to 20 percent and rates for adults ranging from 7 percent to over 30 percent.
- Since the start of the decade—from 1999–2000 to 2007–08—the number of states with high uninsured rates (23% or higher) for nonelderly adults rose from two to nine, while the number with low rates (under 14%) dropped from 22 to 11. In contrast, the number of states with high children’s uninsured rates (16% or more) declined from nine to three during this time, reflecting federal support of CHIP.
- From 2004–05 to 2007–08—the time span represented in the *State Scorecard’s* coverage indicators—trends in coverage were negative in most states for adults and in two of five states for children (Exhibit 3). That this was true even before the severe recession underscores the challenge that states face in ensuring coverage for children and adults in the absence of federal action.
- Massachusetts, which had only begun to implement its universal health insurance program during the period covered by the *State Scorecard*, had the greatest increase in coverage for adults and made gains in coverage for children between 2004–05 and 2007–08, becoming the top-ranked state for the coverage of both adults and children as well as the top-ranked state for access to care overall.
- Across states, the percentage of adults who reported going without health care because of the cost is closely associated with insurance coverage and is up to three times greater in states with the highest uninsured adult rates than in states with the lowest uninsured adult rates (19% vs. 7%).

## Prevention and Treatment

- Almost all states improved on process indicators of the quality of hospital treatment (48 states by 5% or better) and nursing home care (38 to 51 states by 5% or better across three indicators). On a set of hospital clinical quality measures, the rate in the five lowest-performing states in 2007 had risen to the level of the five highest-performing states three years earlier. On an expanded set of measures to prevent surgical complications in hospitals, the variation in performance among states narrowed by half.
- Despite a 30 percent narrowing in state variation on nursing home care, the range has remained wide, with a two-to-five-fold variation between the top-five and bottom-five states.
- States have failed to match these gains when it comes to the quality of ambulatory care; even in the best states, quality continues to be well below standards. The percentage of adults age 50 and older receiving all recommended cancer screenings and immunizations ranged from a high of just 53 percent in Delaware to a low of 35 percent in Oklahoma. Only about half the states improved by 5 percent or more. The proportion of diabetic patients receiving three basic services to prevent disease complications varied from two-thirds in Minnesota to one-third in Mississippi. The rate worsened or failed to improve significantly in 24 of 42 states for which data were available.
- More than one-quarter of young children in the bottom-five states did not receive timely preventive medical and dental visits and recommended vaccinations, and in the bottom five states more than half of children who needed mental health care did not receive it. Top states, in contrast, achieved vaccination rates of 90 percent and preventive visit and mental health care rates that were 20 and 30 percentage points higher, respectively. Only nine states improved substantially (by 5% or more) on vaccination rates, while 10 lost ground. And only 21 states improved substantially on child mental health care, while 12 declined substantially.
- In 48 states, there was no appreciable change in the percentage of adults who had a usual source of care—not surprising, given the lack of improvement in health insurance coverage. The proportion

of children who received effective, patient-centered care coordination from a primary care medical home ranged from more than two-thirds (69%) in New Hampshire to less than half (45%) in Nevada.

- Across all states in 2007, there was a divergence in how Medicare patients rated their care, with provider interactions rated more highly and overall care experience rated more poorly than in 2003. (These trends should be interpreted with caution, however, because of changes in survey administration.) More data are needed to judge whether these shifts are an anomaly or represent an enduring change in patients' experiences.

## Potentially Avoidable Use of Hospitals and Costs of Care

- Hospital admissions among Medicare beneficiaries for ambulatory care sensitive conditions improved (i.e., declined) in a majority of states, although rates fluctuated from year to year—illustrating the importance of looking at long-term trends when assessing improvement. Declining hospital admissions may reflect patients' improved access to medications for chronic conditions, or incentives provided to manage such conditions better. (The way hospital administrators code diseases for reimbursement purposes also has changed, potentially influencing trends for some conditions.)
- Hospitalization rates for pediatric asthma declined across most of the 32 states that reported data in both time periods. Yet despite some narrowing in state variation, rates were three times greater in the highest-rate states compared with the lowest-rate states, indicating that an opportunity exists for further reductions to benchmark levels.
- Hospital admissions and 30-day readmissions among nursing home residents increased by 8 percent and 11 percent, on average, between 2000 and 2006, with negative trends seen in a significant majority of states. Rates went up by 5 percent or more in 29 to 37 out of 48 states for which trend data were available for these two indicators. Rates in the worst-performing states (i.e., those with the highest admission rates) were two to three times higher than in the best-performing states, and the ranges widened.

- The 30-day hospital readmission rate among all Medicare beneficiaries either failed to improve or increased across most states from 2003–04 to 2006–07, with continued sharp variation across states. Readmission rates in 2006–07 ranged from lows of 13 to 14 percent in the best-performing five states (Oregon, Utah, South Dakota, Nebraska, and Idaho) to highs of 21 to 23 percent in the worst-performing five states (Louisiana, Arkansas, West Virginia, Nevada, and the District of Columbia). Improvements in some states, as well as recent experience in some hospitals, suggest that all states could improve if incentives were better aligned to support care transitions and improve quality of care.
- Medicare fee-for-service spending per person grew by 6.5 percent per year from 2003 to 2006 for the median state—more than twice the rate of general inflation. The gap in per-beneficiary spending between the highest- and lowest-cost states widened. By 2006, average per-beneficiary spending in the five most costly states was 50 percent higher than average spending in the five least costly states (\$9,439 vs. \$6,027).
- Employer premiums (including the employee shares) for a single individual rose an average of 4.5 percent per year in the median state from 2004 to 2008; average annual increases ranged from 8.5 percent in Utah to less than 1 percent in neighboring Nevada. Premiums bought less coverage, as annual deductibles and cost-sharing went up during this time. By 2008, average premiums in the highest-cost states were 30 percent higher than in the lowest-cost states (\$5,056 vs. \$3,904).
- Only eight states—Connecticut, Delaware, New York, Utah, Wisconsin, Oregon, Montana, and Michigan—saw the equity gap narrow, with the vulnerable group improving on more than half of equity indicators and improving relative to the national average. The greatest gains in equity across states were in mortality amenable to health care. Yet even on this indicator, in only half the states was the gap reduced for blacks relative to the national average; moreover, within all states, white–black differences remained large.
- In those states ranked at the top for equity overall, the gaps between vulnerable groups (low-income, uninsured, and minority) and national averages tended to be smallest. Six of the 13 top-ranked states—Maine, Vermont, Rhode Island, New Hampshire, Delaware, and Iowa—scored in the top quartile on this dimension for all three vulnerable groups. Conversely, five of the 13 states in the bottom quartile of the overall equity rankings score in the bottom quartile for all three groups.
- In some higher-performing states, traditionally disadvantaged groups reported quality of care that exceeded the national average. For example, the percentage of low-income diabetic patients receiving basic recommended services was higher in 11 states than the national average for all diabetics (44%). In a few instances, the care received by vulnerable groups was on par with that received by the typically advantaged group.
- The performance patterns for the equity dimension indicate that it is possible to close gaps—and raise the floor on performance—for vulnerable groups in comparison with national averages.

### Equity

- In most states, there are wide “equity gaps” in performance on access and quality indicators based on income level, health insurance status, and race/ethnicity. Disturbingly, in the majority of states, these equity gaps widened over time. Equity gaps were most likely to worsen for access and coordination of care. (Equity gaps measure the difference between the experiences of vulnerable population groups in each state and the national average for a total of 24 equity comparisons, only 17 of which had data that could be compared over time.)

### Healthy Lives

- Rates of mortality for conditions amenable to health care improved in most states from 2001–02 to 2004–05, but wide regional variation persists. Average death rates were 68.2 per 100,000 persons in the lowest-rate states (Minnesota, Utah, Vermont, Colorado, and Nebraska) compared with 135.4 per 100,000 in states having the highest mortality rates (Mississippi, Louisiana, Arkansas, and Tennessee) and the District of Columbia.
- Looking just at white mortality rates for conditions amenable to health care, the spread across states

is also wide, ranging from a low of 61 deaths per 100,000 in Minnesota to a high of 111 deaths per 100,000 in West Virginia.

- In all states, potentially preventable deaths among blacks are considerably higher than among whites. Even in the five states with the lowest rates for blacks on this indicator, there is still an average of 92.0 deaths per 100,000 blacks, which exceeds the national average for whites. Preventable deaths among whites have gone down in most states, yet some states have had increases in black mortality, resulting in widening disparities.
- State variations in breast and colorectal cancer narrowed between 2002 and 2005, as bottom-ranked states improved faster than states with the lowest cancer mortality rates. Notably, rates of colorectal cancer deaths in the bottom states are now at the median state rate observed in 2002.
- Few states experienced appreciable improvement in their infant mortality rates from 2002 to 2005. Signaling the need for urgent action, several states with already high rates experienced further increases, reaching an average of more than 11.0 deaths per 1,000 births—more than double the rates of states with the lowest infant mortality (4.5 to 5.1 deaths per 1,000 births).
- Smoking rates among adults declined by 5 percent or more in the majority of states from 2003–04 to 2006–07. Yet more than one of four adults smoke in high-rate states, compared with just one of 10 in Utah, the lowest-rate state.
- Obesity is a growing concern across states. As of 2007, at least a quarter of children ages 10 to 17 are overweight or obese in all but three states (although these states are not far behind). And one of three children is overweight or obese in 17 states, with regional patterns closely tracking mortality amenable to health care.

## SUMMARY AND IMPLICATIONS

In the midst of the current national debate on health system reform, the *State Scorecard* provides a framework for states to take stock of how they are currently performing and where they have opportunity to improve. The challenge for all states and for all private-sector health care delivery system leaders is this: to learn to use health care resources more

effectively and efficiently, so that greater value and greater gains in outcomes can be realized. Achieving this goal will require incentives to improve and payment systems that support high-value care. There is also a need for greater integration of medical and public health interventions to help people adopt and maintain healthy lifestyles, as a means to counter the growing threat of obesity and prevent the development of chronic diseases—a major source of health care costs.

The erosion of insurance coverage (with the notable exception of a few states) and the high uninsured rates in many states underscore the need for national reform and federal action to extend affordable insurance and ensure access for everyone. Federal and national reforms also are needed to enable all-population data, spread the adoption and effective use of health information technology, and initiate payment reforms. The Medicare program, as the single-largest payer of hospitals and physicians, has the ability to serve as a national leader in the area of payment reform.

Wide geographic variations, as well as states' commonly shared concerns over care coordination and rising costs, further point to the need for national reforms that would stimulate and support state initiatives to improve performance. In the *State Scorecard*, those states that face the greatest health care challenges often have high poverty rates and more limited resources to invest in improvements. Moreover, the experience of the economic recession highlights the challenges of “going it alone”—even for states at the top of the scorecard rankings.

State action is similarly critical. States play many roles in the health system: purchasers of coverage for vulnerable populations and for their employees; regulators of providers and insurers; advocates for public health; and, increasingly, conveners of and collaborators with other health system stakeholders. State action is also key to improving primary care infrastructures and community-wide systems that facilitate access, improve coordination, and promote effective care.

Hence, a cogent and congruent set of national and state policies is needed to move the country further on the path to higher performance. Disparities across states point to the importance of federal action that

raises the floor on performance levels across all states and creates a supportive climate for state innovation and achievement. The Commonwealth Fund's Commission on a High Performance Health System has identified five essential strategies for comprehensive reform. States can play an important role in fulfilling these aspirations as part of a broader national effort.

- 1. Affordable coverage for all.** In addition to working toward comprehensive insurance coverage reforms, states can improve affordable access and efficiency in the organization of insurance through effective oversight and reform of insurance markets and value-based purchasing of health plans for state employees. Expanding eligibility for Medicaid and CHIP and improving payment for health care providers would lead to greater participation in these programs and expand access to care for low-income families. Federal action is essential for setting a national floor of coverage across states that ensures access and financial protection and eliminates disparities.
  - 2. Align incentives with value and effective cost control.** The U.S. health system's reliance on fee-for-service reimbursement creates incentives for providers to increase the volume of services they deliver—irrespective of the value of that care. Strategic payment reforms include reimbursing providers with more “bundled” payments for services with accountability to encourage efficiency, and providing financial support to develop and spread primary care medical homes. Several states are looking to multipayer initiatives to move in the same direction, with an emphasis on value and on bending the cost curve. Given the fragmentation of health insurance, it will be critical for public and private payers to work together to create consistent and coherent incentives.
  - 3. Accountable, accessible, patient-centered, and coordinated care.** States can design their Medicaid and CHIP programs in a way that links enrollees with a personal source of care that can serve as a medical home to facilitate appropriate care and manage chronic conditions. Several states are collaborating in multipayer, public-private demonstrations to develop and evaluate the effectiveness
- of primary care medical homes. The federal government recently announced a new demonstration that will allow Medicare to participate in such initiatives. States are also investing in key support systems for smaller physician practices—including more nurses and modern information systems—to facilitate delivery of effective, patient-centered care and to build community capacity.
- 4. Aim high to improve quality, health outcomes, and efficiency.** Benchmarks set by leading states, as well as exemplary models of innovation found throughout the U.S., show that there are broad opportunities to improve and achieve better and more affordable health care for all. Information is critical to guide and drive change. The federal economic stimulus legislation provides the opportunity for states to play an important supporting role in the development of health information exchanges, which can help improve quality and efficiency by allowing providers to get timely information needed to treat patients effectively and prescribe drugs safely. States can also play a central role in building all-population, all-payer databases on costs, quality, and outcomes that can inform improvement and hold providers accountable for the care they deliver. Such systems also facilitate goal-setting and monitoring of the effect of policy and practice changes over time.
  - 5. Accountable leadership and collaboration to set and achieve national goals.** Top-performing states set benchmarks and provide examples of the leadership and collaboration necessary to improve. They and other states that have made gains have established quality improvement partnerships with other health system stakeholders to promote standard approaches to quality measurement, public reporting and transparency, consumer and provider engagement, and payment reform to encourage value-based purchasing. With the prospect of national reform, there may be new opportunities for Medicare to put in place the payment policies that are necessary to move forward.

The *State Scorecard* shows that all states can aim higher in their health system performance. But without federal reforms to help states stem rising costs and provide more affordable coverage, access will likely deteriorate. At the onset of the current recession, 1.5 million more adults were uninsured in 2008 than in 2007 because of a drop in employer-sponsored coverage, while the rate of uninsured children declined to its lowest level since 1987—an accomplishment made possible by coverage gains under government-provided health insurance such as Medicaid and CHIP. Estimates have the number of uninsured climbing to 61 million by 2020, with millions more expected to be underinsured.

Such erosion in access and the ability to pay for care would exacerbate financial stress for families, overwhelm safety-net providers, and undermine the financial foundation of community health systems—putting quality care at risk for everyone. With rising costs putting pressure on families and businesses alike, it is urgent that states and the federal government join together to take action to enhance value in the health care system and ensure that everyone has the opportunity to participate in it fully.

## Introduction

As states confront the shared challenges of meeting their populations' health needs and achieving higher-value, affordable health care systems, they need a way to take stock of their performance and identify areas for improvement. Benchmarks drawn from the range of states' performance on health system measures offer one such way, providing achievable targets and focusing public attention on opportunities to close the gap with top-performing states.

The 2009 edition of *Aiming Higher: Results from a State Scorecard on Health System Performance* builds on The Commonwealth Fund's series of scorecards assessing national and state health care systems across core dimensions of performance.<sup>1</sup> The central goal of the state-level analysis is to inform action to ensure that residents of every state have access to high-quality and efficient care within systems that strive to improve population health. Prepared for state policymakers, national leaders, and other health care stakeholders, the *State Scorecard* is a resource for information on states' performance with respect to health care access, quality, potentially avoidable hospital use and costs, and population health. It also provides a means to gauge the impact of reform efforts and identify targets for improvement.

The 2009 *State Scorecard* has been updated and expanded from the inaugural 2007 edition. It includes 38 indicators (of which six are new), grouped into five

dimensions of performance: access to care, prevention and treatment, potentially avoidable hospital use and costs of care, equity, and the ability to live long and healthy lives (referred to as "healthy lives"). The analysis examines the range of variation across states and assesses performance relative to *what has already been achieved* by individual states. The scorecard ranks all 50 states and the District of Columbia on each of the 38 indicators and on each of the five dimensions of performance. The overall rank consists of the average across the five dimension rankings.

The six new indicators in the 2009 *State Scorecard* include the following:

- percentage of home health patients who got better at walking or moving around;
- percentage of long-stay nursing home residents who have moderate to severe pain (supplementing two existing nursing home quality indicators);
- hospital care intensity index (average number of inpatient days and inpatient physician visits among chronically ill Medicare beneficiaries during the last two years of life, relative to national rates);
- number of suicides (as an indicator of the adequacy of mental health care);
- percentage of adults who smoke (amenable to physician assessment, advice, and referral to smoking cessation programs as part of broader public health initiatives); and
- percentage of children who are overweight or obese (amenable to medical counseling on diet and exercise as part of public health improvement).

To enable assessment of change over time, we expanded the baseline results from the 2007 edition of the *State Scorecard* to include these six indicators.

The 2009 *State Scorecard* ranks states relative to the performance of other states based on the most recent data available—typically from 2006 or 2007, but with 2008 data on health coverage and insurance premium rates. It also assesses changes across states as well as changes in each state's performance relative to its own baseline performance on each indicator, with the periods examined ranging from two to seven years for the 35 indicators for which there are comparable trend data available. The analysis examines

**Note:** this report summarizes results of the *State Scorecard* and presents overall state rankings and rankings on each of the five dimensions of health system performance. Appendices present state-level data for all indicators, showing both current performance and changes since the baseline time period. *State Scorecard Data Tables* that display data and state rankings for all indicators, including data by income, insurance, and racial/ethnic groups for equity indicators, can be downloaded from the Commonwealth Fund Web site at [www.commonwealthfund.org](http://www.commonwealthfund.org). The Web site also provides state performance profiles that compare each state to the top state, top five states, and state median rates and display summary information on indicator rankings and time trends. An analysis of the impact on access, costs, and lives for each state if it were to achieve the top level of performance on each of 11 key indicators also can be downloaded from the Commonwealth Fund Web site.



## State Ranking on Health System Performance by Dimension

○ = State in top quartile

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

\* Final rank for overall health system performance across five dimensions

positive or negative changes in states' performance on the 35 indicators and assesses whether the range of performance across states is narrowing or widening (see Appendix A).

In cases where updated data have become available or measurement definitions have changed, we revised baseline data and ranks to allow “apples-to-apples” comparisons over time. Hence, baseline data and ranks may differ from those initially reported in the 2007 *State Scorecard*. Though temporal comparisons provide a useful perspective, they should be interpreted with caution, since they represent only two points in time. The methods box below explains the *State Scorecard* methodology and limitations on data currently available at the state level.

Summary exhibits show indicators, the range of variation across states, and overall state rankings, as well as ranks within dimensions. Exhibit 1 shows the overall state rankings by quartiles in the 2009 *State Scorecard* and the revised 2007 *State Scorecard*. Exhibit 2 lists the indicators included in each dimension of performance and illustrates the range of performance across states, in both the baseline and current periods. Exhibit 3 displays trends in performance, showing the number of states that improved, grew worse, or stayed about the same for each indicator. Exhibit 6 shows overall state rankings and where each state ranks on the five dimensions.

The appendix to this report provides data for all indicators organized by dimension, including rates of change. The first four appendix exhibits display summary information. Exhibit A1 shows how many indicators each state had in each performance quartile. Exhibit A2 shows a count of indicator trends by dimension and Exhibit A3 shows the number of indicators that improved, grew worse, or stayed about the same for each state. Exhibit A4 summarizes changes in the subset of equity indicators (drawn from the access, prevention and treatment, and healthy lives dimensions) for each state. The appendix also includes demographic tables that profile states by income, incidence of poverty, health risks, and income eligibility standards for public coverage programs.

In the sections that follow, we present the 2009 *State Scorecard* results, organized by the five dimensions of performance. The discussion focuses on key indicators and the gains possible if all states were

to achieve the performance level of the top states. Looking across dimensions, the summary section of the report discusses the primary cross-cutting findings based on state patterns and variations. These include:

- Despite notable improvements, wide variation among states persists in terms of access to care, quality of care, and costs. In other words, where you live matters.
  - › Leading states consistently outperform lagging states across indicators and dimensions.
  - › Across states, better access to care is closely associated with better quality of care, as measured by prevention and treatment indicators.
  - › Public policies and public–private collaboration can foster an environment that supports higher performance.
- Improvements made in key areas of health care quality are a hopeful sign underscoring the importance of tracking performance information and setting benchmarks to improve.
- Symptoms of poor care coordination and inefficient or suboptimal use of resources point to opportunities to improve both the quality and costs of care.
  - › Higher quality is not systematically associated with higher costs.
  - › There are significant opportunities to reduce costs while improving access and quality.
- Affordability of care is a growing concern among states.
- All states have substantial room to improve.

The final sections of the report examine the potential impact of improving performance and implications for policy action. The analysis includes estimates of the cumulative reductions in preventable deaths, improvements in health care access and quality, and cost savings that would be possible if all states were to achieve the top level of performance within the current range of state variation on each of 11 key indicators.

The conclusion to this report outlines key areas in which state and federal action will be critical to move forward. Overall, the 2009 *State Scorecard* shows that we have much to gain as a nation from national and state policies that aim for a higher-performing health system.

## WHAT THE SCORECARD MEASURES

### Dimensions and Indicators

The *State Scorecard* measures health system performance for all 50 states and the District of Columbia using 38 key indicators (Exhibit 2). It organizes indicators by five broad dimensions that capture critical aspects of health system performance:

- **Access** includes rates of insurance coverage for adults and children and indicators of access and affordability of care.
- **Prevention and treatment** includes indicators that measure three related components: effective care, coordinated care, and patient-centered care.
- **Potentially avoidable use of hospitals and costs of care** includes indicators of hospital care that might have been prevented or reduced with appropriate care and follow-up and efficient use of resources, as well as the annual costs of Medicare and private health insurance premiums.
- **Equity** includes differences in performance associated with patients' income level, type of insurance, or race or ethnicity.
- **Healthy lives** includes indicators that measure the degree to which a state's residents enjoy long and healthy lives, as well as factors such as smoking and obesity that affect health and longevity.

Whenever possible, indicators were selected to be equivalent to those used in the *National Scorecard on U.S. Health System Performance*. However for some areas, there are no reliable or useful measures available at the state level. For instance, databases do not currently track effective management of chronic conditions, adverse medical or medication events, or potential overuse or duplication of health services across all states. As such, the *State Scorecard* will evolve and explore these concepts as new measures and data sources become available.

In this 2009 edition, six new measures were added: two in effective care (home health patients getting better at walking or moving around, nursing home residents having moderate to severe pain); one in avoidable use of hospitals (Dartmouth Atlas index of hospital care intensity); and three in healthy lives (suicide deaths, adults smoking, and children overweight or obese).

To examine trends, we updated the baseline analysis presented in the 2007 edition to include the expanded set of measures as well as any refinements in methods or measures since the first release. Therefore, baseline results presented in this edition are revised and will not match results reported in the earlier report.

One indicator could not be updated (the percent of adult asthmatics with an emergency room or urgent care visit) and two indicators taken from the National Survey of Children's Health are not available on a comparable basis as a result of survey changes (the percent of children with a medical and dental preventive care visit, and the percent of children with a medical home). Therefore, a maximum of 35 indicators have data that can be compared over time. All of the updates span at least two years, with the majority spanning from three to six years (one indicator shows change over seven years). For some measures, data over several years were combined to enhance the sample size. Still, trends should be interpreted with caution since they represent only two points in time.

See Appendix B for years, databases, and descriptions for each of the indicators included in the *State Scorecard*.

### Scorecard Ranking Methodology

The *State Scorecard* first ranks states from best to worst on each of the 38 performance indicators. We averaged rankings for those indicators within each of the five dimensions to determine a state's dimension rank and then averaged the dimension rankings to arrive at an overall ranking on health system performance. This approach gives each dimension equal weight and, within dimensions, weights indicators equally. We use average state rankings for the *State Scorecard* because we believe that this approach is easily understandable. This method follows that used by Stephen Jencks and colleagues when assessing quality of care for Medicare beneficiaries at the state level across multiple indicators.<sup>2</sup>

For the equity dimension, we ranked states based on the difference between the most vulnerable subgroup (i.e., low income, uninsured, or racial/ethnic minority) and the U.S. national average on selected indicators. The gap indicates how the vulnerable subgroup fares compared with the U.S. average—an absolute standard.

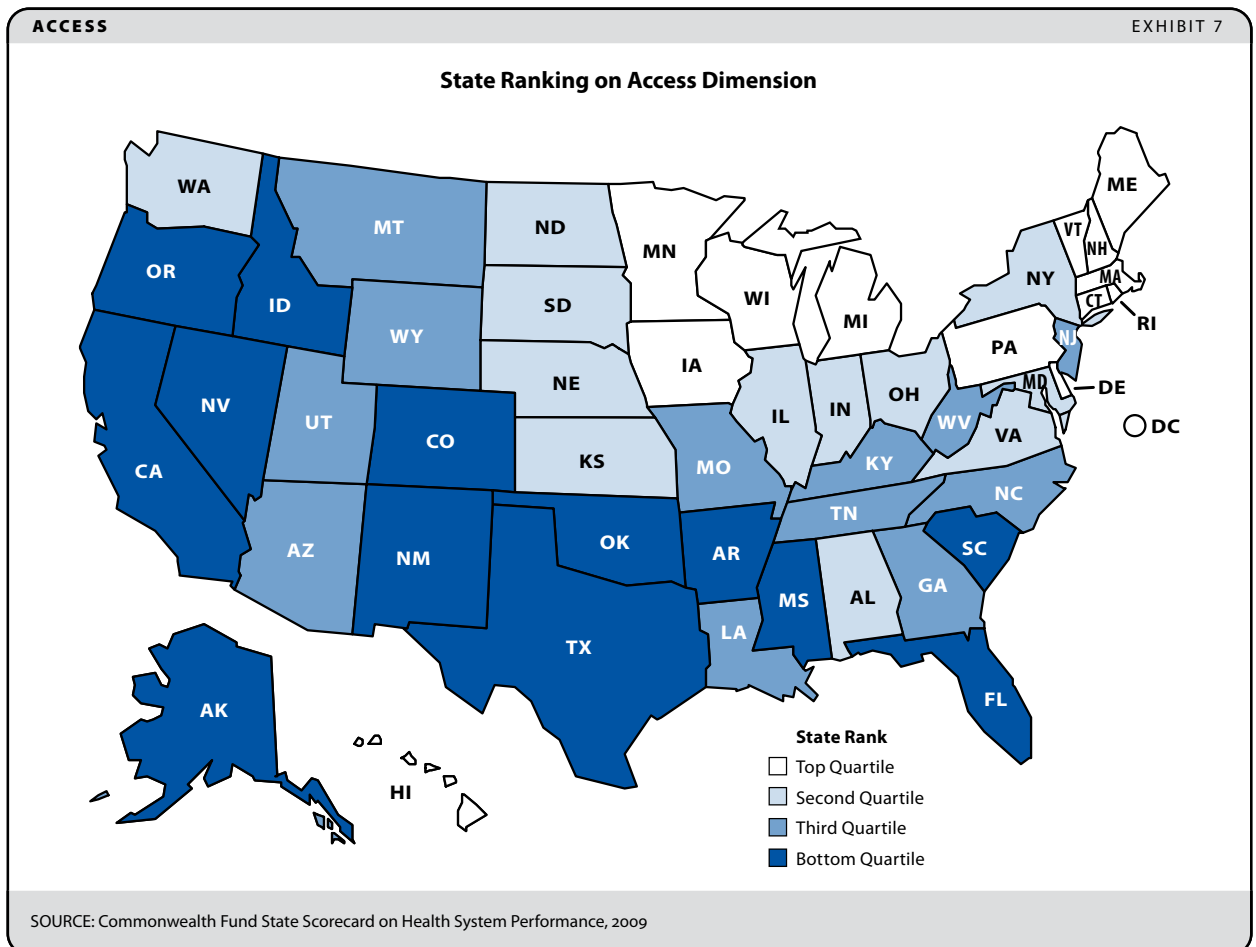
## Access

Access to health care is the foundation and hallmark of a high-performance health system. The foremost factor in determining whether people have access to care when needed is having health insurance that covers essential care. The extent to which insurance provides affordable access also depends on the design of benefits, and whether provider payment policies secure adequate networks of primary and specialized care. The *State Scorecard's* access dimension looks at the percentages of adults and children with insurance and tracks trends in coverage. The two other indicators in this dimension include the percentage of older and/or sicker adults who are likely to need care and who visited a doctor in the last two years for a routine checkup (including adults ages 50 and older, in fair or poor health, or with selected chronic conditions) and the percentage of adults who reported that they went without care because of costs.

The 2009 *State Scorecard* finds there are still significant gaps in access to care across the nation, with most states failing to improve on most of these indicators. These findings are drawn from a period before the economic downturn of 2008–09, so failure to improve and negative trends are likely to have been a prelude to worsening access to care.

The leading states on access—concentrated in the Upper Midwest and Northeast, plus Hawaii—tended to perform well on all four access indicators (Exhibit 7). The top-ranked states are among those with the most expansive policies supporting public health insurance for low- and moderate-income families and insurance market reforms to expand coverage (see table).

Access: Top-Performing States	
Top 5 States	Rank
Massachusetts	1
Minnesota	2
Connecticut	3
Iowa	4
Maine	5



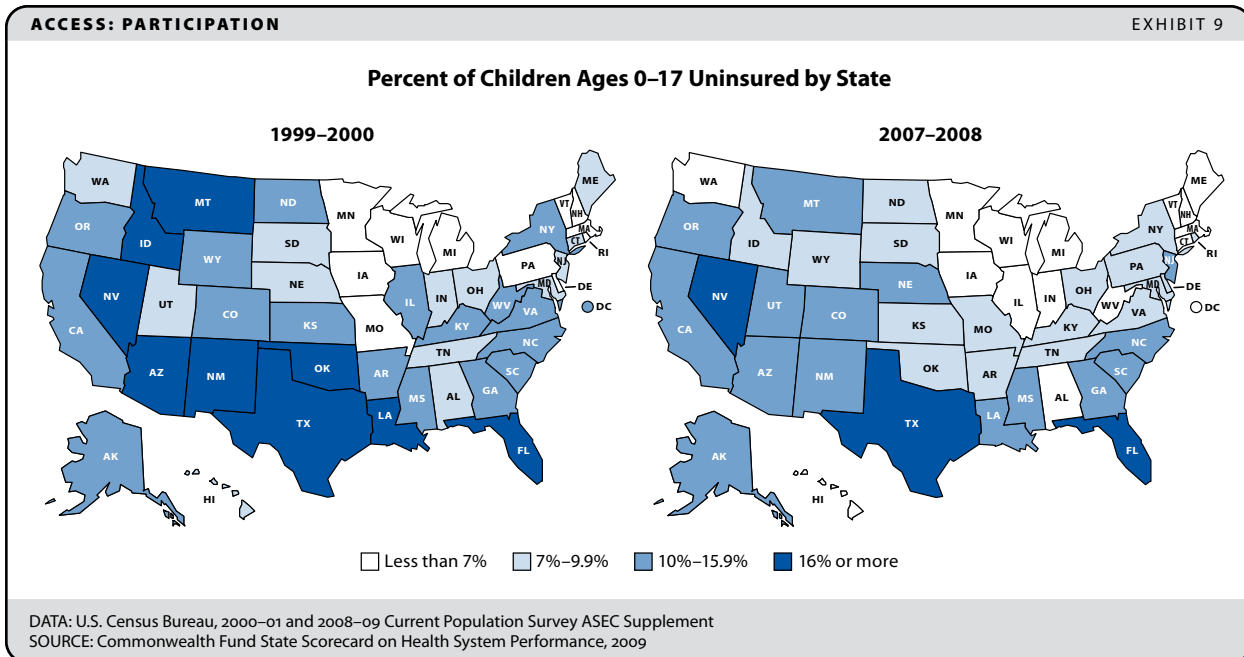
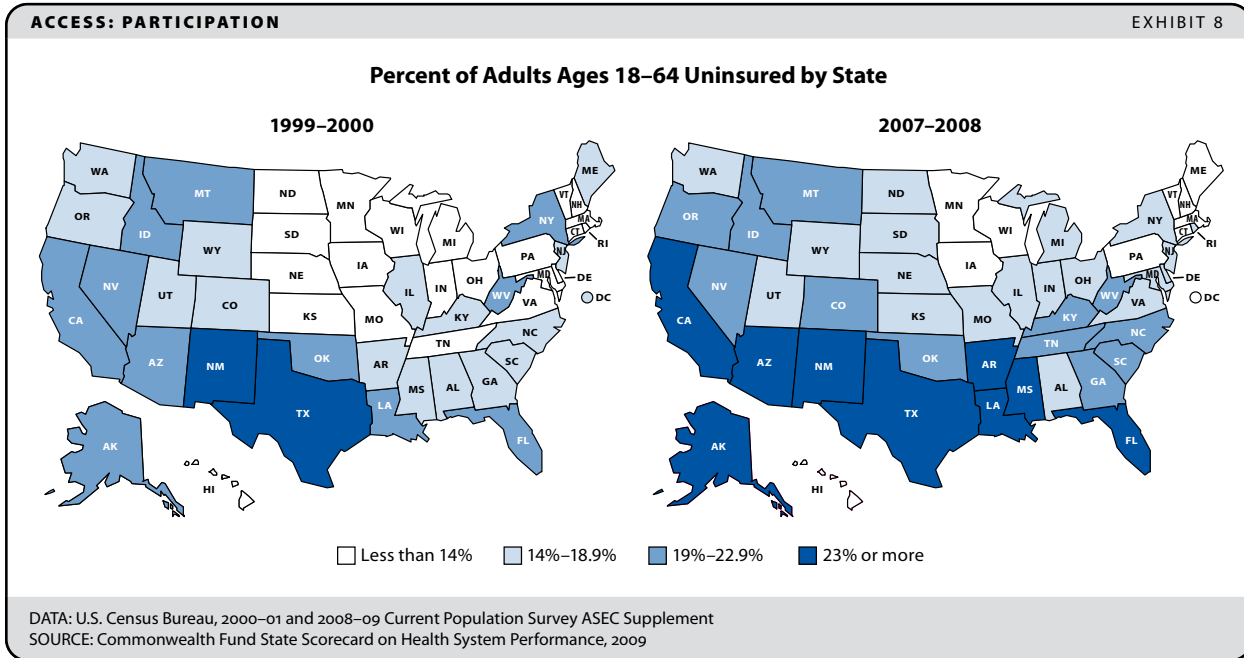
Massachusetts garnered the top ranking because it has the lowest rate of uninsured residents in the country—an especially notable achievement given that the scorecard data reflect a period during implementation of recent reforms in that state.

**PARTICIPATION**

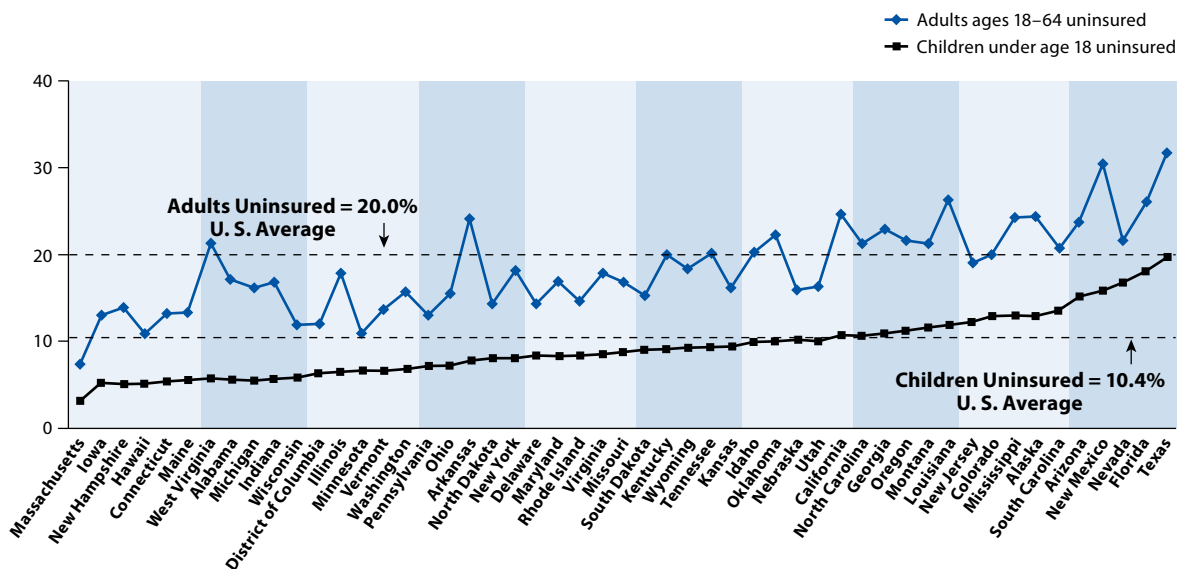
Absent federal reform, health care coverage and access are expected to deteriorate in coming years,

with the number of uninsured Americans projected to grow from 46 million currently to at least 61 million by 2020.<sup>3</sup> In most states, rates of health insurance coverage for adults ages 18–64 failed to improve or deteriorated between 2004–05 and 2007–08, the periods examined in the two editions of the *State Scorecard*.

As of 2007–08, one of five nonelderly adults was uninsured, on average, across the nation—even before



## Percent of Adults and Children Uninsured by State, 2007–08



Data: U.S. Census Bureau, 2008–09 Current Population Survey ASEC Supplement  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

the onset of the economic recession. Across states, the percentage of nonelderly adults who were uninsured ranged from a low of 7 percent in Massachusetts and 11 percent in Hawaii and Minnesota to a high of 30 percent in New Mexico and Texas.

Since the beginning of the decade, there has been considerable erosion in coverage for adults. Between 1999–2000 and 2007–08, the number of states with high rates of uninsured adults under age 65 (23% or more) rose from just two to nine (Exhibit 8). In contrast, the number of states with low rates of uninsured adults (under 14%) declined from 22 to 11 (including the District of Columbia).

Between 1999–2000 and 2007–08, uninsured rates among adults and children moved in different directions, as a result of federal/state action to improve coverage for low- and moderate-income children (but not for adults). The number of states with high rates of uninsured children (16% or more) declined from nine to three (Exhibit 9). Alabama is particularly notable among southern states for having among the lowest rates of uninsured children.

Still, from 2004–05 to 2007–08, the uninsured rate among children failed to improve in close to half of states. In four states, the percentage of uninsured children actually increased by at least three percentage

points—reversing earlier gains. The gap between the best and worst states in terms of children's coverage remains wide, ranging from a low of 3 percent uninsured children in Massachusetts to a high of 20 percent in Texas (Exhibit 10).

In all, 38 states experienced some decline in the percentage of children or adults with insurance. Therefore, moving coverage trends in more positive directions is a broad concern.

These trends do not yet capture the full effects of the 2008–09 recession, such as the loss of employer-sponsored insurance attributable to job losses. The reauthorization and expansion of the Children's Health Insurance Program (CHIP) in 2009 could make up to 4 million more children eligible for CHIP coverage over the next four years if states match federal funding,<sup>4</sup> which would help to offset the effects of the recession (e.g., loss of family health coverage) on rates of children's coverage. Yet states are facing deficits even with federal stimulus support—making it difficult to hold the line on coverage. In California, for example, the number of uninsured children may double in the coming months as state budget cuts, and the consequent loss of federal matching dollars, are expected to cut CHIP funding nearly in half.<sup>5</sup>

## PHYSICIAN VISITS AND COST BARRIERS

Not surprisingly, given these insurance trends, the share of at-risk adults (those who are age 50 or above, chronically ill, or rated their health as fair/poor) who visited a doctor for a routine checkup in a two-year period either failed to improve substantially or declined across states from 1999–2000 to 2006–07 (Appendix Exhibit A6). The percentage of at-risk adults who had not seen a doctor for two years for a checkup ranged from a low of 7 percent in Rhode Island to 25 percent in Oklahoma, the lowest-ranked state. Compared with the 2007 *State Scorecard*, the spread across states widened.

Similarly, there was no improvement in the number of adults saying they went without care because of costs. Responses ranged from a low of 7 percent in Hawaii, Massachusetts, and North Dakota to a high of 19 percent in Mississippi and Texas.

### SOME STATES DEMONSTRATE IMPROVEMENT

In spite of the lack of improvement overall, several states stand out as high performers in providing access to care or having made substantial gains, compared with their baseline scorecard rates. Between 2004–05 and 2007–08, Massachusetts—which had just begun to implement its universal coverage program—saw the greatest increase in coverage rates for adults and further increased its already-high child coverage rates. It is now the top-ranked state in providing coverage for both adults and children. Like Massachusetts, other states that are in the top five performers in the access dimension—Minnesota, Connecticut, and Maine—have supported major coverage expansions. Maine is notable in this respect, since its median income is well below that of the other leading states.

But improvement was not limited to states that historically have been active in expanding access to care. West Virginia moved from the bottom to the top of the third quartile of states in this dimension, with adult and children coverage rates improving by 2.3 percentage points each from 2004–05 to 2007–08 period. Although West Virginia still ranked low on measures of care utilization, it was one of the few states that held steady or experienced marginal improvement in adults' reports of access (i.e., checkup

visits and not forgoing care because of costs). Many of the states that improved the most or ranked high, such as Massachusetts and West Virginia, achieved their progress by closing gaps between high- and low-income individuals with respect to insurance coverage or other access indicators.

Notably, gains in coverage for adults did not always translate to improvement on other access indicators (i.e., routine checkups and not forgoing care because of costs). This indicates that it may take time for coverage expansions to reduce cost or other barriers to care noticeably. The most recent research on the Massachusetts health insurance reforms bears this out: as of the fall of 2008, two years after insurance reforms were implemented, barriers to care have been reduced and affordability has improved.<sup>6</sup>

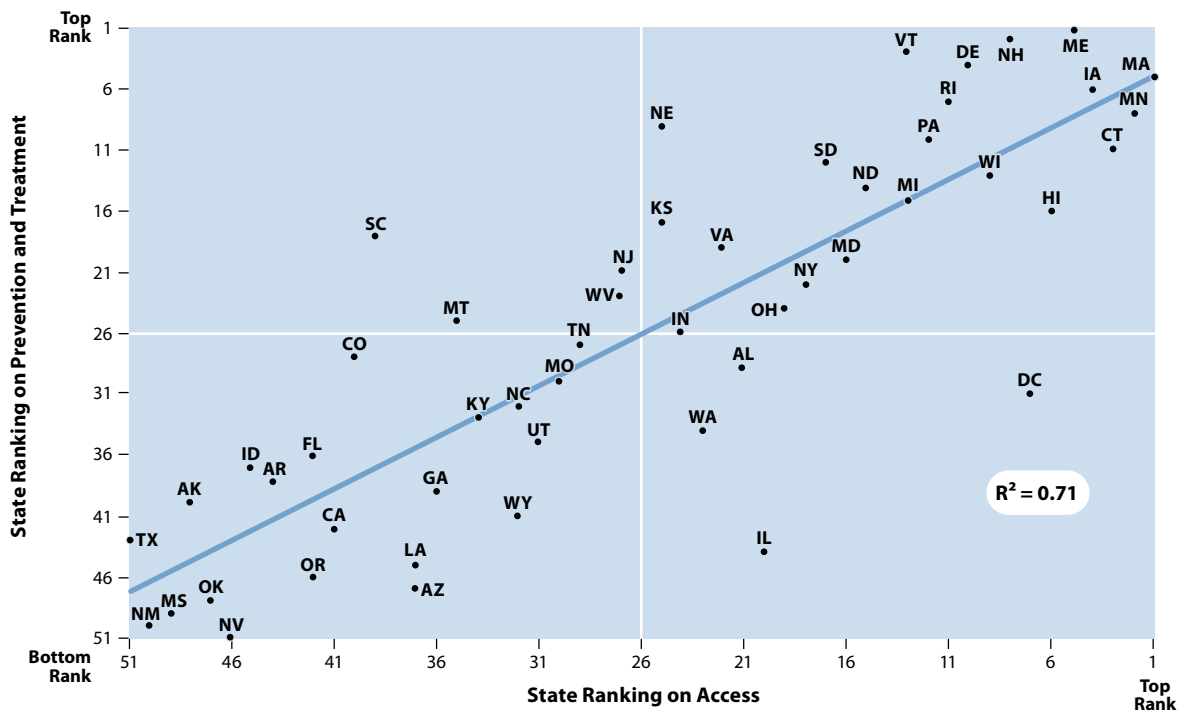
Across all of the access indicators, the picture generally remained more positive in the Upper Midwest and Northeast and worse in western and southern states. Some states in the South (West Virginia, Alabama, and Georgia) and West (Utah, Montana, California, and Wyoming) improved their ranking relative to other states because they performed better than average. Rates of coverage for adults and children increased in West Virginia, while coverage rates declined for both groups in neighboring Virginia and Kentucky. The ranking of a number of southern states declined because of worse performance on the two measures gauging barriers to care. In contrast, some states that improved their ranking, such as Georgia and Wyoming, did so primarily by holding the line while other states declined.

### THE NEED FOR FEDERAL ACTION

Some states have achieved comparatively low uninsured rates for children, despite having high adult uninsured rates (Exhibit 10). Federal support provides states with resources to expand Medicaid or CHIP programs by raising eligibility thresholds or offering 12-month continuous eligibility. These strategies have helped states such as West Virginia and Arkansas hold down uninsured rates for children, despite having adult uninsured rates at or above the national average.

Large differences between the eligibility standards for public health insurance programs for children and those for adults contribute to the uneven progress made in covering both groups. Nearly all states extend

State Ranking on Access and Prevention/Treatment Dimensions



SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

CHIP coverage to children in families with incomes up to 200 percent of the federal poverty level (FPL) or higher—as much as 350 percent of FPL.<sup>7</sup> Meanwhile, few states cover adults at this income level. In 34 states, families would have to have incomes below 100 percent of the poverty level in order for parents to qualify for Medicaid; in 14 of these states, income thresholds for parents are set below 50 percent of poverty. Thirty states do not cover childless adults at any income level unless they are disabled (Appendix Exhibit A7).<sup>8</sup>

With the exception of a few states, insurance coverage is eroding across the nation—and especially across the South and West—underscoring the challenge to state-based coverage expansion initiatives. State fiscal constraints, which may be exacerbated once federal stimulus funding expires, combined with the erosion of job-based coverage, indicate that achieving significant coverage expansions will require federal action.

To raise the floor on state performance and ensure access to care for everyone, federal policies are necessary to galvanize and sustain public expansion

efforts by states. At the same time, state policies and strategies, including simplification of the enrollment process for public insurance and outreach to ensure that all who qualify participate, can make a difference. States also can enhance access to care in low-income, rural, and other underserved communities by investing in primary care, community health centers, and other safety-net resources.

### ACCESS PROMOTES QUALITY

Across states, better access to care and higher rates of insurance are closely associated with better quality of care, as measured by prevention and treatment indicators (Exhibit 11). In states where more people are insured, adults and children are more likely than those in states with lower insurance rates to have a usual source of care or a primary care “medical home” (a regular source of care that meets criteria for effective and patient-centered care coordination; see Appendix B for complete definition) and to receive recommended preventive and chronic care. Eleven of the 13 states in the top quartile of



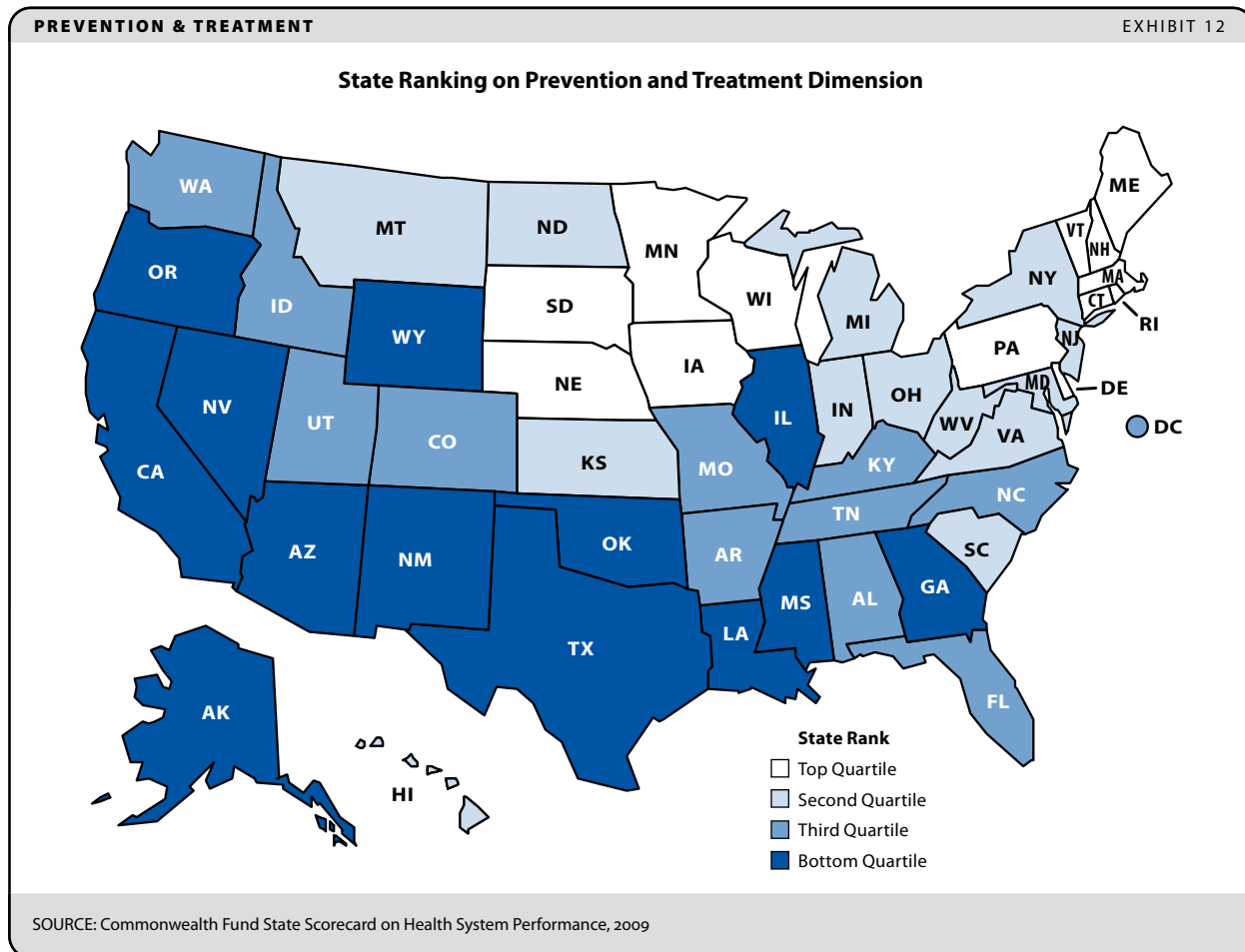
the access dimension also rank in the top quartile of states on the prevention and treatment quality dimension (discussed below). Moreover, states with low prevention and treatment quality rankings tend to have high uninsured rates—a relationship that occurs at the community level as well.<sup>9</sup>

Identifying delivery system practices as well as state policies that promote access to care and a culture of quality is essential to improving health care outcomes and lowering costs. The number of uninsured children declined following enactment of federal Medicaid expansions and creation of the Children’s Health Insurance Program (CHIP), and the number should decline further with the recent CHIP expansion—assuming states are able to fulfill their roles in matching federal funding. Yet the high and rising rates of uninsured adults put states and the nation at risk as adults lose affordable access to care and financial security. The deterioration in coverage and the relationship between better

coverage and better care point to a pressing need for national action to expand insurance coverage and ensure access to care.

### Prevention and Treatment

Patients and families seeking health care rightly expect that their physician will recommend effective and needed services (without prescribing unnecessary care), that their care will be well coordinated among different care providers, and that those who deliver their care will be responsive to their needs. Despite the best efforts of caregivers, fragmentation in the health care system too often makes it hard to meet these expectations. Moreover, the increasing complexity of medicine means that care providers need tools and strategies to practice effectively. States can play an important role in promoting higher-quality care through policy, leadership, and collaboration—such as by convening all stakeholders to find ways to improve.



The good news: there has been substantial improvement on prevention and treatment quality indicators over the periods reported in the 2007 and 2009 editions of the *State Scorecard*—more than in any of the other dimensions of performance. The bad news: wide gaps and variations persist—both within and across states—in the provision of effective, coordinated, and patient-centered care. Nine of the 14 prevention and treatment indicators for which there are comparable data in both the baseline and current periods improved substantially (by 5% or more) in the median state and in the majority of states; state variation substantially narrowed for seven of these nine. There was little or no change in four quality indicators and two could not be compared across these periods (Exhibits 2 and 3 and Appendix Exhibits A2 and A9).

Hospitals and nursing homes—both of which are the focus of national performance reporting and improvement initiatives—achieved the largest gains in this dimension. In contrast, ambulatory care quality barely changed (2% on average across five comparable indicators).

As with other dimensions of the *State Scorecard*, there continue to be wide performance variations across states, with distinct geographic patterns on overall rankings on quality (Exhibit 12). With some exceptions, the top-ranked states tend to be located in New England and the Upper Midwest, while bottom-ranked states are located in the South, Southwest, and West. Overall, bottom-performing states would need to improve their indicator rates by 40 percent on average to reach the level achieved by top-performing states.

The five top-performing states on prevention and treatment quality—Maine, New Hampshire, Vermont, Delaware, and Massachusetts—generally performed better than other states across indicators of effective and coordinated care. The leading states did not consistently perform better on indicators of patient-centered care or long-term care, however (Appendix Exhibit A8). Several states demonstrated impressive gains in quality of care relative to their peers. In four states, more than three-quarters of the indicators improved by 5 percent or more (see table). Utah, which was one of two states with the most indicators that improved by 5 percent or more, moved up in rank from the fourth to the third quartile of states on this dimension.

<b>Prevention &amp; Treatment: Top-Performing and Most-Improved States</b>		
<b>Top 5 States</b>	<b>Rank</b>	<b>Count of indicators that improved by 5% or more*</b>
Maine	1	8
New Hampshire	2	9
Vermont	3	9
Delaware	4	10
Massachusetts	5	8
<b>States with Most Improved Indicators</b>	<b>Rank</b>	<b>Count of indicators that improved by 5% or more*</b>
Utah	35	12
Arkansas	38	12
West Virginia	23	11
Ohio	24	11

\* Count is out of total of 14 indicators with trends (13 for MA).

Even when quality indicators did not improve on average, some states registered substantial gains in performance. Such progress suggests that improvement is within reach of all states.

## **EFFECTIVE CARE**

### **Ambulatory Care.**

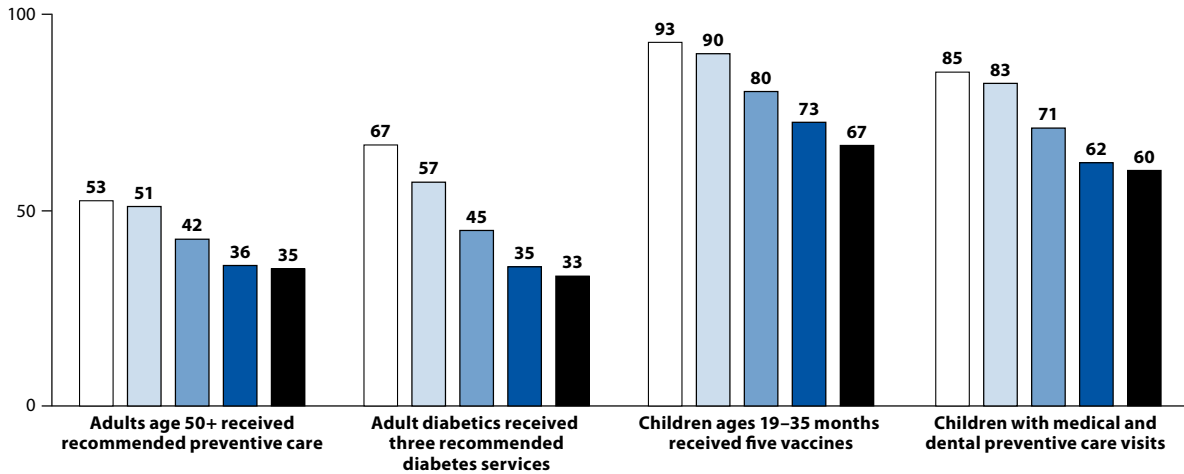
Across the nation, there are major shortfalls in the delivery of recommended preventive care to adults and in the delivery of basic services to help prevent complications for those with diabetes (Exhibit 13). Almost two-thirds of adults age 50 and older in the lowest-ranked states did not report timely receipt of recommended cancer screenings and vaccinations. Even in the top-ranked states just half of such adults received all recommended cancer screenings and immunizations. Preventive care rates range from a high of 53 percent in Delaware to a low of 35 percent in Oklahoma. On this indicator, half of states saw little change and half improved by 5 percent or more.

The rate of delivery of diabetic services in the best-performing state (Minnesota, at 67%) was double that in the worst state (Mississippi, at 33%). Performance on this indicator declined or failed to improve substantially in 24 of 42 states for which there were available trend data. California increased the rate of delivery of diabetic services by 12 percentage points, moving from the fourth to the first quartile. Correlation across state rates on these two indicators of the quality of ambulatory care suggests that there may be common pathways to improvement.

**State Variation: Ambulatory Care Quality Indicators**

Percent

□ Best state    □ Top 5 states average    □ All states median    □ Bottom 5 states average    ■ Worst state



**Top 5 states**

- 1. Delaware
- 2. Connecticut
- 3. Minnesota
- 4. Rhode Island
- 5. Michigan
- 5. Maryland

- 1. Minnesota
- 2. Vermont
- 3. Maine
- 4. Wisconsin
- 5. North Dakota

- 1. New Hampshire
- 2. Maryland
- 3. Connecticut
- 4. Hawaii
- 5. South Dakota

- 1. Rhode Island
- 2. Massachusetts
- 3. Connecticut
- 4. District of Columbia
- 5. New Hampshire

DATA: Adult preventive care—2006 BRFSS; Adult diabetic preventive care—2006-07 BRFSS; Child vaccines—2007 National Immunization Survey; Child medical and dental visits—2007 National Survey of Children’s Health  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

More than one-quarter of young children in the worst-performing five states did not receive preventive medical and dental visits and key vaccinations, and in the bottom five states more than half who needed mental health care did not receive it, based on parents’ reports. The best-performing states, in contrast, achieved vaccination rates of 90 percent. Indicators gauging receipt of children’s preventive and mental health care were 20 and 30 percentage points higher, respectively, in top states than in bottom states. Most states did not make progress in these areas, with only nine improving substantially on vaccination rates and 21 making progress in delivering mental health care.

Nevertheless, some states demonstrated impressive gains. New Hampshire, Maryland, and Hawaii improved vaccination rates by 8 to 10 percentage points, moving from the third and fourth quartiles to the top five states. Rates of receipt of mental health care grew by 10 to 20 percentage points in the most-improved states.

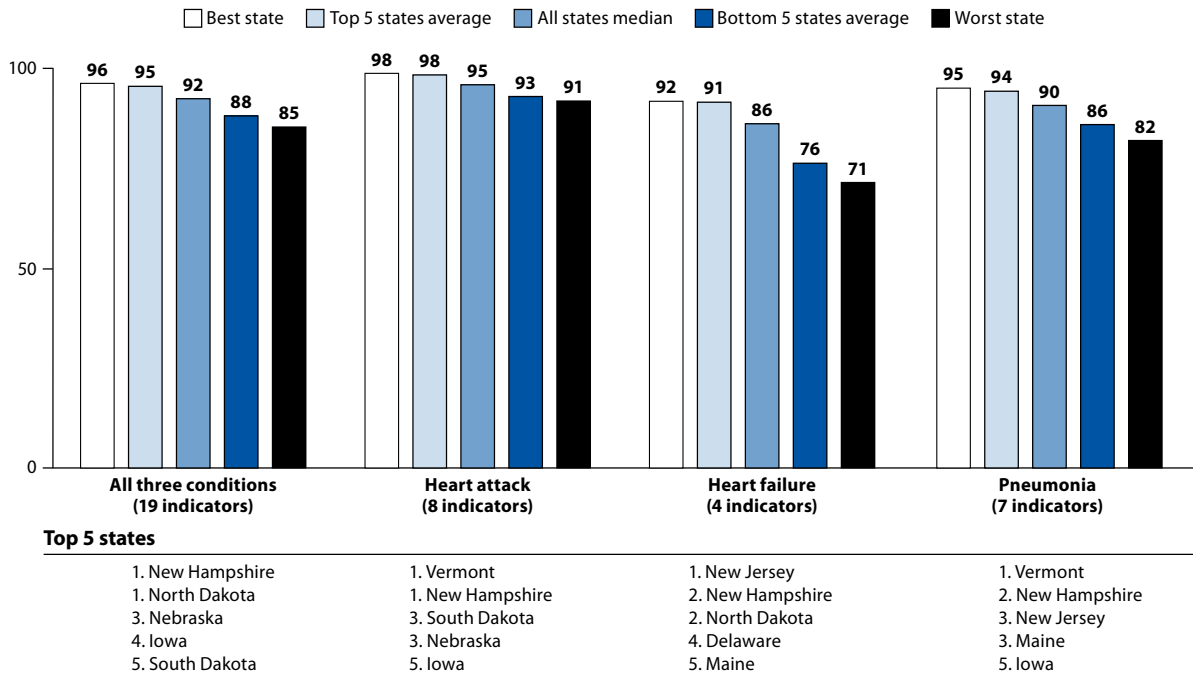
**Hospital Care Clinical Quality Indicators.**

Performance on indicators of the quality of care provided in hospitals is a bright spot in the *State Scorecard*, with substantial improvement from 2004 to 2007 across 48 states on an expanding set of evidence-based treatment standards for heart attack, heart failure, and pneumonia (Exhibit 14.) The median state rate reached 92 percent on a composite measure of care for these three conditions. In 2007, the worst-performing states reached performance levels achieved by the top-performing states three years earlier, and the entire distribution shifted upward. Among the three conditions, however, state variation remains three times wider for heart failure and much wider for pneumonia than for heart attack care—indicating there is substantial room for improvement in providing basic care for people hospitalized with these conditions (Appendix Exhibit A10).

An expanding set of measures gauging the delivery of recommended care to prevent surgical complications

**State Variation: Hospital Care Quality Indicators, 2007**

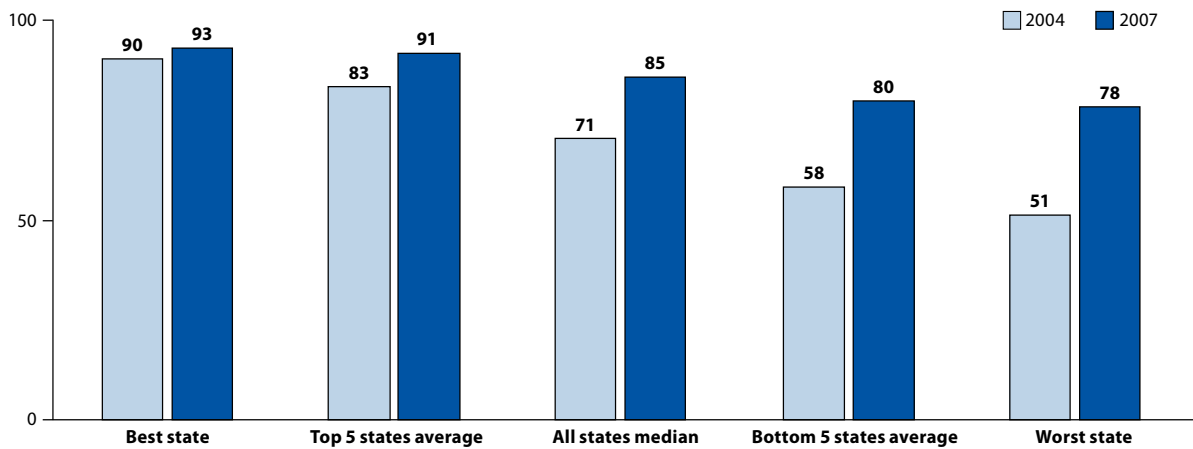
Percent of patients who received recommended care\*



\* See Appendix B for description of clinical indicators.  
 DATA: 2007 CMS Hospital Compare  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

**State Variation: Prevention of Surgical Complications**

Percent of adult surgical patients who received appropriate care to prevent complications\*



\* Data for 2004 is a composite of two clinical indicators; 2007 is a composite of five clinical indicators consisting of original two in 2004 and three new indicators.  
 See Appendix B for description of clinical indicators.  
 DATA: 2004 and 2007 CMS Hospital Compare  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

improved by 8 percentage points in the top five states and by 22 percentage points in the bottom five states, cutting the variation between the five best and five worst states in half (Exhibit 15). Although in 2007 a sizeable spread between the top- and bottom-ranked states persisted, the lowest-ranked states had achieved performance levels above the median rate three years earlier.

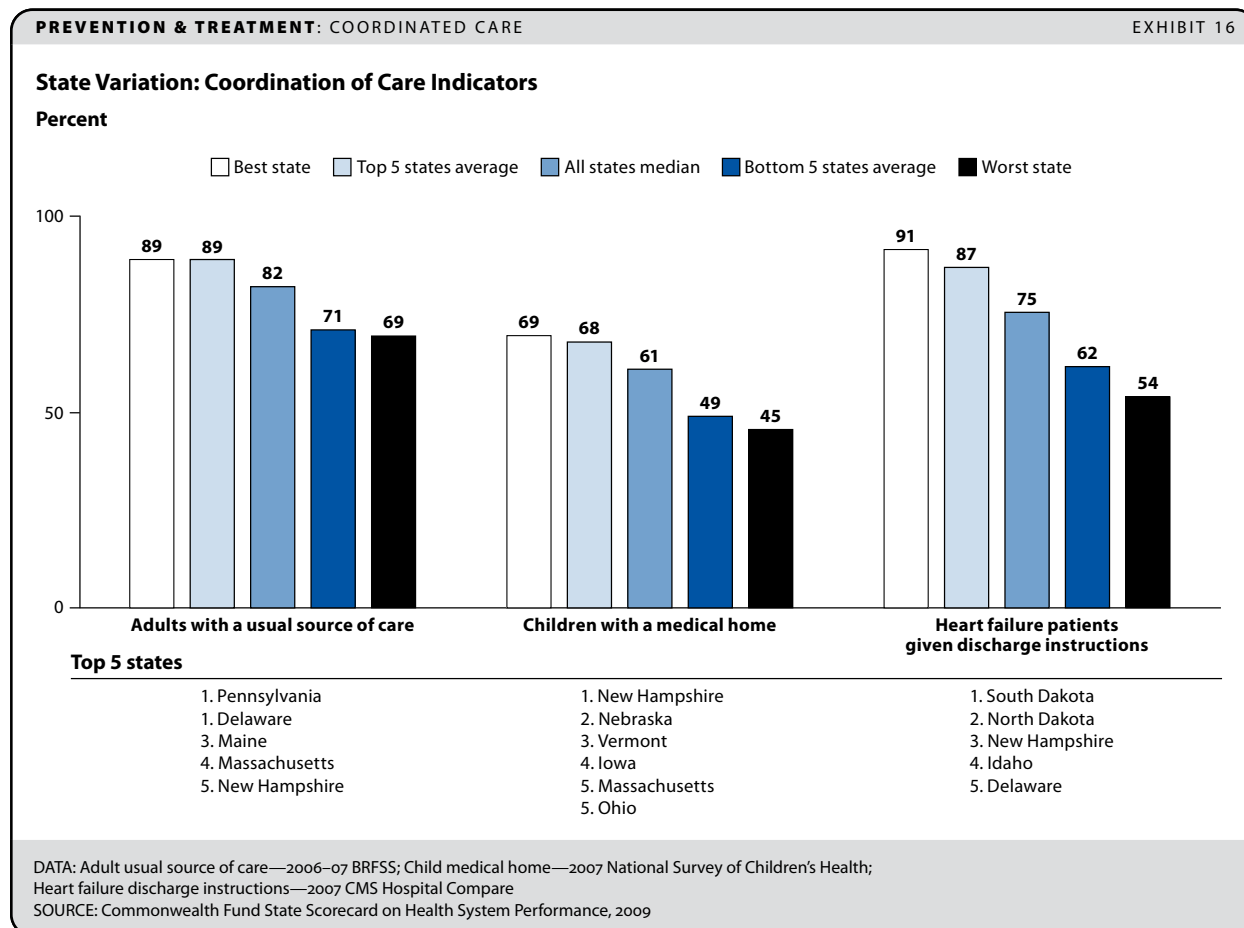
These positive trends in hospital quality likely reflect the influence of national consensus on a single set of measures, public reporting of results of these measures on the federal government’s Hospital Compare Web site, and widespread hospital participation in data reporting following its linkage to Medicare payment updates.

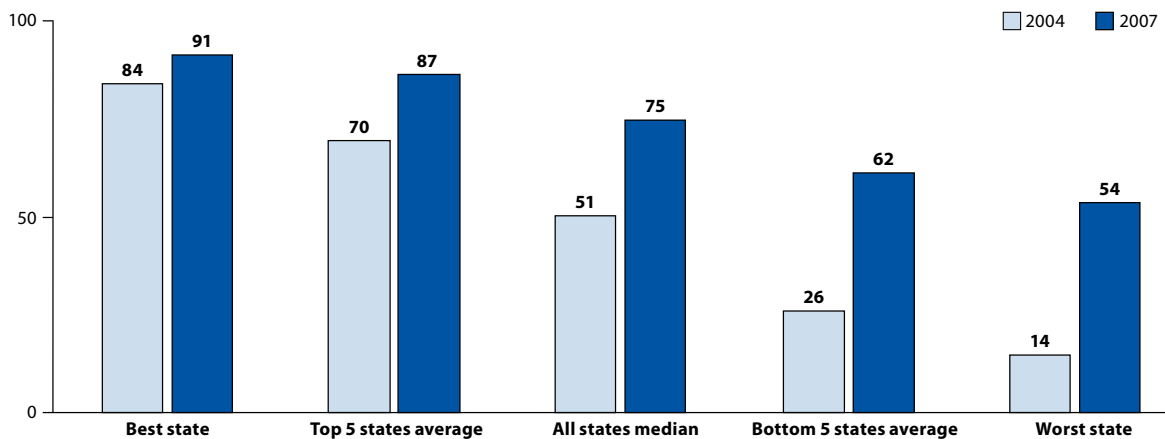
### COORDINATED CARE

In contrast, there was no change in 48 states in the proportion of adults reporting they have a usual care provider, with a 20-percentage-point difference in rates persisting between top and bottom states. This is not surprising, given the stagnation and decline in

rates of insurance coverage, since having insurance is the most important predictor of having a usual source of care.<sup>10</sup> On average, only three of five children had a primary care medical home. Rates varied from less than half of children having a medical home in the bottom states to about two-thirds in the top-ranked states (Exhibit 16).

As with other publicly reported hospital quality indicators, rates of provision of written discharge instructions to heart failure patients—a basic requirement for helping them make the transition from the hospital to their home or another care setting—improved substantially. The median rate across states increased by almost 50 percent, the largest improvement on any *State Scorecard* indicator (Exhibit 17). All states improved substantially, such that the rate achieved in the lowest state by 2007 exceeded the median rate in 2004. Despite improvement on this indicator, hospital readmission rates continue to be a concern, as discussed below. More robust measures of care transitions, together with effective care



**State Variation: Hospital Discharge Planning****Percent of heart failure patients discharged home with written instructions**

DATA: 2004 and 2007 CMS Hospital Compare

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

management interventions, will be needed to avoid adverse events and return trips to the emergency department or hospital.

### **PATIENT-CENTERED CARE, INCLUDING CARE FOR FRAIL ELDERLY AND DISABLED**

Compared with variation seen on other quality indicators, state-by-state variation was narrow on two measures of patient-centered care received by Medicare beneficiaries: the percentage who say their providers always listen, explain, show them respect, and spend enough time with them and the percentage who give a best rating for the health care they received during the past year (Exhibit 2). In 2003 (the year of the data reported in the previous *State Scorecard*), beneficiaries' ratings of their interactions with care providers and their overall care experiences tended to be similar across the nation. By 2007, ratings on these indicators consistently diverged across all states, with beneficiaries giving higher ratings to provider interactions and lower ratings to their overall care experiences.

These results, however, should be interpreted with caution, owing to changes in survey administration in 2007.<sup>11</sup> Longer time trends and data from other patient demographic groups will be needed to judge

whether these shifts represent an enduring change in patients' experiences.

### **Long-Term and Home Health Care.**

Three measures of patient-centered nursing home care (percentage of high-risk nursing home residents with pressure sores; percentage of residents who were physically restrained; and percentage of residents with moderate to severe pain) showed marked improvement from 2004 to 2007, with gains of 13 to 36 percent in median state rates and a 30 percent narrowing in the range of performance across states. In 38 states, pressure sore rates fell substantially (by 5% or more); across all states, rates of use of physical restraints and pain reports also fell substantially (Appendix Exhibit A9). Despite these gains, variation remains wide, with twofold to fivefold variation from the top five to the bottom five states on these three measures.

Nursing home quality and the public reporting of quality data for benchmarking and comparative purposes have been the focus of federal and state initiatives, augmented by collaborative efforts to improve. Recently, a national "Advancing Excellence in America's Nursing Homes" campaign has targeted improvements on the indicators included in the *State Scorecard*. Nursing homes that participate in the campaign do better than those that choose not to participate, and participating homes that set

specific targets for improvement do better than those that merely pledge to improve.<sup>12</sup>

Performance on an indicator of home health care outcomes—the percentage of patients who experienced improvement in mobility—improved substantially across 43 states and by 12 percent in the median state (Appendix Exhibit A9). The range of state variation widened, however, as top states pulled ahead. State-level performance on this indicator does not correlate closely with other indicators in the quality dimension, with some top-ranked states performing poorly and four bottom-ranked states performing in the top quartile. This may reflect the relatively unique nature of home health care services, which have likely benefitted from a national improvement campaign.

### SPREADING THE GAINS

In summary, there remains much room for improvement among states, with even top-ranked states performing poorly on some indicators of health care quality. Strategies being followed by leading states include creating incentives to raise the quality of care, convening leadership groups, and collaborating with private and public sector payers to promote a more responsive and effective health care delivery system. For example, states such as Pennsylvania and Rhode Island are collaborating in multipayer, public–private demonstrations to develop and evaluate the effectiveness of primary care medical homes, which hold promise for delivering better-coordinated, patient-centered care.

Encouraging the adoption of systemic improvements will require national cooperation and sustained federal and state support for infrastructure, such as electronic health records. The federal stimulus legislation provides the opportunity for states to play an important supporting role in the development of health information exchanges, which can help improve quality and efficiency as providers get timely information they need to treat patients effectively and prescribe drugs safely. Likewise, the Children’s Health Insurance Program Reauthorization Act ushered in new federal support for quality improvement and reformed payment policies.

Information systems for benchmarking and comparing quality and monitoring change are

essential to inform improvement efforts and provide incentives to improve. The expansion of publicly available all-payer, population-based data, including information on clinical outcomes drawn from electronic medical records, has the potential to support state and private efforts to improve—particularly to achieve better health outcomes.

### Potentially Avoidable Use of Hospitals and Costs of Care

Inefficient or wasteful health care and high and rising health care costs are the leading impediments to ensuring accessible, high-quality care. The *State Scorecard* focuses on important indicators of efficient care: rates of potentially avoidable and expensive hospital care. A more comprehensive assessment of health system efficiency would compare indicators of inappropriate care, waste, and administrative overhead, but such measures are not available at the state level.

The *State Scorecard* also includes two indicators of health care costs: 1) the average cost of single private health insurance premiums paid by employers and workers and 2) annual spending per Medicare beneficiary. Higher costs are not necessarily indicators of inefficiency if there is a return on investment for extra spending in terms of more accessible care or better quality and outcomes. Yet we include these cost indicators in this dimension, because studies of health care spending and health care systems within the United States as well as international comparisons document multiple instances of inefficient, duplicative, wasteful, or potentially excessive care and find that higher spending is not systemically related with better outcomes.<sup>13</sup>

Overall trends in this dimension were unfavorable. Performance on five of the nine indicators for which trend data are available worsened by 5 percent or more, and variation among states more often widened than narrowed (one indicator could not be updated). A twofold to threefold spread persisted between top and bottom states on key indicators. Notably, health care costs continued their long-running upward trend, with growing burdens on families as coverage has become less affordable and changes to health benefit designs have shifted more

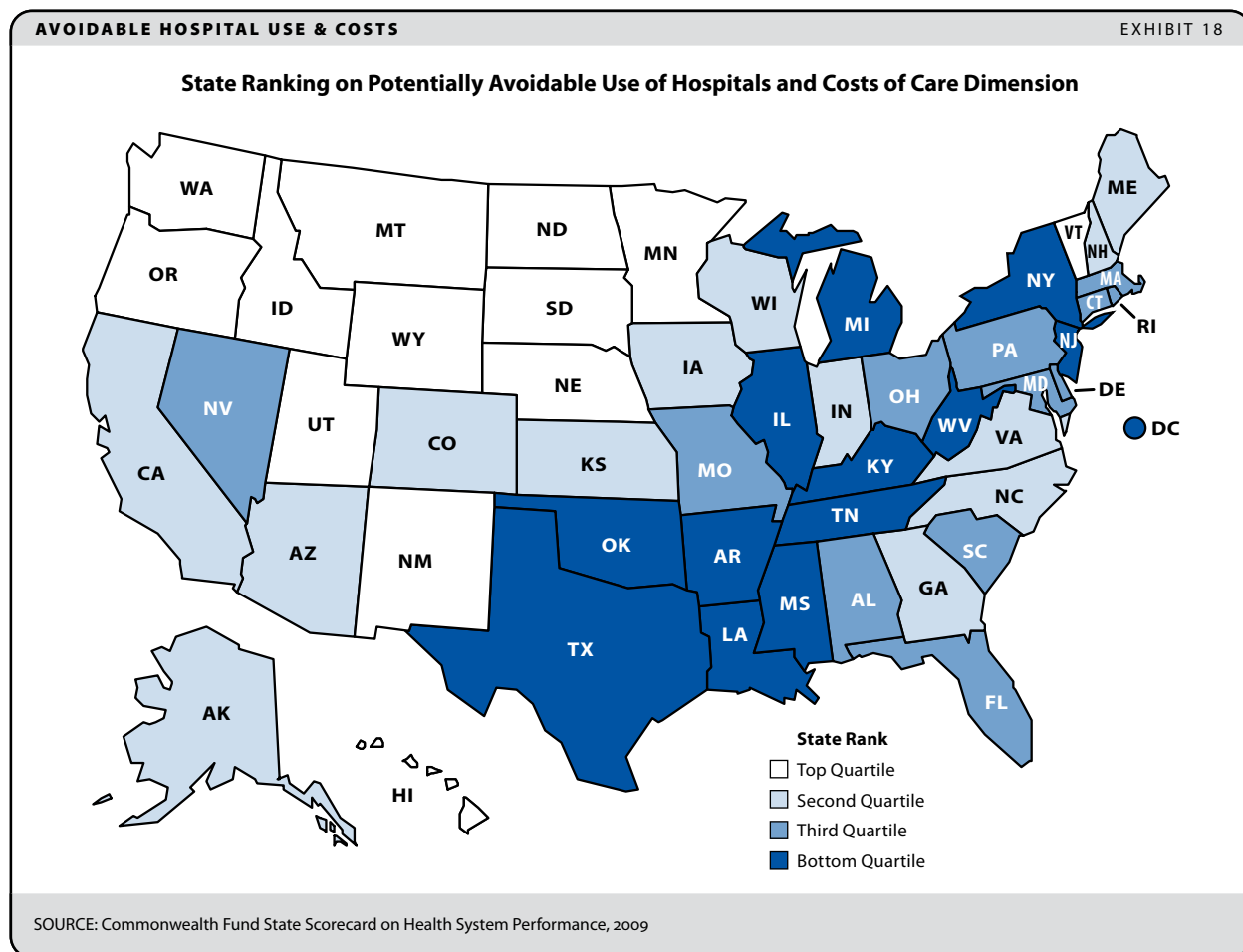
costs to patients and their families.<sup>14</sup> The 2009 *State Scorecard* finds that health care costs are rising faster than incomes. There is continued wide variation across states in rates of potentially preventable use of hospitals and emergency departments—pointing to underlying patterns that drive up the costs of care and undermine affordability.

Geographic patterns of avoidable utilization and costs have changed little since the 2007 *State Scorecard*, with better performance (i.e., lower admission rates and costs) concentrated in the West and Upper Midwest (Exhibit 18). Poor performance (i.e., higher costs and higher rates of potentially preventable hospitalizations) remains concentrated in the South and Northeast. Rates of 30-day hospital readmissions among Medicare beneficiaries for selected conditions increased by 5 percent or more in 16 states. Thirty states failed to improve on this indicator from 2003–04 to 2006–07. Rates of hospital admissions among nursing home patients, as well as rates of 30-day cycling from

hospital to nursing home and back, worsened significantly in the majority of states since the beginning of the decade (Appendix Exhibit A12).

Each of the five top-ranked states on this dimension—Utah, Idaho, Oregon, North Dakota, and Hawaii—has relatively low rates of potentially avoidable hospital use, including readmissions, and relatively lower premiums and Medicare costs per beneficiary. Notably, despite already having low rates of potentially avoidable hospital use in the 2007 *State Scorecard*, several of the leading states improved their performance on these indicators.

Nevertheless, reflecting the overall unfavorable performance in this dimension, no state exhibited substantial improvement on more than half the indicators (see table). South Dakota improved on the most indicators by 5 percent or more, including a substantial reduction in hospital readmissions—resulting in the state’s move from near the bottom on this dimension to near the top.





Avoidable Hospital Use & Costs: Top-Performing and Most-Improved States		
Top 5 States	Rank	Count of indicators that improved by 5% or more*
Utah	1	2
Idaho	2	1
Oregon	3	2
North Dakota	4	2
Hawaii	5	1
States with Most Improved Indicators	Rank	Count of indicators that improved by 5% or more*
South Dakota	7	4
Minnesota	12	3
Colorado	15	3
Arizona	18	3
Rhode Island	36	3
Kentucky	43	3
West Virginia	47	3
Louisiana	51	3

\* Count is out of total of 9 indicators with trends (8 for ID, LA, ND, and SD; 7 for HI).

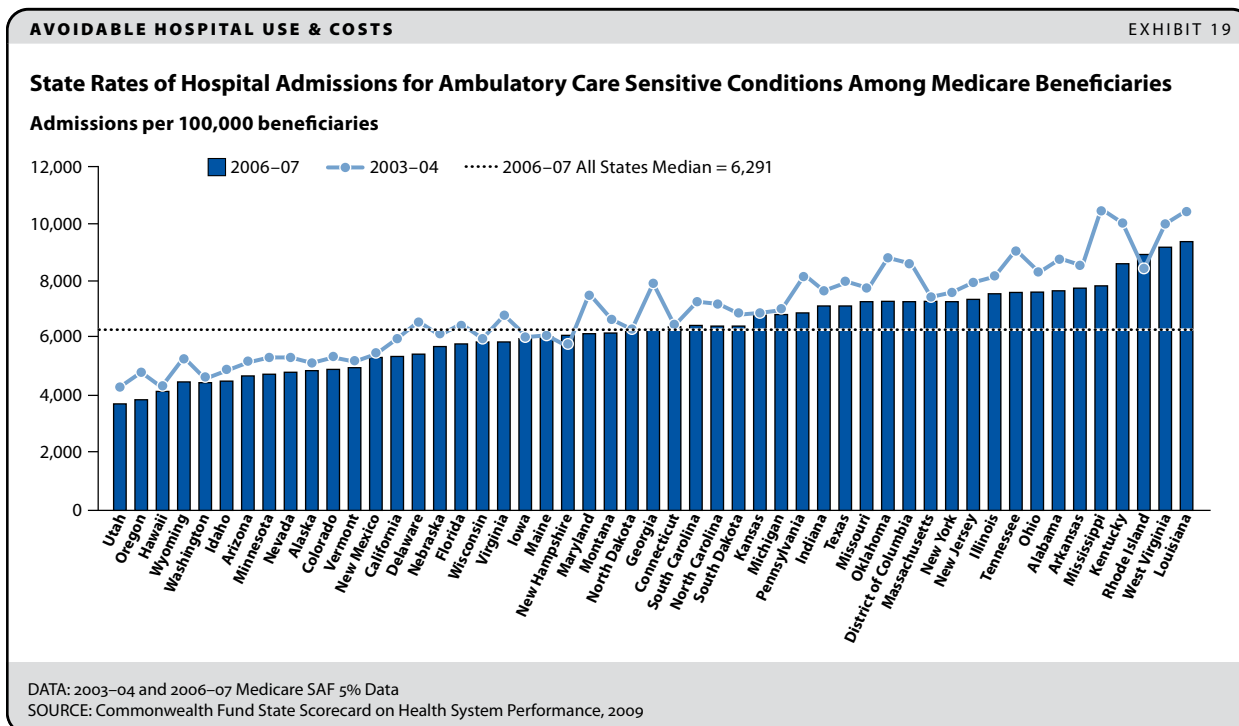
### POTENTIALLY AVOIDABLE USE OF HOSPITALS

Across states, most indicators of potentially avoidable use of hospitals worsened or failed to improve from the baseline to current Scorecard periods, with two notable exceptions: 1) admission rates for pediatric

asthma and 2) ambulatory care sensitive (ACS) conditions among Medicare beneficiaries. On both indicators, the majority of states had lower rates of admissions than in the previous *State Scorecard* (Exhibit 3).

### Hospital Admissions for ACS Conditions.

By 2006–07, hospital admissions for one of 11 ACS conditions among Medicare beneficiaries were lower than in 2003–04 in all but a few states, based on a sample of Medicare claims data. In 36 states, such rates declined by at least 5 percent (Exhibit 19). Several southern states that had among the highest ACS admission rates in 2003–04 showed improvements. The rates in Mississippi, Oklahoma, Georgia, Tennessee, and Kentucky dropped significantly. While the range of variation among states narrowed somewhat, rates of potentially preventable admissions were 2.5 times higher in the highest-rate state than in the lowest-rate state (9,331 vs. 3,725 per 100,000 beneficiaries). This indicates that there is broad opportunity for further improvement, particularly for efforts to avoid complications of chronic conditions among elderly adults living in the community. An essential first step is to ensure that all patients have a relationship with a primary care provider who is accessible and can effectively coordinate their care.



Hospitalization rates among children with asthma declined in most of the 32 states that collected and reported this information over the two periods; the rates in three-fourths of these states declined by at least 5 percent. Lack of data on the number of children with asthma, and on hospitalization rates among children with asthma in the other states, makes it difficult to assess progress on this indicator. It is encouraging that states with the highest asthma admission rates in 2003 were among the most improved—somewhat narrowing the variation across states. Still, a threefold spread in hospitalization rates persists from top to bottom. The five states with the highest admission rates improved nearly 14 percent between 2003 and 2005, while the five states with the lowest rates improved about half that much.

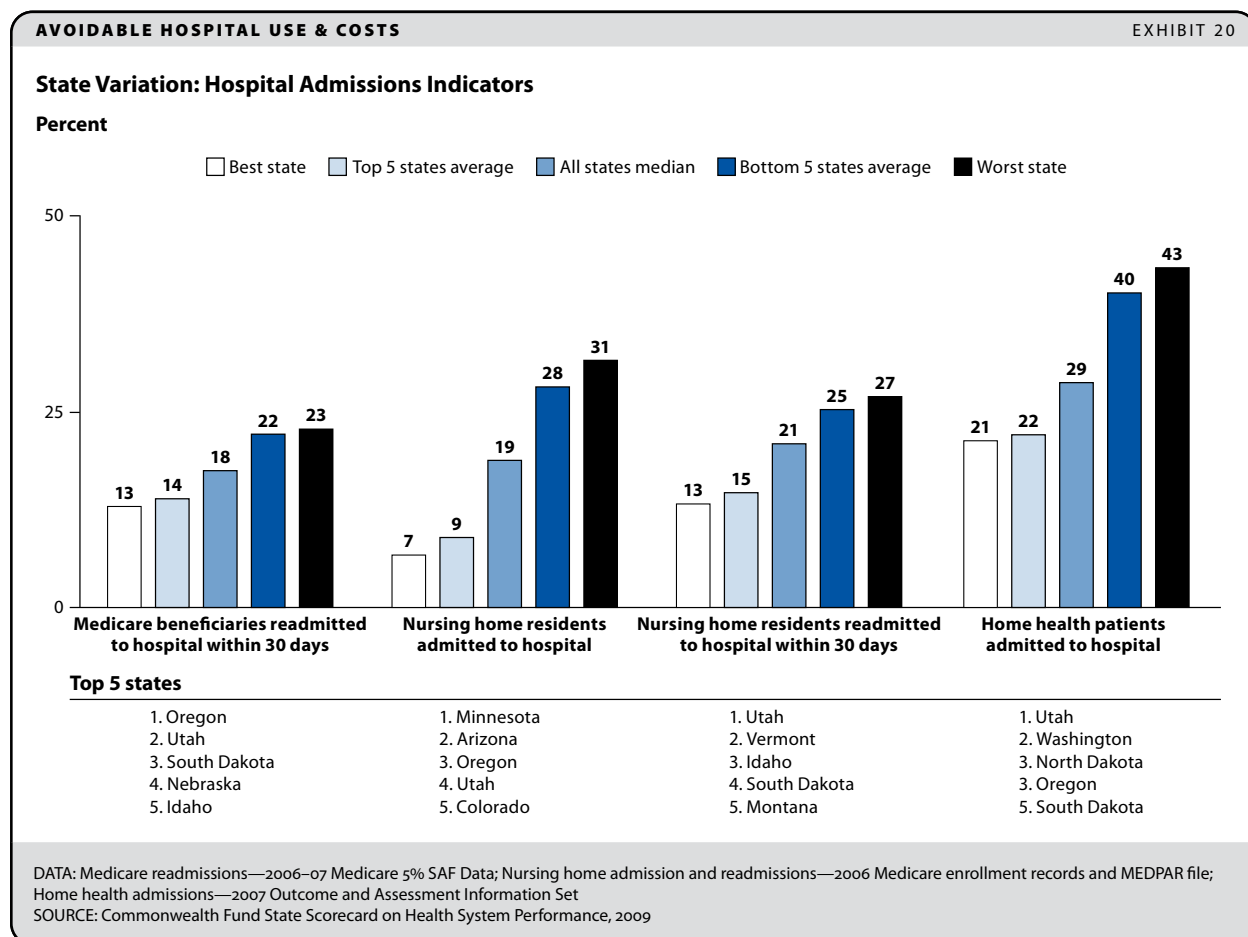
Readers should exercise caution in interpreting geographic data on avoidable use of hospitals, as rates can be higher or lower due to any of a number of factors, including the underlying prevalence or

severity of conditions, changes in practice patterns (such as outpatient treatment of community-acquired pneumonia), or better care management. The implementation of Medicare prescription drug coverage in January 2006 may have contributed to reduced hospitalizations by helping beneficiaries adhere to drug regimens that prevent disease complications. Further investigation is warranted to determine underlying causes for trends in specific conditions.<sup>15</sup>

### Hospital Readmission Rates Among Medicare Beneficiaries and Hospital Use Among Nursing Home and Home Health Residents.

Rates of hospital readmission within 30 days among Medicare beneficiaries and hospital use among nursing home and home health residents vary widely across states (Exhibit 20). Across most states, rates on both indicators either increased or failed to improve (Exhibit 3).

The negative trends observed among nursing home residents are of particular concern, since moving in and out of hospitals puts frail elders at



risk of complications.<sup>16</sup> Rates of hospital readmission within 30 days of discharge to a nursing home increased by 5 percent or more from 2000 to 2006 in 37 of the 48 states for which trends are available. Disturbingly, the rate grew by 15 percent or more in 13 geographically disparate states (Appendix Exhibit A12). Similarly, hospital admission rates among long-stay nursing home residents rose in the vast majority of states (39 of 48), increasing by 5 percent or more in about two-thirds of the states (29 of 48). Rates in the highest-rate states were two to three times higher than in the lowest-rate states, and the ranges between states widened.

Among all Medicare beneficiaries who were hospitalized during 2006–07, nearly one of five (18.4%) returned to the hospital within 30 days. Medicare readmission rates increased by 5 percent or more in 16 states and declined by this amount in only five states, with a failure to improve nationally from the average rate (18.0%) in 2003–04. Readmission rates in 2006–07 ranged from lows of 13 to 14 percent in the best-performing five states (Oregon, Utah, South Dakota, Nebraska, and Idaho) to highs of 21 to 23 percent in the worst-performing five states (Louisiana, Arkansas, West Virginia, Nevada, and the District of Columbia). Notably, the readmission rate declined in Oregon—already the lowest-rate state in 2003–04—suggesting that there is significant room to improve across the nation.

Hospital readmissions are receiving national attention as a symptom of fragmentation and lack of coordination in the health care delivery system. The nearly twofold spread among states on rates of 30-day readmissions among Medicare patients points to the need to reform provider incentives, strengthen primary care, and manage care during transitions between care settings.

Performance on another indicator of potentially avoidable hospital use—hospital admissions among home health care patients—declined or failed to improve between 2004 and 2007 in the majority of states. Admission rates were up by 5 percent or more in 27 of 51 states; rates improved (i.e., decreased) by 5 percent or more in only five states (Appendix Exhibit A12).

### **Hospital Care Intensity.**

A new *State Scorecard* indicator finds threefold variation among states in the propensity to use hospital services intensively to care for chronically ill Medicare beneficiaries during their last two years of life (Exhibit 21). The *Dartmouth Atlas* Hospital Care Intensity (HCI) index measures the amount of time such Medicare beneficiaries spent in the hospital, and the number of physician visits they received while hospitalized. It is expressed as a ratio of each state's average to the national average (see box for methodology).

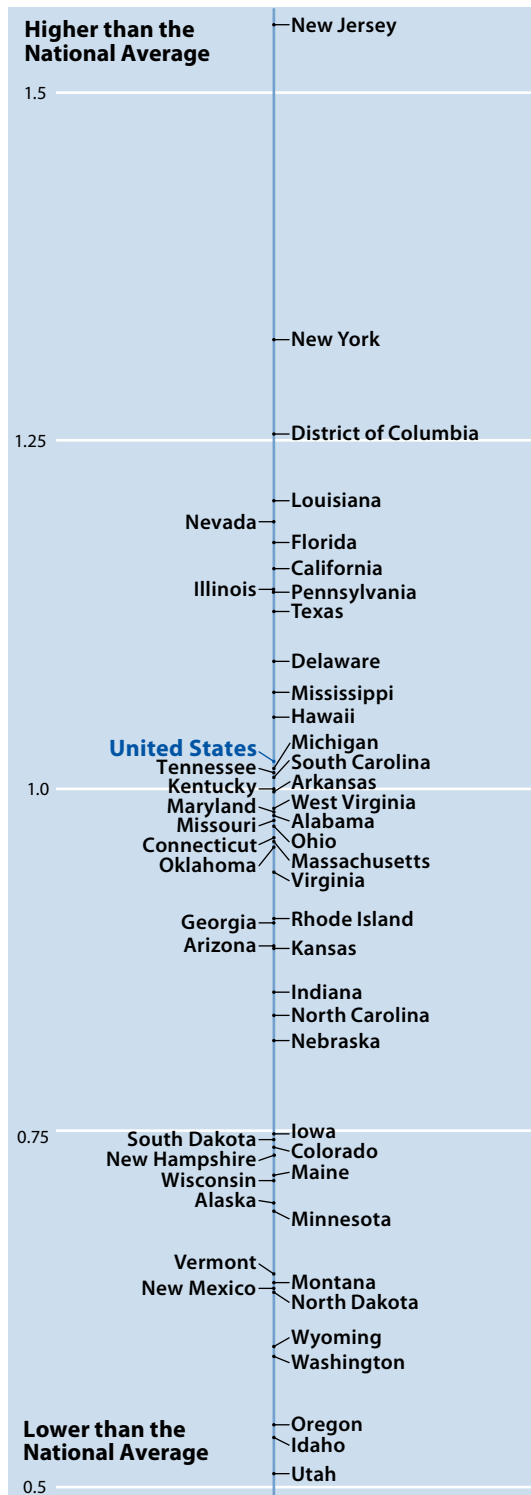
#### **Methodology: Hospital Care Intensity (HCI) Index**

The HCI index is based on two variables: the number of days patients spent in the hospital and the number of physician encounters (visits) they experienced as inpatients during their last two years of life. The population includes Medicare beneficiaries with one or more of nine chronic illnesses who died during the particular year.<sup>19</sup> The HCI index is computed as the age-sex-race-illness standardized ratio of patient days and visits. For each variable, the index calculates the ratio of a given state's use rate to the national average and then averages the two ratios to create the overall index. The national average was set to 1.0 for the base year 2001, so that ratios in subsequent years reflect the national trend in this composite measure of inpatient utilization.<sup>20</sup>

States with the highest HCI index scores (New Jersey, New York, Louisiana, Nevada, and Florida) make much greater use of the hospital than states with the lowest scores (Utah, Idaho, Oregon, Washington, and Wyoming). Moreover, several of the states with the largest populations (New York, Florida, California, Illinois, Pennsylvania, and Texas) dominate the group, with HCI scores greater than the national average. In New Jersey (the state with the highest score in 2005), chronically ill Medicare beneficiaries spent over 25 days in the hospital and received over 61 inpatient physician visits on average during their last two years of life. In contrast, such patients in Utah (the state with the lowest score in 2005) were hospitalized for 11 days and received 15 physician visits at the end of life.

The Dartmouth researchers who developed the index found that regions and states with higher HCI scores had lower hospital clinical quality scores and lower patient ratings of hospital care—suggesting poorer coordination of care.<sup>17</sup> They also have

State Variation: Hospital Care Intensity Index, 2005



Note: The Hospital Care Intensity Index was calculated as the average of the number of inpatient days by state divided by the national rate and the number of inpatient physician visits by state divided by the national rate, for chronically ill Medicare beneficiaries in the last two years of life. All rates were age-sex-race-illness standardized. The national average was set to 1.0 for the base year 2001, so that ratios in subsequent years reflect the national trend in this composite measure of inpatient utilization.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

documented that areas of the country with greater hospital intensity have higher mortality rates (after adjusting for differences in patients' illnesses and severity of disease).<sup>18</sup> Hence, states and regions where there is more conservative use of hospitals to manage chronically ill patients at the end of life—the regions that also tend to place greater emphasis on primary care—likely deliver better value for health care spending than those with greater intensity of hospital care for these patients.

As with other *State Scorecard* indicators of potentially avoidable hospital use, performance on the HCI index failed to improve in most states and in the nation overall. With 2001 as the base year (1.0), the average national HCI rate remained about the same in 2003 and 2005, although it worsened by about 2 percent between 2001 and 2005. Seven states (Arkansas, Delaware, Hawaii, Mississippi, New Mexico, Rhode Island, and South Dakota) improved their standing on the HCI between 2003 and 2005 by at least 5 percent, while three states (Ohio, Montana, and Vermont) saw a worsening in their HCI score by at least that amount.

**COSTS OF CARE**

All states experienced substantial increases in the costs of care since the first *State Scorecard* (from 2003 to 2006). At the same time, substantial variation in per-person spending persisted across the states. Some drivers of health spending, such as underlying wage differentials, are beyond the reach of health policy reform. But other factors are amenable to public policies and private initiatives. Such factors include the degree to which primary care is supported and the degree to which financial incentives encourage high-quality, efficient care, including well-coordinated care for those with chronic illness. Policies across the country designed to reform payment methods, advance patient-centered medical homes, and spread the adoption and effective use of health information technology hold considerable promise, but they have not yet produced a discernable impact on cost trends across the states.

As spending has increased, variation in spending across the states has widened. Yet research has consistently shown that higher spending is not associated with better outcomes or better patient experiences,

Median Income, Health Insurance Premiums as Percent of Income, and Percent of Nonelderly Adults Uninsured by State

	Median household income for under-65 population			Employer premiums as percent of median household income for under-65 population			Percent of nonelderly adults (ages 18–64) uninsured		
	2003–04	2007	2007 Rank	2003	2008	2008 Rank	2004–05	2007–08	2007–08 Rank
<b>United States</b>	<b>\$48,442</b>	<b>\$53,685</b>		<b>15.0</b>	<b>17.2</b>		<b>19.6</b>	<b>20.0</b>	
Alabama	46,000	48,000	41	14.9	17.5	32	19.1	17.0	25
Alaska	56,108	65,850	6	15.5	16.2	19	22.3	24.1	45
Arizona	42,500	49,600	39	16.3	18.9	42	23.2	23.6	43
Arkansas	37,899	49,090	40	17.3	18.8	41	23.9	24.0	44
California	46,030	52,000	32	14.8	17.1	27	23.7	24.4	47
Colorado	53,430	64,830	7	13.8	13.9	2	19.3	19.7	31
Connecticut	65,032	69,150	4	12.6	14.3	5	14.5	13.3	8
Delaware	52,000	60,000	13	15.4	16.7	23	15.6	14.3	12
District of Columbia	40,000	42,904	51	16.9	19.0	43	16.3	12.0	5
Florida	45,000	50,000	35	16.2	18.5	37	26.2	25.9	48
Georgia	45,000	54,202	29	14.9	16.1	16	22.7	22.8	42
Hawaii	48,084	53,680	30	12.1	14.1	4	11.9	10.6	2
Idaho	47,322	56,834	20	15.5	16.1	16	19.0	20.1	33
Illinois	52,016	57,000	18	14.7	16.9	25	17.0	17.8	26
Indiana	50,000	56,611	21	15.0	18.1	34	17.7	16.6	22
Iowa	53,650	58,050	17	13.1	14.8	7	11.6	12.8	6
Kansas	51,082	55,000	27	14.5	16.0	15	14.3	16.1	19
Kentucky	42,419	46,000	45	16.8	19.5	47	17.7	19.9	32
Louisiana	38,700	45,000	48	17.8	18.7	40	24.2	26.2	49
Maine	45,840	55,045	25	17.7	19.0	43	12.7	13.3	8
Maryland	60,000	69,500	3	11.8	13.3	1	17.4	16.8	24
Massachusetts	60,432	63,867	8	12.4	15.6	11	13.9	7.2	1
Michigan	52,490	60,000	13	14.7	15.3	9	14.8	16.1	19
Minnesota	63,510	68,000	5	12.9	15.4	10	10.4	10.8	3
Mississippi	39,018	43,094	50	16.8	20.0	49	22.0	24.2	46
Missouri	50,967	50,000	35	14.1	17.3	28	15.8	16.6	22
Montana	37,457	50,000	35	17.8	17.4	30	21.7	21.1	36
Nebraska	52,082	57,000	18	14.4	16.5	20	14.4	15.8	18
Nevada	45,000	52,000	32	15.0	16.9	25	21.9	21.6	39
New Hampshire	66,078	74,317	1	12.3	14.9	8	13.2	13.9	11
New Jersey	65,000	69,560	2	12.2	13.9	2	18.1	18.8	30
New Mexico	36,300	45,000	48	19.7	19.0	43	25.3	30.2	50
New York	47,000	51,101	34	15.1	17.6	33	17.3	18.0	28
North Carolina	43,662	46,002	44	15.6	19.9	48	19.7	21.1	36
North Dakota	49,750	56,250	23	13.3	15.9	14	13.4	14.3	12
Ohio	51,084	55,025	26	14.5	16.1	16	14.3	15.5	16
Oklahoma	42,162	48,000	41	17.1	18.3	36	24.9	22.0	41
Oregon	45,350	52,305	31	15.1	18.1	34	21.2	21.6	39
Pennsylvania	52,178	56,500	22	13.8	16.5	20	13.3	12.9	7
Rhode Island	52,031	58,800	16	14.2	16.8	24	14.2	14.4	14
South Carolina	44,488	50,000	35	16.2	18.6	39	22.0	20.6	35
South Dakota	49,818	54,922	28	14.6	15.8	13	15.3	15.1	15
Tennessee	44,064	46,000	45	17.4	20.3	50	17.7	20.1	33
Texas	40,050	45,640	47	18.4	19.3	46	29.6	31.5	51
Utah	52,033	60,090	12	14.0	16.5	20	18.4	16.2	21
Vermont	52,606	55,506	24	14.1	18.5	37	15.0	13.5	10
Virginia	56,000	61,000	11	12.9	14.7	6	17.2	17.9	27
Washington	54,400	62,300	10	13.7	15.7	12	17.1	15.7	17
West Virginia	38,400	46,066	43	19.3	23.1	51	23.4	21.1	36
Wisconsin	52,760	62,485	9	14.8	17.3	28	13.1	11.9	4
Wyoming	51,560	59,136	15	16.0	17.4	30	17.6	18.2	29

DATA: Median household incomes—2004–05 and 2008 Current Population Survey ASEC Supplement; Average premiums for employer-based health insurance plans (weighted by single and family household distribution)—2003 and 2008 Medical Expenditure Panel Survey; Uninsured—2005–06 and 2008–09 Current Population Survey ASEC Supplement

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

making the continuing increases and wide range of spending especially troubling.<sup>21</sup>

Total Medicare fee-for-service spending per beneficiary for hospital (Part A) and physician (Part B) benefits provides a good basis for contrasting state spending, since such benefits are uniform across the states. Per-beneficiary spending grew by 6.5 percent per year from 2003 to 2006 for the median state—more than two times the increase in the Consumer Price Index, which grew at an average annual rate of 3.1 percent for this period. During this time, Medicare costs grew more than twice as fast in Iowa and New Hampshire (almost 9% per year) than in New Jersey, Hawaii, and Delaware (under 4% per year). The difference in costs per beneficiary between the highest- and lowest-cost states widened by nearly 10 percent. As a result, by 2006, average per-beneficiary spending in the five most costly states was nearly \$3,500 more than average spending in the five lowest-cost states (\$9,439 vs. \$6,027). The 50 percent variation in per-beneficiary spending suggests that there are opportunities for reducing unnecessary use of services and for engaging patients and physicians alike in making informed treatment choices.

Private-sector health care costs also rose in recent years and vary across the states. The average employer-sponsored health insurance premium for single coverage (i.e., employer and employee shares combined) increased more than 4.5 percent per year from 2004 to 2008 in close to half of the states. Premium growth is likely to understate the total impact of rising health costs, because even as premiums have risen, patient cost-sharing or limits on benefits have increased.<sup>22</sup>

All states saw insurance premium increases from 2004 to 2008, with an average annual increase of 6 percent or more in New Hampshire, West Virginia, and Utah. In contrast, premiums rose by half that rate—less than 3 percent per year on average—in six states (Michigan, Oklahoma, Texas, Virginia, Ohio, and Nevada). The average premium increased by 8.5 percent per year in Utah as compared with less than 1 percent per year in neighboring Nevada during this period. In 2008, average premiums in the highest-cost states were nearly one-third (30%) higher than in the lowest-cost states (\$5,056 vs. \$3,904).

Over a longer five-year period, affordability of health insurance has declined as premiums have risen faster than wages or other measures of patients' ability to pay.<sup>23</sup> By 2008, the average employer insurance premiums (including employer and employee shares) relative to income amounted to 16 percent or more of state median household income for the under-65 population in 37 states, up from 16 states in 2003 (Exhibits 5 and 22). In 18 states, premiums relative to annual incomes amounted to 18 percent or more of median incomes for the under-65 population. In only three states (Colorado, New Jersey, and Maryland), average premiums were less than 14 percent of median income. The increasing cost of health insurance puts moderate- and middle-income families at risk of joining the ranks of the uninsured. Millions of workers and their families were in a precarious position going into the 2008–09 recession.

#### **OPPORTUNITIES TO REDUCE AVOIDABLE USE AND COSTS**

The close link between high rates of potentially avoidable hospital care and Medicare spending suggests opportunities to reduce cost while improving care. As illustrated in Exhibit 4, states with high readmission rates also have the highest per capita Medicare spending. This association has drawn the attention of federal and state policymakers as well as private insurers. There is broad interest in creating incentives to improve the organization and delivery of care, including methods that would bundle payments for episodes of care (e.g., creating a single payment for hospital stays, readmissions, and post-acute care) and pay-for-performance initiatives.<sup>24</sup> States also are examining strategies to strengthen primary care, promote care coordination through health information technology, and enlist nurses to provide better care during transitions.

The five top-ranked states on the dimension—Utah, Idaho, Oregon, North Dakota, and Hawaii—generally performed better across indicators of potentially avoidable hospital use as well as those measuring costs of care (for which data were available). Utah, home to highly integrated systems of care, stands out as an example of better performance across both cost and use indicators.

## Equity

A state's health system should be judged by how well it performs for its most vulnerable residents. Through programs such as Medicaid and the Children's Health Insurance Program (CHIP), all states devote considerable resources to providing care for low-income residents and other vulnerable groups. Policy strategies such as raising eligibility thresholds for public coverage and eliminating barriers to enrollment and retention can contribute substantially to improved access to care for such groups. By building on efforts to promote health system capacity and quality of care overall—with an explicit focus on safety-net providers serving primarily low-income and uninsured patients—states can reduce disparities in health care access and quality.

The *State Scorecard* assesses equity by comparing gaps in performance among subgroups of patients by income level, insurance coverage, and race/ethnicity. The analysis compares performance levels among each state's most vulnerable populations to a common benchmark—the national average—for a subset of indicators.<sup>25</sup> We call the difference between the state's most vulnerable group and the national average the "equity gap."

Featured indicators draw from each of the dimensions where data are available by the relevant subgroups. In total, there are 24 equity comparisons: nine by income, six by insurance coverage, and nine by race/ethnicity (Exhibit 23). Only 17 of these had data that could be compared over time.

To assess progress over time, we count how often the equity gap narrowed across the available indicators for each state in the periods between the 2007 and 2009 editions of the *State Scorecard*. We consider improvement to have occurred only when performance for the most vulnerable group also improved, since a narrowing in the equity gap resulting only from a decline in the national average does not make the vulnerable group better off.<sup>26</sup>

Only eight states—Connecticut, Delaware, New York, Utah, Wisconsin, Oregon, Montana, and Michigan—saw at least half of their equity indicators improve, such that the gap narrowed and performance levels among the most vulnerable group improved (Appendix Exhibit A4).

On most of the equity comparisons (15 of all 17 with trend data), vulnerable groups were more likely to fare worse both in relation to the national average and in absolute terms over time (Exhibit 23). The greatest gains were in rates of mortality amenable to health care. Yet even on this indicator, blacks reduced the gap relative to the national average in only half the states, and the gap worsened in seven others. Moreover, differences between whites and blacks within each state remained wide (see discussion under "Healthy Lives," below). At the same time, equity gaps widened in 27 to as many as 41 states on interrelated indicators of access and coordination of care. Typically, the increase in the gap reflected worse access and care experiences for the vulnerable group.

States ranked at the top of the equity dimension tend to have the smallest gaps in performance between national averages and low-income, uninsured, and minority groups (Exhibit 24). Six of the 13 top-ranked states—Maine, Vermont, Rhode Island, New Hampshire, Delaware, and Iowa—score in the top quartile on this dimension for all three population groups (income level, insurance coverage, and race/ethnicity). Conversely, five of the 13 states in the bottom quartile of the overall equity ranking score in the bottom quartile for all three groups.

States that rank high on the equity dimension are located in the Upper Midwest and the Northeast. The lowest-ranked states are in the South and West. But as seen in the first *State Scorecard*, other states in these regions—including West Virginia, Alaska, and Montana—rank in the top half of the equity rating overall and in the top quartile of one subgroup. This pattern suggests that states facing similar regional circumstances and challenges can still effectively tackle disparities in care.

Despite progress in some states, there are wide equity gaps in *State Scorecard* measures for vulnerable populations, with the extent of disparities varying across the states. States that perform well among all populations on overall statewide rankings—and on access and quality in particular—tend to have smaller equity gaps among vulnerable

## Summary of Changes in Equity Dimension

	Number of States with Data	Gap Narrowed	Gap Narrowed and Low-Income Group Improved	Gap Widened	Gap Widened and Low-Income Group Worsened	Change in U.S. Average Rate
<b>Income</b>						
1 Percent uninsured, ages 0–64	50	22	22	27	27	Worsened
2 Percent of at-risk adults have not visited a doctor for routine checkup in the past two years	51	16	8	35	35	Worsened
3 Percent of adults with a time in the past year when they needed to see a doctor but could not because of cost	51	13	13	35	35	Worsened
4 Percent of adults age 50 and older did not receive recommended screening and preventive care	51	15	15	35	21	Improved
5 Percent of adult diabetics did not receive recommended preventive care	42	13	13	28	21	Improved
6 Percent of children without both a medical and dental preventive care visit in the past year <sup>a</sup>	—	—	—	—	—	—
7 Percent of adults without a usual source of care	51	17	17	34	29	Improved
8 Percent of children without a medical home <sup>a</sup>	—	—	—	—	—	—
9 Percent of adult asthmatics with an emergency room or urgent care visit in the past year <sup>b</sup>	—	—	—	—	—	—
	Number of States with Data	Gap Narrowed	Gap Narrowed and Uninsured Group Improved	Gap Widened	Gap Widened and Uninsured Group Worsened	Change in U.S. Average Rate
<b>Insurance Coverage</b>						
1 Percent of at-risk adults have not visited a doctor for routine checkup in the past two years	51	10	4	41	41	Worsened
2 Percent of adults with a time in the past year when they needed to see a doctor but could not because of cost	51	23	22	27	27	Worsened
3 Percent of adults age 50 and older did not receive recommended screening and preventive care	51	19	19	31	23	Improved
4 Percent of children without both a medical and dental preventive care visit in the past year <sup>a</sup>	—	—	—	—	—	—
5 Percent of adults without a usual source of care	51	18	18	33	33	Improved
6 Percent of children without a medical home <sup>a</sup>	—	—	—	—	—	—
	Number of States with Data	Gap Narrowed	Gap Narrowed and Non-White Group Improved	Gap Widened	Gap Widened and Non-White Group Worsened	Change in U.S. Average Rate
<b>Race/Ethnicity</b>						
1 Percent uninsured, ages 0–64	43	21	19	22	22	Worsened
2 Percent of at-risk adults have not visited a doctor for routine checkup in the past two years	49	14	11	35	35	Worsened
3 Percent of adults with a time in the past year when they needed to see a doctor but could not because of cost	51	21	20	28	28	Worsened
4 Percent of adults age 50 and older did not receive recommended screening and preventive care	47	21	21	26	19	Improved
5 Percent of children without both a medical and dental preventive care visit in the past year <sup>a</sup>	—	—	—	—	—	—
6 Percent of adults without a usual source of care	51	22	22	29	28	Improved
7 Percent of children without a medical home <sup>a</sup>	—	—	—	—	—	—
8 Mortality amenable to health care, deaths per 100,000 population	43	24	24	19	7	Improved
9 Infant mortality, deaths per 1,000 live births	47	25	25	21	21	Same

<sup>a</sup> Data are not comparable over the two time periods because of changes in survey design.

<sup>b</sup> Data could not be updated.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

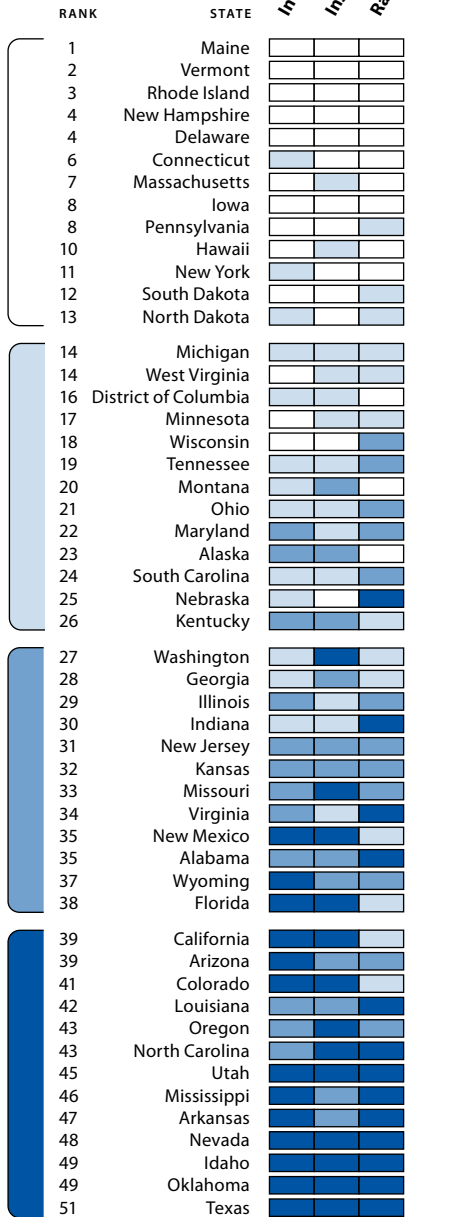


**Equity Dimension and Equity Type Ranking**

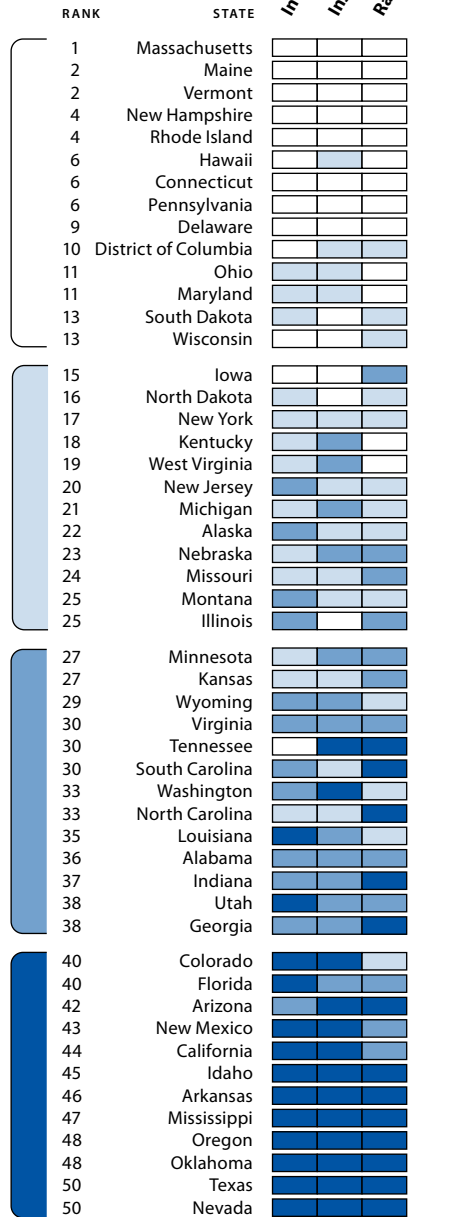
**State Rank**

- Top Quartile
- Second Quartile
- Third Quartile
- Bottom Quartile

**2009 Ranking**



**Revised 2007 Ranking\***



\*Some state rates from the 2007 edition have been revised to match methodology used in the 2009 edition.  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

populations. This relationship indicates that states that do better for their populations overall also tend to do better for their most vulnerable groups on indicators examined by the *State Scorecard* (most of the equity indicators are drawn from the access and prevention and treatment dimensions).

Some higher-performing states provide care to traditionally disadvantaged groups at rates that are better than the national average on some indicators. For example, the percentage of low-income diabetic patients receiving basic recommended services was higher in 11 states (e.g., 63% in Minnesota) than the national average for all diabetic patients across the nation (44%). In a few instances, care for the most vulnerable group was on par with that provided to the typically advantaged group. States with large equity gaps might learn lessons from the care management strategies in these better-performing states.

Conversely, in states that rank low on overall performance across all five dimensions, low performance extends even to high-income, insured, and non-minority groups.

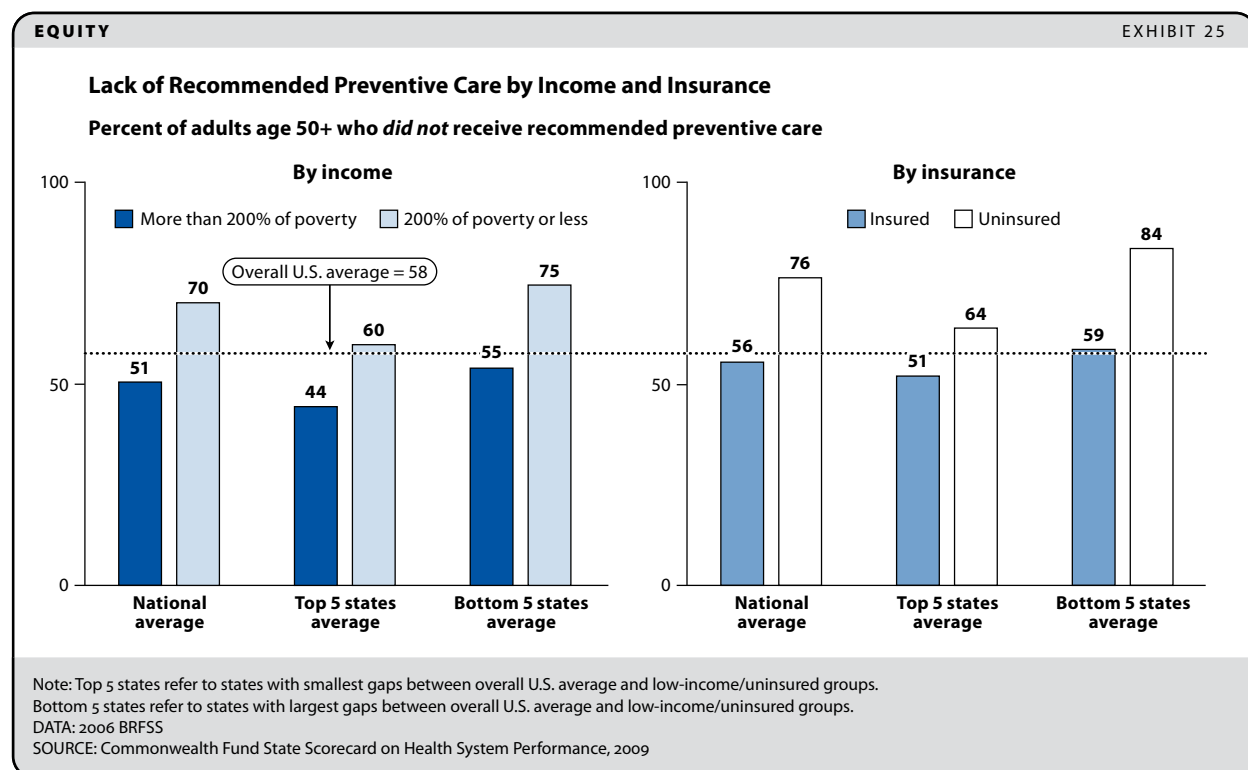
The following section examines gaps in terms of access to and quality of care, focusing on disparities by income level and insurance status. The “Healthy Lives” section, below, examines how well state health

systems support their residents’ ability to live long and healthy lives and further explores disparities by race or ethnicity on selected mortality indicators.

## INCOME AND INSURANCE

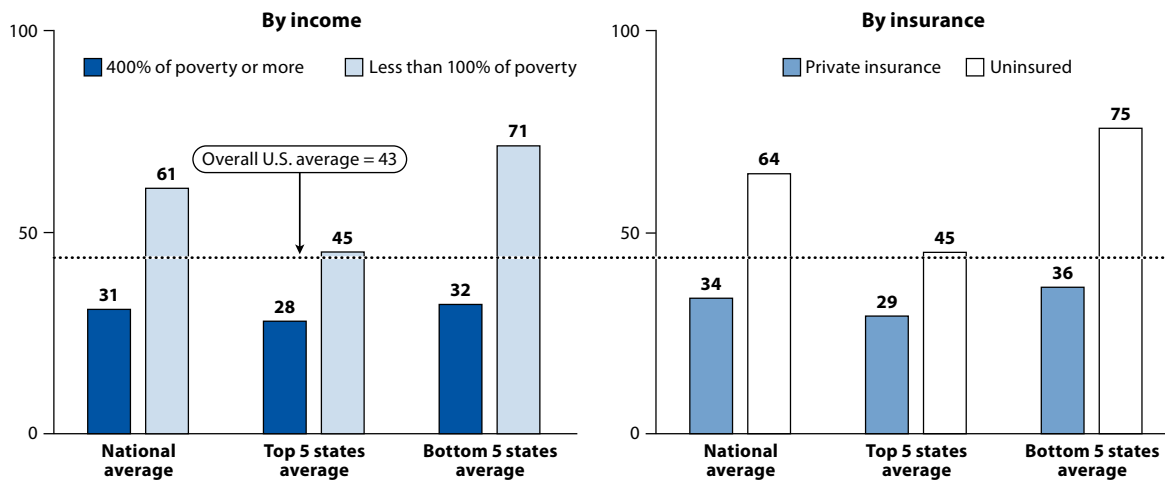
In most states, access to and quality of care varies by income and insurance, with lower income and lack of insurance associated with poorer access and lower quality. Gaps are widest in states that perform poorly on indicators of quality and access overall.

Across all equity indicators, states in which low-income and uninsured individuals lost ground outnumbered states in which these groups advanced in relation to the national average over the periods assessed by the *State Scorecard*. For most of these indicators, the equity gaps widened in both top- and bottom-ranked states on equity. Widening equity gaps were especially striking on indicators of access and coordination of care: in 35 states, low-income adults were increasingly less likely to visit a physician over the periods assessed by the *State Scorecard*, and in 29 states they were less likely to have a usual source of care (Exhibit 23). Likewise, in 41 states uninsured adults were less likely to have physician visits, and in 33 states they were less likely to have a usual source of care.



### Children Without a Medical Home by Income and Insurance

Percent of children without a medical home



Note: Top 5 states refer to states with smallest gaps between overall U.S. average and low-income/uninsured groups.  
 Bottom 5 states refer to states with largest gaps between overall U.S. average and low-income/uninsured groups.  
 DATA: 2007 National Survey of Children's Health  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

Income and insurance equity gaps are particularly wide in terms of receipt of preventive care (Exhibit 25). On average, across the nation 76 percent of uninsured and 70 percent of low-income adults age 50 and older did *not* receive all recommended cancer screening and immunizations, compared with 56 percent of insured and 51 percent of higher-income adults. A similar pattern exists for diabetes care. On average, 61 percent of low-income diabetic patients did not receive basic care according to guidelines for their condition (although this represents an improvement from 67% in 2003–04).

Part of whether children have a medical home depends on their family's income and their insurance status. Top-ranked states on equity were more likely than other states to provide children with medical homes overall, including those in low-income families or without health insurance. Even though vulnerable children in the top-ranked states were less likely than their higher-income or insured counterparts to have medical homes, performance rates for the vulnerable groups were at the national average. In contrast, medical home rates among children in low-income families or without health insurance were much lower than the national average in the

bottom-ranked states, with close to a twofold spread in the equity gap (Exhibit 26).

In most states, performance variation on many indicators is much greater among uninsured than among insured populations. For instance:

- The proportion of uninsured adults who reported not seeing a doctor because of costs ranged from 30 percent in the five states with the narrowest equity gap to 52 percent in the five states with the widest gap on this indicator. This was four times the state variation among those with insurance, which ranged from 5 percent to 11 percent between the top-five and bottom-five states.
- Across the nation, on average only 13 percent of adults with insurance coverage reported not having a usual source of care—an important determinant of whether people receive preventive care. Among the uninsured, proportions without a usual source of care ranged from 42 percent in the states with the smallest equity gap to 67 percent in the states with the largest gap.

### RACE AND ETHNICITY: ACCESS AND QUALITY

The *State Scorecard* also compares access to and quality of care by racial and ethnic groups, focusing

on states that have substantial minority populations and sufficient data for analysis. Because minorities often have lower incomes and are more likely to be uninsured than whites, the disparities observed among minorities also reflect differences related to income and insurance status.

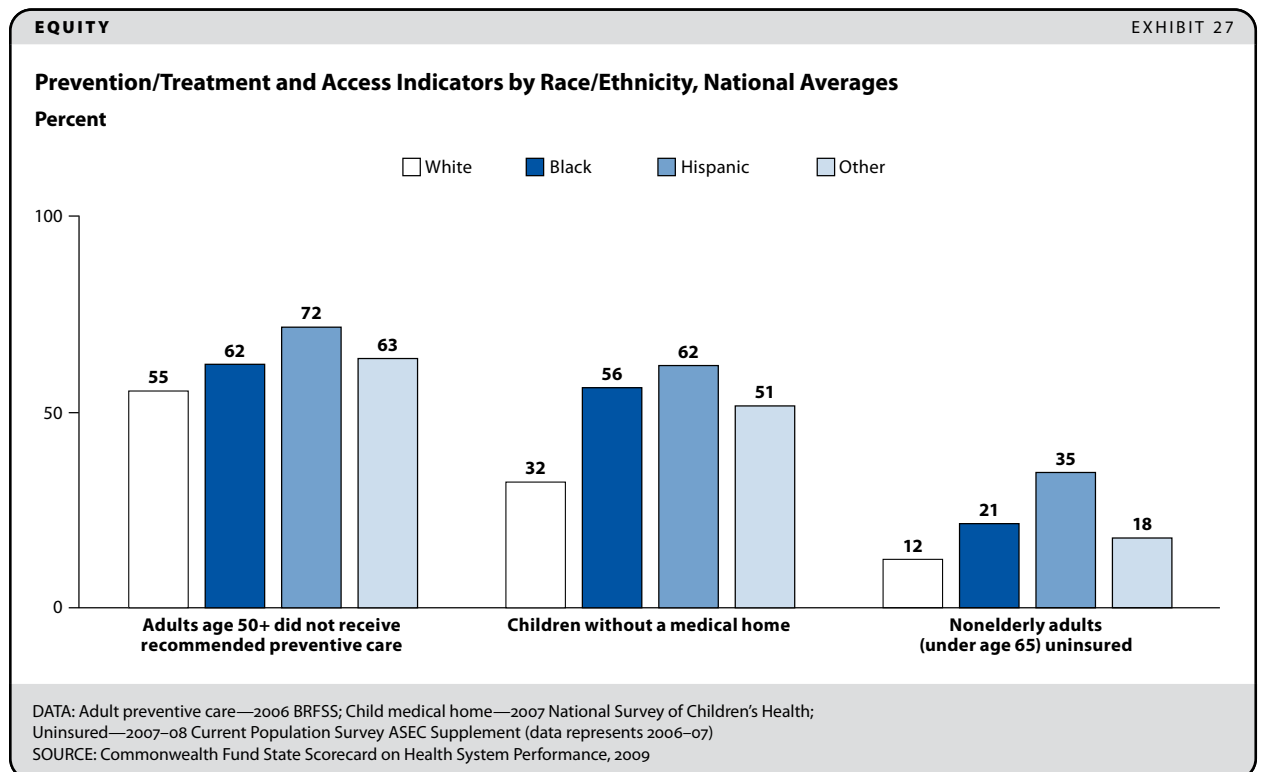
Equity gaps by race or ethnicity were more likely to widen than narrow as a result of worsening performance among the most vulnerable nonwhite group across four of seven indicators for which trend data were available (Exhibit 23). Most states made progress on the other three indicators: rates of mortality amenable to health care, infant mortality rates, and rates of older adults receiving recommended preventive care. Still, large equity gaps remain on these indicators.

Minorities fare substantially worse than whites on most indicators in most states, though their experiences vary across states. Hispanics have the highest uninsured rate in nearly all states—on average, almost three times that of whites (Exhibit 27). In states with the widest equity gaps, nearly half of all nonelderly Hispanics are uninsured. Hispanics also are the most likely to report not having a regular source of care among racial/ethnic population groups (40% of Hispanics vs. 16% for whites). Black, Hispanic, and other minority children are all at higher risk

of lacking a primary care medical home to coordinate their care: medical home rates among minority children were 19 to 30 percentage points lower than among white children. Minority adults, too, are at greater risk than whites of missing recommended preventive care.

Some states ranked low on measures of equitable care for racial/ethnic minorities as a result of severe shortfalls for selected minority groups that comprise relatively small shares of these states' total populations. For example, Minnesota's scores were often low for a racial/ethnic category that included Asian Americans and Native Americans. For these states, improvement efforts focused on these population groups could substantially reduce health disparities.<sup>27</sup>

Some states stand out in terms of achieving more equitable treatment of minorities. Reflecting the influence of state coverage policy, the uninsured rate among blacks is almost equal to that of whites in Tennessee and approaches the national rate for whites in Wisconsin, Massachusetts, and the District of Columbia. Likewise, the uninsured rate among Hispanics is almost half the national average for Hispanics in Pennsylvania and near the national average for whites in Massachusetts and Hawaii.



In eight states (Delaware, Maryland, Michigan, Missouri, Montana, Ohio, Pennsylvania, and Wisconsin), black or Hispanic adults are more likely than whites nationally—and at least as likely as whites in their own state—to receive all recommended cancer screenings and immunizations. Minority children also do relatively better than white children across states in terms of receipt of preventive medical and dental visits, with black children more likely to receive preventive visits in two-thirds of the states for which data are available. This likely reflects the influence of expanding coverage to low-income children through Medicaid and CHIP as well as requirements for the delivery of preventive care under Medicaid’s Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) program.

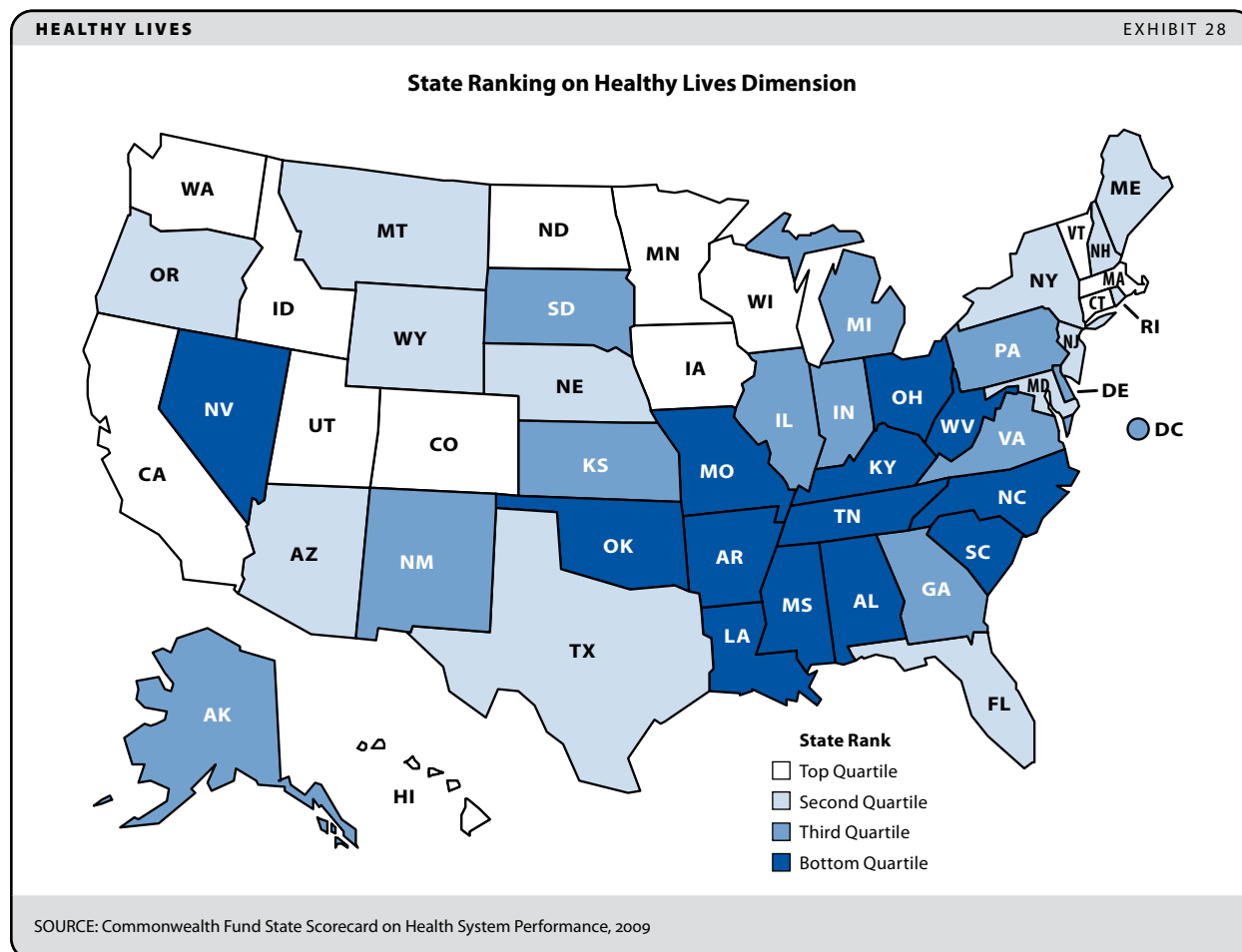
Altogether, the *State Scorecard* paints a sobering picture of equity gaps that remain large and in many cases appear to be widening. Federal policy action is clearly needed to support more equitable access to

care and treatment across all states. Where people live, how much they earn, and what their racial or ethnic background is should not determine the kind of health care they receive.

## Healthy Lives

Helping adults and children lead healthy lives and avoid sickness and disability is an overarching goal of health care systems and a challenge for state medical care and public health systems. Millions of Americans suffer from chronic disease, and the number with such conditions is expected to continue to climb rapidly. Heart disease, cancer, and diabetes account for the majority of premature deaths in the United States. The future burden of such diseases will be fueled by the epidemic of obesity, unless trends abate.

States are looking for comprehensive approaches that emphasize prevention and better management of these conditions, as well as public health initiatives



that address population risk factors. These include policies and programs intended to stem the rise of obesity, curb smoking, and promote healthy lifestyles, while ensuring the delivery of preventive services and effective care for chronic conditions.

The *State Scorecard* gauges how well states strengthen opportunities for achieving optimal health and quality of life for their residents. There is little question that health outcomes are heavily shaped by forces both outside and inside the health care system. Income, education, and housing and work environments significantly influence the extent to which people are able to live healthy and productive lives. Other health determinants that are closely intertwined with cultural and socioeconomic factors also affect people’s expectations of and interactions with the health system. By assessing mortality rates and other health outcomes, the *State Scorecard* does not aim to dismiss the complex nature of state-level differences in health, but rather it seeks to highlight important targets for system improvement.

The 2009 *State Scorecard* analysis found continuing large variation in health outcomes across states on multiple indicators. Regional patterns remained relatively constant, with top-ranked states spread across parts of the Upper Midwest, West (including the Mountain and Pacific regions), and New England (Exhibit 28). Minnesota—the top-ranked state on this dimension—was the only state to consistently perform in the top quartile on all indicators of healthy lives. Wisconsin moved into the top quartile of states—reaching the top quartile of performance on three indicators and becoming one of the most improved states on two indicators: rates of mortality amenable to health care and rates of nonelderly adults with activity limitations. In five states, three-quarters of the indicators improved by 5 percent or more (see table).

### POTENTIALLY PREVENTABLE MORTALITY

Mortality amenable to health care represents the best measure available to summarize state variations in health outcomes. This age-standardized measure includes deaths before age 75 caused by at least partially preventable or treatable conditions, such as bacterial infections, certain screenable cancers, diabetes, heart disease, stroke, asthma, and surgical complications (for some conditions,

Healthy Lives: Top-Performing and Most-Improving States		
Top 5 States	Rank	Count of indicators that improved by 5% or more*
Minnesota	1	4
Hawaii	2	4
Connecticut	3	6
Utah	4	3
California	5	5
States with Most Improved Indicators	Rank	Count of indicators that improved by 5% or more*
Connecticut	3	6
Oregon	18	6
New Jersey	19	6
Georgia	37	6
District of Columbia	38	6

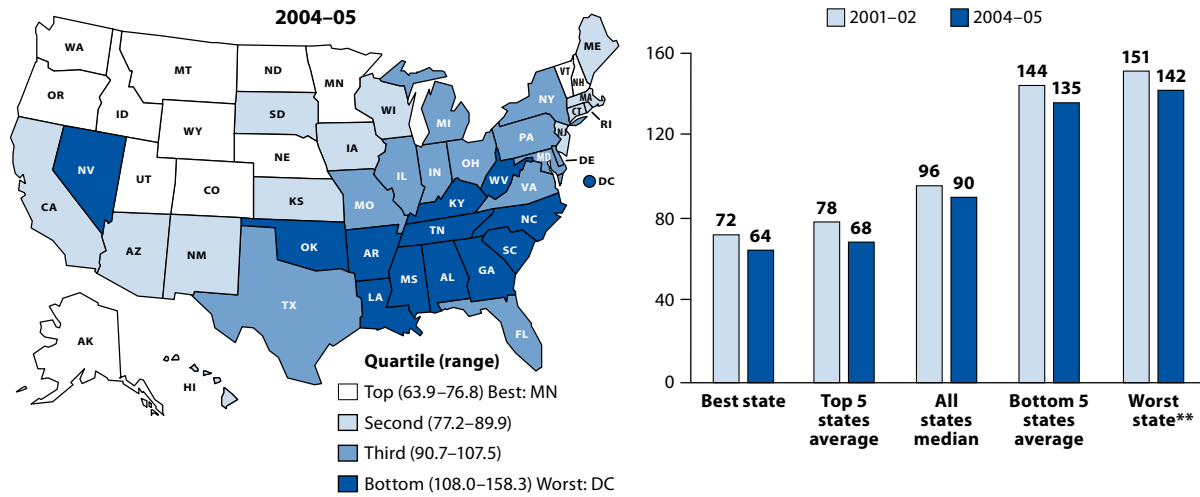
\* Count is out of a total of 8 indicators.

deaths were restricted even further to younger age ranges). The United States fell into last place among 19 industrialized countries between 1997–98 and 2002–03. While the overall rate of mortality amenable to health care went down in the U.S., the pace of improvement in the other countries over the same period was greater.<sup>28</sup>

Updated state-level analyses prepared for the *State Scorecard* find that the median state rate of deaths from conditions amenable to health care declined by 6 percent from 2001–02 to 2004–05 (95.6 to 89.9 deaths per 100,000) (Exhibit 29). In a handful of states, the rates of preventable deaths decreased by 15 percent or more. Minnesota and Vermont—which had among the lowest rates in the country in the beginning of the decade—further lowered their death rates, setting new benchmarks. The lowest state rates now near results achieved in the best country (65 deaths per 100,000 in France). For the most part, rates of deaths from conditions amenable to health care improved across all states, except for Arkansas, Nevada, and Louisiana, which saw minimal or no change.

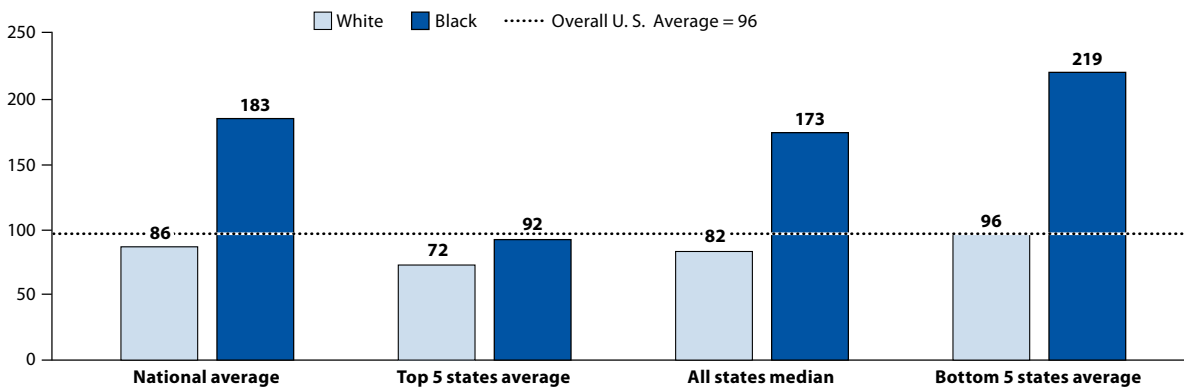
Still, wide regional variation remains. There is a twofold range across the top- and bottom-five states. In the best-performing states (Minnesota, Utah, Vermont, Colorado, and Nebraska), rates are half those in the District of Columbia and lagging states (Mississippi, Louisiana, Arkansas, and Tennessee). Average death rates were 68.2 per 100,000 persons in the top

**Mortality Amenable to Health Care by State**  
Deaths\* per 100,000 Population



\* Age-standardized deaths before age 75 from select causes; includes ischemic heart disease.  
 \*\* Excludes District of Columbia.  
 DATA: Analysis of 2001-02 and 2004-05 CDC Multiple Cause-of-Death data files using Nolte and McKee methodology, *BMJ* 2003  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

**Mortality Amenable to Health Care by Race, National Average and State Variation, 2004-05**  
Deaths\* per 100,000 Population



\* Age-standardized deaths before age 75 from select causes; includes ischemic heart disease.  
 Note: Top 5 states refer to states with smallest gaps between overall U.S. average and black.  
 Bottom 5 states refer to states with largest gaps between overall U.S. average and black.  
 DATA: Analysis of 2004-05 CDC Multiple Cause-of-Death data files using Nolte and McKee methodology, *BMJ* 2003  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

states, compared with 135.4 per 100,000 persons in the bottom states (Exhibit 29). States in the Upper Midwest, the Mountain region, and New England generally had lower rates of mortality amenable to health care than states in the South. This gap translates

into thousands of lives. If all states improved to the levels achieved by the best state, about 78,000 fewer premature deaths would occur each year.

Wide differences exist between amenable mortality rates for black and white populations (Exhibit 30). In

half of the states, rates of death among blacks are at least two times higher than among whites. Even in the five states with the lowest amenable death rates among blacks, 92.0 deaths per 100,000 blacks occur on average—a rate that is higher than the national average for the white population.

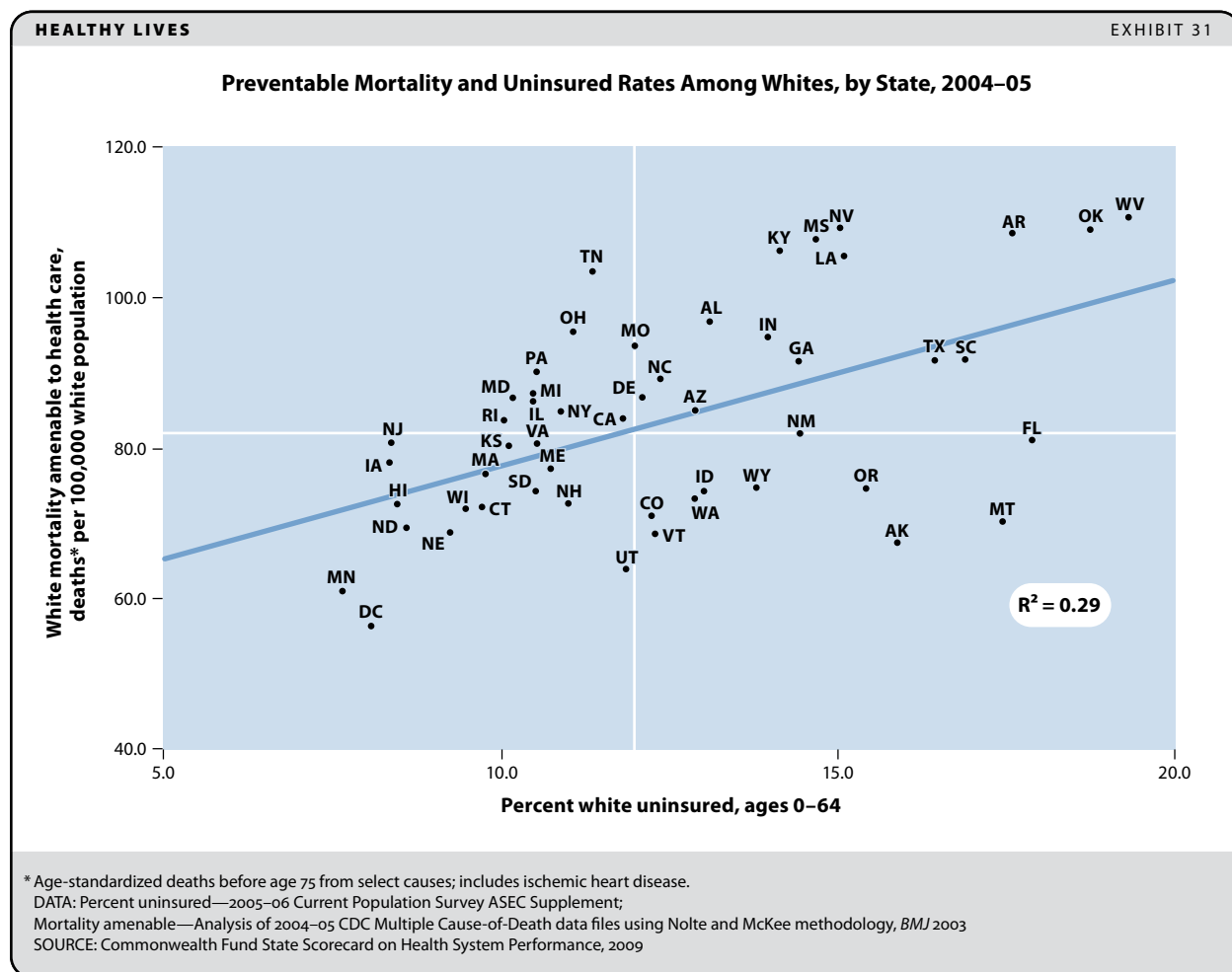
Potentially preventable deaths among whites have gone down in nearly all states. Although such rates also declined among blacks in many states with substantial black populations, they have typically done so at slower rates. As a result, race differences within states have increased (Exhibit A15).

High rates of black mortality bring up the average mortality rate for states with high concentrations of black populations, particularly the District of Columbia and states located in the southern central regions. Louisiana, Mississippi, and Arkansas have more than 120 additional deaths per 100,000 black residents in excess of the total national average for

blacks; these states also have highest amenable death rates in the country.

Yet even when looking at potentially preventable death rates among whites only, wide variation persists across states. Such rates ranged from a low of 61 to 69 per 100,000 whites in the five states with the lowest rate (Minnesota, Utah, Alaska, Vermont, and Nebraska) to a high of 108 to 111 in the five highest-rate states (Mississippi, Arkansas, Oklahoma, Nevada, and West Virginia).

Higher rates of uninsured residents are also linked to poorer health outcomes across states. After restricting the analysis to whites (as a control for race), the *State Scorecard* finds the likelihood of dying from conditions amenable to health care tended to be higher in states with the largest percentages of uninsured adults (Exhibit 31). The quartile of states with the highest uninsured rates among whites averaged an additional 20 preventable deaths per 100,000 whites





than the quartile of states with the lowest uninsured rates (94 deaths per 100,000 vs. 74 per 100,000). This association between a state's uninsured rate and its mortality rate remains significant after adjusting for the poverty rate (data not shown).

Comparisons of state rates of deaths amenable to health care and overall ranking on potentially avoidable hospital use/costs dimension reveal a strong correlation (Exhibits 29 and 18).<sup>29</sup> The relationship points to the potential for states to pursue the twin goals of a healthier population and a more efficient health care system—with an emphasis on improving public health as well as the performance of care systems.

## CANCER DEATHS

Mirroring overall amenable mortality rates, median state death rates from breast cancer and colorectal cancer declined between 2002 and 2005. The age-adjusted rate of colorectal cancer deaths dropped in nearly every state, whereas the change in breast cancer death rates was more varied and less pronounced across states (Appendix Exhibit A14). Within states, reducing mortality rates for one type of cancer did not necessarily overlap with reducing rates for another type. For example, Wyoming had the largest reduction in colorectal cancer death rates (by 5.4 per 100,000 population) during the course of three years, but rates of breast cancer deaths among its residents increased over the same period. Likewise, Idaho showed the greatest decline in breast cancer deaths (by 6.0 deaths per 100,000 population) but made no improvement in reducing colorectal cancer deaths.

Breast cancer mortality ranged from an average of 19.5 to 28.3 per 100,000 females in the top- and bottom-five states. This variation has grown smaller as states with the highest breast cancer death rates experienced steeper declines than leading states. The spread in state-specific rates of colorectal cancer mortality also narrowed during this time; bottom-ranked states are now at the median state rate observed in 2002. Still, death rates from colorectal cancer are more than 40 percent higher in the five states with the worst mortality rates, compared with the five states with the best mortality rates (20.4 vs. 14.3 per 100,000 population). State strategies should focus on increasing screening rates as well as improving access

to early detection and treatment services, particularly among underserved communities.

## INFANT MORTALITY

High infant death rates in many states continue to be of concern. Alarming, such rates are up in states that already had high rates in the earlier *State Scorecard*. Infant mortality rates increased by at least 5 percent in 22 states and went down by 5 percent or more in 11 states, including some states that already had among the lowest rates (Exhibit A14). As a result, the spread across states grew larger.

The following states, along with the District of Columbia, had high rates of infant deaths in 2002 and experienced further increases by 2005: Mississippi, South Carolina, Alabama, and Delaware. Their infant deaths rates now range from more than 13 per 1,000 live births (District of Columbia) to nine per 1,000 births (Delaware)—all well above the national average of 6.9 per 1,000. Even some previously top-ranked states had increases in their infant death rates. Utah and Washington, on the other hand, are examples of states with relatively low infant mortality rates in 2002 that continued to move ahead of other states by 2005.

The highest infant death rates (in the District of Columbia, Mississippi, Louisiana, South Carolina, and Alabama) are more than twice as high as the lowest infant death rates (in Utah, Massachusetts, Minnesota, Washington, and New Jersey). Death rates among black infants exceed those among white infants in all states—by up to three times in certain states that have reliable black infant mortality data. While it is important to consider state variation in racial makeup in assessing state patterns, states with traditionally low or high infant mortality rates persist at the same relative levels, even after adjusting for state racial and ethnic demographics.<sup>30</sup>

The states with the lowest white infant mortality rates (excluding the District of Columbia) also tend to have better birth outcomes for black infants relative to all states. Yet, the combined average of infant deaths is 4.1 per 1,000 white births versus 10.4 per 1,000 black births in these same states. Ensuring that high-risk mothers and newborns receive appropriate counseling and coordinated care services could improve birth outcomes to the levels that should be attainable for all infants.

## SUICIDES

Lives lost from suicide present major public health and clinical challenges. After a decline of more than a decade, the national suicide rate has gone up since 1999. From 2003 to 2005, there was no improvement in the state median suicide rate or spread across states. Age-adjusted suicide rates continue to vary considerably across states, from a low of six per 100,000 persons in New York and New Jersey (and 5.5 per 100,000 in the District of Columbia) to a high of 20 or more per 100,000 in Montana, Alaska, and Nevada. Regional patterns reveal that suicides are most common in states from the Mountain region, and rates have slipped farther behind in Montana and Colorado. Wyoming, with historically high rates of suicide, exhibited the greatest improvement (by 4.6 per 100,000 population). Suicide death rates were lowest in the Northeast.

Recent studies find that lower state-based suicide rates are related to positive indicators of access to and utilization of mental health care services, including lower rates of uninsured residents.<sup>31</sup> Notably, the five states ranked highest by the *State Scorecard* on the access dimension have a combined average suicide rate that is almost 40 percent lower than the combined average of the five lowest-ranked states.

New state-level data from the National Survey of Drug Use and Health show wide variation among the states in the proportion of adults who had a major depressive episode and received any mental health treatment in the past year (see table 3A in supplemental *State Scorecard Data Tables*). Rates of reported treatment ranged from 77 percent in the best state (Connecticut) to only 50 percent in the worst state (Arizona) during 2004–07. Other research has found that even when people receive mental health treatment, it is often inadequate in achieving health outcome goals.<sup>32</sup> This indicator will be included in future *State Scorecards* as time trends become available.

## PUBLIC HEALTH

Smoking and obesity contribute to high rates of preventable disease and long-term disability, as well as risk of early death. In the majority of states, an increasing proportion of adults are limited in their daily

activities because of health problems; in the worst states, the rate reached a high of more than 20 percent of the working-age population in 2006–07. State initiatives that promote healthy behaviors and curtail tobacco use and reduce obesity have the potential to improve population health substantially. Such strategies could also lead to real cost savings. Between 2000 and 2004, cigarette smoking resulted in annual direct medical costs of approximately \$96 billion—or a total of \$193 billion annually if lost productivity is included.<sup>33</sup> Meanwhile, the annual medical costs of obesity alone have doubled in the past decade, adding \$147 billion to the nation's health care bill in 2008.<sup>34</sup>

Smoking rates among adults showed signs of improvement, decreasing by 5 percent or more in 40 states from 2003–04 to 2006–07. Yet, large geographic variations exist. The highest percentages of smokers are concentrated in the South-Central region and lower Midwestern states. On average, more than one of four adult residents smoke in the bottom-ranked states of Kentucky, West Virginia, Oklahoma, Mississippi, and Indiana, compared with only one of 10 in Utah, the top-ranked state (Appendix Exhibit 14).

Those states with the highest adult smoking rates also continue to have relatively low excise taxes, despite the proven effectiveness of such levies in preventing smoking initiation and reducing cigarette consumption. In fact, seven of the top 10 states with the lowest smoking rates have cigarette taxes of at least \$2.00 per pack. Notably, Rhode Island, which back in 2003 became one of the first two states to achieve the Healthy People 2010 objective of \$2.00 per pack, is now one of the most improved states on this indicator.<sup>35</sup> This year, Rhode Island increased its cigarette tax to \$3.46 per pack, the highest in the nation.<sup>36</sup>

The prevalence of childhood overweight (defined as greater than or equal to the 85th percentile of body mass index, or BMI, based on gender, age, weight, and height) or obesity (95th percentile of BMI or higher) has failed to show marked improvements from 2003 to 2007. At least a quarter of children ages 10 to 17 are overweight or obese in every state, except Utah, Minnesota, and Oregon (although these states are not far behind). In 17 states, one of three children is either overweight or obese. Such lack of progress suggests that obesity-related hospitalizations among children

and youth will continue to rise and drive Medicaid costs as they have been doing.<sup>37</sup>

Notably, regional patterns of childhood overweight or obesity prevalence closely resemble those of mortality amenable to health care rates. States in the South-Central region have the highest percentage of overweight or obese children, and parts of the Upper Midwest, the Mountain region, and New England have the lowest. Geographic disparities have remained even after adjusting for individual and area-level socioeconomic factors.<sup>38</sup> By 2007, Mississippi had the highest rate of overweight and obesity, growing from 37 percent of children to a staggering 45 percent. Previously top-ranked states also show higher rates of childhood overweight or obesity.

Reducing obesity and smoking rates would significantly raise health outcomes and quality of life. Improvement in these areas requires comprehensive strategies, including public health initiatives to provide nutrition counseling, smoking cessation, and exercise programs, along with enhanced access to care for the most disadvantaged groups. A number of states are already using a variety of incentives in state-funded programs like Medicaid and CHIP to encourage healthy behaviors.<sup>39</sup> State efforts can be further boosted by a federal commitment to disease prevention and health promotion, such as recent legislation authorizing the Food and Drug Administration to regulate the content, marketing, and sale of cigarette and tobacco products.<sup>40</sup> Indeed, public policy interventions that helped bring down tobacco use—excise taxes, warning label requirements, and advertising bans—may offer models for addressing the ever-growing public health problem of obesity.<sup>41</sup>

## Cross-Cutting Findings

Six cross-cutting findings emerge from the 2009 *State Scorecard*, some of which reinforce themes identified in the 2007 *State Scorecard* and some of which are new:

- Leading states consistently outperform lagging states across indicators and dimensions: public policy and public-private collaboration can make a difference.

- Wide variations in access, quality, costs, and health outcomes persist across states.
- Improvement in key areas of quality performance holds promise for continued improvement in these and other areas of performance.
- Symptoms of poor care coordination and inefficient use of resources point to opportunities to improve the quality of care and reduce costs.
- Affordability of care is a concern across states.
- There is room for improvement across all states.

### **Leading states consistently outperform lagging states across indicators and dimensions: public policy and public-private collaboration can make a difference.**

Thirteen states—Vermont, Hawaii, Iowa, Minnesota, Maine, New Hampshire, Massachusetts, Connecticut, North Dakota, Wisconsin, Rhode Island, South Dakota, and Nebraska—again rise to the top quartile of the overall performance rankings (Exhibit 1). Though specific rankings shifted, these are the same states that were identified as top performers in the first *State Scorecard* two years ago. Many have been leaders in health system reform, including targeted efforts to reduce rates of uninsured adults and children.

Ten of the 13 states in the lowest quartile of performance—Tennessee, Alabama, Florida, Kentucky, Texas, Nevada, Arkansas, Louisiana, Oklahoma, and Mississippi—also ranked in the bottom quartile in the 2007 *State Scorecard*. Three others—North Carolina, Illinois, and New Mexico—dropped from the third to the fourth quartile, while California, West Virginia, and Georgia moved up out of the last quartile. The 13 states in the lowest quartile lagged well behind their peers on indicators across performance dimensions. Rates of uninsured adults and children are, on average, double those in the top quartile of states. Receipt of recommended preventive care is generally lower, and mortality from conditions amenable to health care is 50 percent higher on average in these states than in leading states.

Among the states that moved up the most in the overall rankings, Minnesota rose within the top quartile of performance to become the fourth-ranked state, with significant improvement on multiple indicators. In three states—Arkansas, Delaware, and

West Virginia—plus the District of Columbia, at least half of the performance indicators improved by 5 percent or more (Appendix Exhibit A3). Leading states set new benchmarks for 20 of the 35 indicators with trends.

These patterns indicate that public policies, as well as state and local health care systems, can make a difference, though socioeconomic factors also play a role. Vermont, Maine, and Massachusetts, for example, have enacted comprehensive health system reforms to expand coverage and also have initiatives under way to improve population health and benchmark providers on the quality of care they deliver. Minnesota is a leader in bringing public- and private-sector stakeholders together in collaborative initiatives to improve the overall value of health care—an approach that is gaining traction in other states as well.<sup>42</sup> As New York and Utah have made concerted efforts to improve their performance in priority areas, their performance on key indicators has improved.<sup>43</sup>

#### **Wide variations in access, quality, costs, and health outcomes persist across states.**

Overall, the range of performance remains wide across states and dimensions of performance, with a twofold to threefold spread between top and bottom states on multiple indicators (Exhibit 2). On many indicators, the leading states have improved substantially since the 2007 *State Scorecard*—setting new benchmarks.

The range across states is particularly wide on the following indicators: percent insured; rate of diabetic patients receiving recommended care; receipt of mental health care for children; rate of pressure ulcers in nursing homes; rate of preventable hospital admissions; and mortality amenable to health care. To reach the level of top-performing states, bottom-performing states would need to improve by 40 to 50 percent on average.

Improving the performance of all states to the levels achieved by the best states could save thousands of lives, improve access to care and quality of life for millions, and reduce costs to pay for improved care and expanded coverage. As discussed under “Impact of Improved Performance,” below, the cumulative effect would mean substantial gains in value to the nation.

Geographic variations remain striking, repeating the same general patterns seen in the first *State Scorecard*. Upper Midwest and New England states continue to lead, and states across the South, Southwest, and Lower Midwest continue to trail their peers on overall performance rankings. This pattern generally holds for the access, quality, and equity dimensions, but western states tend to perform better on the other two dimensions (avoidable hospital use and costs of care and healthy lives) (Exhibit 1). Yet, exceptions also exist—especially where states and care systems have made a concerted effort to improve.

#### **Improvement in key areas of quality performance holds promise for continued improvement in these and other areas of performance.**

The 2009 *State Scorecard* also documents widespread improvement across states for selected indicators, especially quality indicators for which there has been a national commitment to reporting performance data and collaborative efforts to improve. Notably, for some indicators of hospital clinical processes, the average performance of the bottom-ranked states now exceeds the median state rate three years ago—as virtually all states improved (Exhibits 2 and 3). These indicators measure treatment for heart attack, heart failure, and pneumonia, prevention of surgical complications, and provision of written discharge instructions for heart failure patients.

Performance on publicly reported measures of nursing home care quality also improved substantially across states. The average performance on reported pain and use of physical restraints on residents improved by at least 5 percent in all states, and in the majority of states average performance improved by the same amount for a measure of pressure ulcers; in addition, the range of performance between states narrowed. One key measure of home health care quality—improvement in patients’ mobility—also showed a 5-percent-or-greater improvement in most states.

Currently, all hospitals are required to publicly report selected indicators in return for payment updates from Medicare. Several public and private initiatives have further tied payment incentives to improvement on such metrics. The rapid improvement

in a relatively short period illustrates the importance of having performance information to guide and drive change. It also shows that health care providers have the capacity to improve and that financial incentives can foster higher performance. In contrast, hospital readmission rates and several quality indicators that are not generally publicly available at the level of health care delivery systems failed to improve or evidenced mixed performance across states.

General trends toward lower rates of mortality amenable to health care, cancer deaths, and smoking are also promising. Still, most states' death rates substantially exceed those achieved by the lowest state benchmarks. The more than twofold spread among states on rates of mortality amenable to care and smoking, and the greater than 50 percent spread on breast cancer and colorectal cancer deaths, signal that there are significant opportunities to improve, particularly through efforts focusing on population health and outcomes.

At the same time, rates of childhood overweight or obesity have yet to show any meaningful declines. Further progress in reducing unnecessary death and illness will hinge on prevention of disease and promotion of healthy behaviors in both medical and community settings. Clinical care systems need to work hand in hand with public health professionals and community-based groups to implement programs and policies and evaluate progress toward achieving population health goals.<sup>44</sup>

Gains in the quality of care provided in hospitals and nursing homes were not matched in other areas. Of particular concern, there were modest increases in the percentage of adults receiving preventive care in just half the states and failure to improve in the majority of states on multiple indicators of ambulatory care quality and access over the two-to-four-year trends typically captured by the 2007 and 2009 *State Scorecards*. Performance on many indicators of avoidable hospital use and costs failed to improve or grew worse, especially rates of hospital admissions and readmissions from nursing homes—highlighting the need for better coordination of care across settings.

The median state rate (representing the middle of the range) failed to improve or declined by 5 percent or more on 20 of the 35 indicators for which trends were available. There was improvement of 5 percent

or more on only 15 such indicators, and these were mainly in the prevention and treatment quality dimension (Appendix Exhibit A2). Disturbingly, the range of performance across states widened on a third of these indicators—often in tandem with a decline across states.

Making positive change the norm across all indicators and states will require federal action and comprehensive reforms to raise the floor on performance levels. It also will require state policies that ensure access to care, realign provider incentives, and provide performance information and targets to improve.

### **Symptoms of poor care coordination and inefficient use of resources point to opportunities to improve the quality of care and reduce costs.**

The *State Scorecard* findings of gaps in quality and fragmented care are symptomatic of health system dysfunction. All too common are failure to provide timely and effective preventive and chronic care, increases in or failure to reduce hospital readmission rates, and rising rates of hospital admissions from nursing homes and home health care. Despite improvement in some states, rates of potentially preventable hospitalizations remain high in many states. Low rates of recommended care delivered in community practices underscore the need for a stronger primary care infrastructure.

Annual costs of care (average employer-group premiums for individuals and Medicare spending per beneficiary) vary widely across states, with no systematic relationship to insurance coverage or ability to pay (as measured by median income). Moreover, there is no systematic relationship between performance on cost and quality indicators across states. Some states in the Upper Midwest (e.g., Iowa, Minnesota, Nebraska, North Dakota, and South Dakota) achieve high quality at lower costs. Although these states are exceptions, they provide examples for other states to follow.

States with higher medical costs tend to have higher rates of potentially preventable hospital use, including high rates of readmission within 30 days of discharge and high rates of admission for complications associated with diabetes, asthma, and other chronic conditions. Reducing the use of expensive

hospital care by preventing complications, controlling chronic conditions, and providing effective transitional care following discharge has the potential to improve outcomes and lower costs.

**Affordability of care is a concern across states.**

Across the country, health care costs have been rising faster than incomes. As a result, insurance premium costs have increased as a share of income for middle-income families in most states. The upward pressure has led to erosion of insurance benefits, with growing numbers of “underinsured” individuals—those who are poorly protected in the event of illness even though they are insured all year long—as well as loss of coverage.<sup>45</sup> Notably, the 2009 *State Scorecard* data on access to care predate or capture only the early phase of the economic recession, which has likely worsened coverage trends across states. Reversing the trends will require a dual focus on “bending the cost curve” as well as action to secure affordable coverage for all.

**There is room for improvement across all states.**

All states have substantial room to improve. No state ranked in the top quartile across all indicators. Even among the top-ranked states, each had several indicators that declined by 5 percent or more and each had some indicators in the bottom quartile or lower half of the performance distribution (Appendix Exhibits A1 and A3). Moreover, even the best performance on some indicators is well below what is achievable based on the benchmarks set by top-performing health care systems.

Improvement is possible for all states. Each of the lowest-ranked states exhibited pockets of high performance or improved significantly on certain indicators. There is value in learning from the experiences of those states or care systems that face the greatest challenges.

At the same time, the wide variation across states and common concerns with care coordination and rising costs point to a need for national reforms that stimulate and support state-based improvement initiatives. The disparities in access across states signal the need for federal action to raise the floor for insurance coverage by extending affordable coverage to everyone. Gaps in performance data—

coupled with evidence that rapid improvement is possible when there are incentives in place for the public reporting of such data—underscore the need for the federal government to work in tandem with states to create coherent, all-population information systems that furnish essential data and performance targets. Federal efforts are also essential to spur the adoption and effective use of interoperable health information technology, so that clinicians have the tools and decision support they need to provide safe, effective, and efficient care.

The wide variation in costs and symptoms of less-efficient care systems further point to the importance of federal leadership in payment reform. With Medicare payments accounting for a substantial share of revenues for hospitals and physicians, federal payment reforms—including Medicare participation in statewide all-payer efforts—could promote significant gains in quality and efficiency. On a foundation of more-affordable coverage for everyone, with federal reforms to assure affordable coverage for all, effective use of information systems, and payment reform could help all states aim higher to improve access and health outcomes, and, at the same time, slow the rate of cost growth.

## *Impact of Improved Performance*

There are many ways to improve health system performance, involving stakeholders at all levels of the system. This section illustrates the potential gains in terms of healthy lives, access, and dollars if all states were able to meet the levels of performance achieved by top states for selected indicators. It concludes with a discussion of policy implications for federal and state governments.

Exhibit 32 shows the estimated impact if all states were to improve their performance to the rate of the best-performing state for 11 key scorecard indicators.<sup>46</sup> If all states could approach the low levels of mortality from conditions amenable to health care achieved by the top state in 2004–05, there would be nearly 78,000 fewer deaths before age 75 on an annual basis. There also could be potentially fewer disease complications and limitations in activities of daily living through improved access to care and timely delivery of care.

If all states in the U.S. performed at the levels achieved by the top states:

- about 29 million more adults and children would have health insurance coverage—reducing the number of uninsured by more than half;
- approximately 9 million more adults age 50 and older would receive preventive care, including cancer screenings and immunizations;
- nearly 4 million more diabetic patients would receive basic recommended care to help prevent or delay the onset of disease complications; and
- about 30 million more adults and children would have a regular source of primary care and care coordination.

The Medicare program could potentially save \$2.9 billion to \$5.0 billion a year by reducing potentially preventable hospitalizations for chronically ill Medicare patients or by reducing the number of readmissions by improving care transitions. These savings would be even greater if the improvements

extended to all patients. Over \$1 billion dollars could potentially be saved through a reduction in hospital admissions by providing the standard of care for frail nursing home residents reached in the best-performing state. Savings would be contingent on identification of effective interventions, and some savings might be offset by the costs of the intervention. More generally, the nation would save \$20 billion to \$37 billion per year if higher-cost states achieved access, care, and efficiency improvements sufficient to bring costs down to the national median or rates achieved by the lowest-cost quartile of states.

These examples illustrate only a few of the many important opportunities for improvement. Because some indicators would affect the same individuals, some of these numbers cannot be combined. Yet, across states over the course of several years, the numbers add up to substantial gains in value for the nation.

**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	24,080,100	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	5,363,021	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.
Adult Preventive Care	9,005,926	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.
Diabetes Care	3,941,224	more adults (age 18 and older) with diabetes would receive three recommended services (eye exam, foot exam, and hemoglobin A1c test) to help prevent or delay disease complications.
Childhood Vaccinations	786,471	more children (ages 19–35 months) would be up-to-date on all recommended doses of five key vaccines.
Adults with a Usual Source of Care	21,017,920	more adults (age 18 and older) would have a usual source of care to help ensure that care is coordinated and accessible when needed.
Children with a Medical Home	8,732,905	more children (ages 0–17) would have a medical home to help ensure that care is coordinated and accessible when needed.
Preventable Hospital Admissions	746,484	fewer hospitalizations for ambulatory care sensitive conditions would occur among Medicare beneficiaries (age 65 and older) and \$5.0 billion dollars would be saved from the reduction in hospitalizations.
Hospital Readmissions	209,723	fewer hospital readmissions would occur among Medicare beneficiaries (age 65 and older) and \$2.9 billion dollars would be saved from the reduction in readmissions.
Hospitalization of Nursing Home Residents	127,393	fewer long-stay nursing home residents would be hospitalized and \$1.0 billion dollars would be saved from the reduction in hospitalizations.
Mortality Amenable to Health Care	77,952	fewer premature deaths (before age 75) might occur from causes that are potentially treatable or preventable with timely and appropriate health care.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

## *Aiming Higher: The Need for Action to Improve Performance*

In the midst of the current national debate on health system reform, the *State Scorecard* provides states with a framework for taking stock of how they are performing and where they have opportunities to improve. The erosion in health insurance coverage (with the notable exception of a few states) and the high uninsured rates in many states underscore the need for national reform and federal action to extend affordable insurance and ensure access for everyone.

Federal and national reforms also are needed to enable all-population data, spread the adoption and effective use of health information technology, and initiate payment reforms. The Medicare program, as the single-largest payer of hospitals and physicians, has the ability to serve as a national leader in the area of payment reform.

The *State Scorecard* reveals that the U.S. health care system often fails to provide timely and effective preventive and chronic care, or to ensure safe and effective care transitions. High rates of potentially preventable hospitalizations and readmissions in many states and low rates of receipt of recommended preventive care in the community underscore the need for a stronger primary care infrastructure and a clear focus on population health to help prevent and reduce the burden of chronic disease. Further, growing obesity rates call for greater effort at integrating medical and public health interventions to support individuals in adopting and maintaining healthy lifestyles.

States play many roles in the health system: purchasers of coverage for vulnerable populations and for their employees; regulators of providers and insurers; advocates for public health; and, increasingly, conveners and collaborators with other stakeholders. States also have multiple opportunities to convene stakeholders to collaborate on improvement and to provide leadership that will hold care systems accountable for population health and affordability.

Even at their best, however, states cannot do all the work of reform on their own. States challenged by high rates of disease and poverty, as well health care systems that are low-performing, often are the most limited in the resources available to invest in

improvements. And states where a large proportion of residents are uninsured face a much higher hurdle in seeking to enact comprehensive reform than states with a relatively small number of uninsured. Moreover, the experience of the economic recession highlights the challenges of “going it alone”—even for states at the top of scorecard rankings.

Hence, a cogent and congruent set of national and state policies is needed to move the country further along the path to higher performance. Disparities across states point to the importance of federal action that raises the floor on performance levels across all states and creates a supportive climate for state innovation and achievement.

The Commonwealth Fund’s Commission on a High Performance Health System has identified five essential strategies for comprehensive reform. States can play an important role in fulfilling these aspirations as part of a broader national effort.

1. Affordable coverage for all;
2. Align incentives with value and effective cost control;
3. Accountable, accessible, patient-centered, and coordinated care;
4. Aim high to improve quality, health outcomes, and efficiency; and
5. Accountable leadership and collaboration to set and achieve national goals.

Individual states continue to make progress to improve access to health care as well as health care quality and equity. The specific innovations that have gained traction since the last *State Scorecard* are increased access to care through coverage expansions, use of information exchanges and other technology to share patient and other health data, and a strong emphasis on management of chronic conditions through payment incentives and medical homes.

### **AFFORDABLE COVERAGE FOR ALL**

In addition to working toward comprehensive coverage reforms, states can make health insurance more affordable and efficient through effective oversight and reform of health insurance markets and through value-based purchasing of coverage for state employees. Expanding eligibility for and improving provider payment under both Medicaid



and CHIP would support greater participation and access for vulnerable populations.

One of the most notable health policy reforms of the past year was the passage of the Children's Health Insurance Program Reauthorization Act (CHIPRA) by Congress on February 4, 2009. The legislation provides an additional \$33 billion over four-and-a-half years, primarily through increased tobacco taxes, to cover up to 6.5 million newly enrolled children under CHIP and Medicaid, assuming that states are able to provide matching funding. An estimated 4.1 million of these 6.5 million children would remain uninsured without this action. States that streamline enrollment and retention procedures for the CHIP program will receive a federal bonus payment for each child enrolled above a target level.<sup>47</sup>

Rhode Island, for example, has responded to CHIPRA with an increased state allotment for its RItE Care and RItE Share programs to expand coverage and premium assistance to children and pregnant women up to 300 percent of the federal poverty level. The state is utilizing the federal law's new "Express Lane" option, which allows Medicaid programs to use eligibility determinations made by other public agencies.<sup>48</sup>

A few leading states have expanded coverage as part of comprehensive health system reforms. In Massachusetts, 428,000 residents have gained coverage since late 2006 through a combination of policies involving shared responsibility among individuals, employers, government, and insurers.<sup>49</sup> As a result, 97.4 percent of Massachusetts' residents now have health insurance coverage—the highest rate in the nation.<sup>50</sup> Vermont's Catamount Health Care Plan and Maine's Dirigo Health program also offer promising models for attaining universal or near-universal coverage.

Other states are pursuing incremental approaches to fill in coverage gaps. Wisconsin's BadgerCare Plus, for example, is a new state health insurance plan that aims to cover more than 40,000 childless adults with incomes below 200 percent of the federal poverty level.<sup>51</sup> A new Oregon law will provide coverage for 80,000 uninsured children and 35,000 low-income adults funded by a tax on insurers and hospitals as well as increased federal funds.<sup>52</sup>

Given states' current fiscal duress and their failure to enact comprehensive reforms in the years before the recession, it is unlikely that many will succeed in getting close to universal coverage on their own. To support state efforts, strong federal action, including a common insurance coverage framework and financing, is needed—especially for states that face large coverage gaps and socioeconomic challenges. By moving from fractured to continuous insurance coverage, comprehensive reform would provide a more coherent and effective foundation for payment and system reforms to enhance quality and efficiency.

### **ALIGN INCENTIVES WITH VALUE AND EFFECTIVE COST CONTROL**

The U.S. health system's reliance on fee-for-service reimbursement creates incentives for providers to increase the volume of services they deliver—irrespective of the value of that care. This system of payment undermines efforts to improve quality and efficiency. The Commonwealth Fund's Commission on a High Performance Health System estimates that payment reforms, coupled with universal health coverage and other system reforms, could slow the growth of health spending by a cumulative \$3 trillion through 2020, compared with projected trends in the absence of reform.<sup>53</sup>

In its 2009 report to Congress, the Medicare Payment Advisory Commission (MedPAC) recommends a move toward reimbursing providers with more "bundled" payments for services, associated with care received over time to encourage efficiency and accountability for outcomes. The report also recommends making additional payments to primary care practices to support patient-centered "medical homes" to improve care for those with chronic conditions. States and private insurers also are looking to make payment reforms to improve the value of care. A report from the Center for Health Care Strategies finds that more than half of all states currently operate one or more pay-for-performance programs for their Medicaid programs, and nearly 85 percent expect to do so over the next five years.<sup>54</sup> CHIPRA establishes a new Medicaid Commission modeled after MedPAC to evaluate children's access to care and payment policies in Medicaid and CHIP.<sup>55</sup>

Several states are looking to multipayer initiatives to move in the same direction, with an emphasis on value and on bending the cost curve. For example, in Massachusetts, a special commission recently recommended that all payers in the state transition to the use of “global fees” that “prospectively compensate providers for all or most of the care that their patients may require” over a given period, with adjustments to “reward provision of accessible and high quality care.”<sup>56</sup> New Jersey is looking to expand an “Accountable Care Organization” approach that targets efforts to improve outcomes and reduce costs for those with very high health risks and high-cost, low-income families.

Providing financial support for the development of primary care medical homes is another way to develop structural changes and financial incentives that can lead to quality and efficiency improvements through better coordination of care.<sup>57</sup> Minnesota passed legislation promoting this model in 2008. Under the legislation, health care homes, which can include physicians, advanced nurse practitioners, or physician assistants, will receive care coordination payments of about \$50 per patient from public and private health care purchasers to cover the costs of managing patients with complex chronic conditions.<sup>58</sup>

Aligning incentives among federal Medicare, state Medicaid, and private insurance plans could enhance the effects of payment reforms. The federal government recently announced that the Centers for Medicare and Medicaid Services will establish a demonstration program under which Medicare will join Medicaid and private insurers in state-based initiatives that integrate patient-centered medical homes and public health services to promote the efficient delivery of high-quality care with an emphasis on wellness and prevention.

#### **ACCOUNTABLE, ACCESSIBLE, PATIENT-CENTERED, AND COORDINATED CARE**

Improvements achieved by hospitals and nursing homes underscore the value of reaching consensus on national standards, setting goals for improvement, and benchmarking performance among peers to stimulate competition and achieve results. Collaborative learning and technical assistance can help states create the necessary infrastructure for improvement.

For example, a State Quality Improvement Institute, sponsored by The Commonwealth Fund and led by AcademyHealth, is intended to help states share best practices and implement concrete efforts to improve health system performance.<sup>59</sup>

Massachusetts has developed a chronic care management model that brings together public and private health care leaders to promote coordinated, integrated care through medical homes statewide. Payment reform is a key strategy for aligning quality measurement and payment for primary care physicians. Additional planned interventions include educating primary care providers about evidence-based diabetes care standards, creating a diabetes patient registry, and working with the Department of Health to launch a consumer education campaign.<sup>60</sup>

Vermont’s Blueprint for Health is seeking to develop capacity at the community level to improve care coordination for chronically ill residents—a potential model for other states.<sup>61</sup> North Carolina’s Community Care of North Carolina has invested in nurse care manager networks and primary care physician practices to promote the sharing of resources and team care across the state. This approach has reduced use of hospitals and emergency rooms and improved health outcomes.<sup>62</sup>

Several multipayer, public–private collaboratives are focusing on improving quality, coordination, and accountability. Pennsylvania is targeting care for childhood asthma and adult diabetes within 32 group practices, including seven federally qualified health centers; 16 commercial payers are participating. In Rhode Island, collaboration among Medicaid, Medicare, and commercial payers is offering shared support for nurse care managers embedded in clinical practice sites to foster medical homes, with a focus on diabetes, depression, and coronary artery disease.<sup>63</sup>

CHIPRA includes \$225 million over five years for health quality initiatives. The federal Agency for Healthcare Research and Quality and Centers for Medicare and Medicaid Services are working to develop an initial core set of quality measures for children by 2010 for voluntary use by Medicaid and CHIP providers. The law also establishes a program for the creation and dissemination of a model electronic health record for children and creates a demonstration program to reduce childhood obesity.<sup>64</sup>

## AIM HIGH TO IMPROVE QUALITY, HEALTH OUTCOMES, AND EFFICIENCY

Widespread adoption of electronic medical records and electronic information exchange among providers, along with the redesign of care processes to support more effective and efficient care delivery, could save the nation an estimated \$88 billion over 10 years.<sup>65</sup> States such as New York have established programs to promote innovative use of health information technology (HIT) to improve health care. Such efforts will be strengthened by the Health Information Technology for Economic and Clinical Health Act (HITECH), which was part of the federal economic stimulus legislation. Along with financial incentives for providers, HITECH offers state planning grants and loans to support and expand the effective statewide use of HIT and health information exchanges (HIE).<sup>66</sup> For example:

- Minnesota, which has long focused on information exchange as a means of improving outcomes and reducing costs, has a not-for-profit HIE organization with a public-private governance structure. The exchange serves 3.9 million patients and is designed to share clinical and administrative data among multiple providers in Minnesota and bordering states.<sup>67</sup>
- Arizona is incorporating HIE into its Medicaid program to promote efficient, patient-centered care. Starting in pilot regions in 2008, providers are able to exchange patient demographic, eligibility, and clinical information. The state is also creating a group purchasing arrangement for providers to acquire systems that will support statewide objectives for the effective use of HIT.<sup>68</sup>
- The five-year-old Indiana HIE connects 39 hospitals and 10,000 physicians to deliver laboratory results and medication and treatment histories in real time. The Indianapolis HIE estimates that it saves \$26 per emergency department visit by eliminating duplicate tests and other unnecessary activities. The system also alerts doctors about potential drug interactions and reminds them about appropriate preventive services and chronic disease follow-up care.<sup>69</sup>
- Alabama is currently testing its QTool health information system, which provides clinicians with

free electronic access to medical claims history, including lab test results, and enables electronic prescribing to pharmacies.<sup>70</sup> Federal funds support the initiative.

Meanwhile, such states as California, New York, Pennsylvania, and Utah have led robust efforts to deploy public reporting and data monitoring systems that serve as models for the states:

- Pennsylvania recently implemented new laws to provide transparency in reporting quality data and rates of health facility-acquired infections. In the first six months, this effort contributed to a 7.6 percent decrease in hospital-acquired infections and 300 fewer deaths related to such infections compared with the previous year.<sup>71</sup>
- Utah's Health Data Authority Act created a Health Data Committee, representing multiple stakeholders and staffed by an Office of Health Care Statistics, that is charged with collecting, analyzing, and distributing health care data to facilitate the promotion and accessibility of quality and cost-effective health care.<sup>72</sup>

Information is critical to guide and drive change, and to set targets and monitor progress over time. Medicare is currently the only national source of data available for tracking several important indicators of performance across all states. More robust national data are essential for assessing performance comprehensively for all payers, including Medicaid and private insurers. Notably, although hospital readmission rates offer a target for improvement that could bring about broad systems changes, most states currently lack the data to track or monitor readmission rates. And federal data comparing geographic regions and care systems are not readily or publicly available.

Several states are combining public health initiatives with reforms to improve the health care delivery system. These include a focus on community-wide efforts to lower rates of obesity, tobacco use, and other risks to population health.<sup>73</sup> States are in a unique position to support such community health initiatives through their ability to convene multiple stakeholders as well as their support for public health resources and authority.

## ACCOUNTABLE LEADERSHIP AND COLLABORATION TO SET AND ACHIEVE NATIONAL GOALS

Several leading states have histories of a collaborative culture of quality improvement focused on improving leadership, transparency, and sustainability of results. Such efforts tend to focus on expanding access as well as quality, with a goal of improving health outcomes. For example, an initiative led by the Institute for Healthcare Improvement is engaging several states in an effort to prove statewide approaches for reducing hospital readmissions.

Vermont's Blueprint for Health Integrated Pilot Program began in 2008 with three pilot communities working to reduce the health and economic impacts of the most common chronic conditions. This initiative builds on the framework passed in its 2006 health care reform legislation and revised in 2007. Pilot communities are given infrastructure and financial incentives to operate a patient-centered medical home, with the goals of reducing costs through improved efficiency and better management of chronic conditions. Vermont's blueprint also seeks to improve community health and prevent disease by encouraging healthy lifestyles for the general population.<sup>74</sup>

As part of its involvement in the State Quality Improvement Institute, Kansas set a goal that 85 percent of the state's children have a medical home. In addition, the state has achieved agreement on indicators of quality, access, cost, and public health—including several measures of the quality of care provided in Medicaid managed care organizations—and has started publicly reporting results. Kansas also has created a consumer Web site for comparing the cost and quality of health care plans and providers.<sup>75</sup>

North Carolina formed the Healthcare Quality Alliance, which is sanctioned by the governor and includes a plan to standardize care across the state for diabetes, asthma, hypertension, heart failure, and heart attacks. It is a collaborative effort, one involving North Carolina provider organizations, three major insurers, the state employee health plan, and Medicaid.<sup>76</sup> The Alliance complements the community-led quality improvement initiatives undertaken by Community Care of North Carolina, a public-private collaboration serving Medicaid and CHIP beneficiaries.<sup>77</sup>

## Conclusion

The overall picture that emerges from the *State Scorecard* is the clear potential for improvement on all key dimensions of performance. Our national values emphasize that we are one nation, yet where people live affects their health care in nearly every respect—access, quality, and affordability. The view across states reveals startlingly wide gaps between leading and lagging states on multiple indicators. Gaps between actual and achieved performance represent illnesses that could have been prevented or better managed, as well as dollars that could have been saved or reinvested to improve population health. Exemplary initiatives in the top-performing states and models of excellence in health care delivery that exist within many states can help set the pace for change.

Continuing variation in state performance also provides compelling evidence of the need for concerted and complementary federal and state policy action to improve health system performance across all key dimensions. National reform can provide a more coherent health system infrastructure, so that benchmark levels achieved by top-performing states become realistic targets for all states to meet and exceed.

Without federal reform to address rising costs as well as support more affordable access, coverage rates and access to care will continue to deteriorate in coming years. At the onset of the economic recession, 1.5 million more adults were uninsured in 2008 than in 2007, putting one in five working-age adults at risk of financial catastrophe from a major illness. This increase in the uninsured would have been much worse without a growth in government-provided health insurance such as Medicaid and CHIP that covered 4.4 million people. The rate of uninsured children declined to its lowest level since 1987 (the first year that comparable data were collected) as a result of an 800,000 decrease in the number of uninsured children. Private coverage declined for both adults and children.<sup>78</sup>

Without national action, the number of uninsured is expected to reach 61 million by 2020, with millions more Americans underinsured. Such a trend is likely to overwhelm safety-net providers and undermine the financial health of community health systems that serve the entire community. With costs rising faster than incomes and pressuring families and businesses, it is urgent that states and the nation join together to aim higher—to take action to enhance the value of health care across the country and ensure that everyone can participate in the health care system according to their needs.

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# Appendices

## Appendix A

- EXHIBIT A1 **Summary of Indicator Rankings by State**
- EXHIBIT A2 **Summary of State Median Rates and Range of State Performance Across Indicators with Trends**
- EXHIBIT A3 **Summary of Performance Across Indicators with Trends by State**
- EXHIBIT A4 **Summary of Improvement in Closing Equity Gaps by State**
- EXHIBIT A5 **Access: Dimension and Indicator Ranking**
- EXHIBIT A6 **Access: Dimension Ranking and Performance on Indicators**
- EXHIBIT A7 **Uninsured Rates and Medicaid/CHIP Eligibility Standards by State**
- EXHIBIT A8 **Prevention and Treatment: Dimension and Indicator Ranking on Effective Care, Coordinated Care, and Patient-Centered Care**
- EXHIBIT A9 **Prevention and Treatment: Dimension Ranking and Performance on Indicators**
- EXHIBIT A10 **Hospital Quality Indicator Composite Percent and Rank: Hospitalized Patients Who Received Recommended Care for Heart Attack, Heart Failure, and Pneumonia**
- EXHIBIT A11 **Avoidable Hospital Use and Costs: Dimension and Indicator Ranking**
- EXHIBIT A12 **Avoidable Hospital Use and Costs: Dimension Ranking and Performance on Indicators**
- EXHIBIT A13 **Healthy Lives: Dimension and Indicator Ranking**
- EXHIBIT A14 **Healthy Lives: Dimension Ranking and Performance on Indicators**
- EXHIBIT A15 **Mortality Amenable to Health Care by Race**
- EXHIBIT A16 **State Demographics: Income and Health Status**
- EXHIBIT A17 **State Demographics: Race and Ethnic Groups**

## Appendix B

- APPENDIX B.1 **State Scorecard Data Years and Databases**
- APPENDIX B.2 **State Scorecard Indicator Descriptions**
- APPENDIX B.3 **Complete References for Data Sources**



## Summary of Indicator Rankings by State

Overall Rank*	State	No. of main indicators	Top 5 States		Top Quartile		2nd Quartile		3rd Quartile		Bottom Quartile		Bottom 5 States	
40	Alabama	36	0	0%	5	14%	7	19%	11	31%	13	36%	4	11%
34	Alaska	35	3	9%	9	26%	5	14%	6	17%	15	43%	6	17%
36	Arizona	38	1	3%	4	11%	13	34%	8	21%	13	34%	4	11%
48	Arkansas	37	1	3%	2	5%	8	22%	7	19%	20	54%	9	24%
31	California	38	1	3%	5	13%	14	37%	8	21%	11	29%	4	11%
24	Colorado	37	2	5%	9	24%	13	35%	11	30%	4	11%	1	3%
8	Connecticut	38	7	18%	17	45%	11	29%	6	16%	4	11%	0	0%
14	Delaware	37	8	22%	13	35%	9	24%	7	19%	8	22%	1	3%
26	District of Columbia	35	7	20%	10	29%	7	20%	4	11%	14	40%	11	31%
44	Florida	37	0	0%	4	11%	8	22%	13	35%	12	32%	4	11%
38	Georgia	38	1	3%	2	5%	11	29%	12	32%	13	34%	3	8%
2	Hawaii	36	14	39%	22	61%	6	17%	4	11%	4	11%	3	8%
29	Idaho	37	6	16%	17	46%	2	5%	9	24%	9	24%	5	14%
42	Illinois	34	0	0%	3	9%	8	24%	8	24%	15	44%	1	3%
28	Indiana	38	0	0%	2	5%	16	42%	14	37%	6	16%	1	3%
2	Iowa	38	11	29%	21	55%	11	29%	4	11%	2	5%	1	3%
23	Kansas	36	1	3%	5	14%	14	39%	15	42%	2	6%	0	0%
45	Kentucky	38	1	3%	2	5%	5	13%	17	45%	14	37%	8	21%
49	Louisiana	37	1	3%	5	14%	1	3%	4	11%	27	73%	17	46%
5	Maine	36	4	11%	22	61%	8	22%	3	8%	3	8%	1	3%
17	Maryland	37	3	8%	8	22%	13	35%	10	27%	6	16%	2	5%
7	Massachusetts	37	11	30%	14	38%	16	43%	3	8%	4	11%	1	3%
20	Michigan	38	1	3%	5	13%	12	32%	16	42%	5	13%	1	3%
4	Minnesota	38	11	29%	25	66%	8	21%	4	11%	1	3%	1	3%
51	Mississippi	37	0	0%	3	8%	1	3%	7	19%	26	70%	14	38%
36	Missouri	38	0	0%	3	8%	8	21%	18	47%	9	24%	2	5%
18	Montana	37	4	11%	11	30%	14	38%	4	11%	8	22%	4	11%
13	Nebraska	36	6	17%	19	53%	6	17%	11	31%	0	0%	0	0%
47	Nevada	37	1	3%	3	8%	4	11%	6	16%	24	65%	12	32%
5	New Hampshire	38	10	26%	20	53%	11	29%	5	13%	2	5%	1	3%
30	New Jersey	38	3	8%	11	29%	6	16%	9	24%	12	32%	5	13%
42	New Mexico	37	0	0%	9	24%	6	16%	6	16%	16	43%	8	22%
21	New York	38	1	3%	5	13%	13	34%	12	32%	8	21%	6	16%
41	North Carolina	38	0	0%	2	5%	14	37%	16	42%	6	16%	1	3%
9	North Dakota	36	10	28%	21	58%	5	14%	7	19%	3	8%	2	6%
27	Ohio	38	1	3%	4	11%	9	24%	15	39%	10	26%	1	3%
50	Oklahoma	37	0	0%	1	3%	4	11%	8	22%	24	65%	10	27%
32	Oregon	37	8	22%	14	38%	4	11%	5	14%	14	38%	7	19%
15	Pennsylvania	37	2	5%	7	19%	16	43%	11	30%	3	8%	0	0%
11	Rhode Island	37	7	19%	13	35%	11	30%	9	24%	4	11%	2	5%
33	South Carolina	37	2	5%	4	11%	11	30%	13	35%	9	24%	2	5%
12	South Dakota	37	8	22%	17	46%	9	24%	8	22%	3	8%	0	0%
39	Tennessee	37	2	5%	3	8%	8	22%	13	35%	13	35%	2	5%
46	Texas	38	0	0%	1	3%	9	24%	12	32%	16	42%	6	16%
19	Utah	38	13	34%	16	42%	8	21%	6	16%	8	21%	4	11%
1	Vermont	38	8	21%	22	58%	10	26%	5	13%	1	3%	1	3%
22	Virginia	37	0	0%	3	8%	23	62%	8	22%	3	8%	0	0%
16	Washington	38	6	16%	14	37%	9	24%	9	24%	6	16%	3	8%
35	West Virginia	37	1	3%	5	14%	5	14%	14	38%	13	35%	6	16%
10	Wisconsin	38	5	13%	15	39%	17	45%	4	11%	2	5%	0	0%
25	Wyoming	36	5	14%	10	28%	8	22%	8	22%	10	28%	5	14%

\* Final rank for overall health system performance across five dimensions

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

### Summary of State Median Rates and Range of State Performance Across Indicators with Trends

	Total		Access		Prevention & Treatment		Avoidable Use & Costs		Healthy Lives	
	Count	Percent	Count	Percent	Count	Percent	Count	Percent	Count	Percent
<b>Total indicators with trends*</b>	<b>35</b>	<b>100%</b>	<b>4</b>	<b>100%</b>	<b>14</b>	<b>100%</b>	<b>9</b>	<b>100%</b>	<b>8</b>	<b>100%</b>
<b>All States Median</b>										
Improved by 5% or more	15	43%	0	0%	9	64%	2	22%	4	50%
Worsened by 5% or more	7	20%	0	0%	1	7%	5	56%	1	13%
No change or less than 5% change	13	37%	4	100%	4	29%	2	22%	3	38%
<b>Top 5 States Average Rate</b>										
Improved by 5% or more	13	37%	0	0%	7	50%	2	22%	4	50%
Worsened by 5% or more	7	20%	0	0%	1	7%	4	44%	2	25%
No change or less than 5% change	15	43%	4	100%	6	43%	3	33%	2	25%
<b>Bottom 5 States Average Rate</b>										
Improved by 5% or more	15	43%	0	0%	10	71%	2	22%	3	38%
Worsened by 5% or more	6	17%	1	25%	1	7%	2	22%	2	25%
No change or less than 5% change	14	40%	3	75%	3	21%	5	56%	3	38%
<b>Range of Performance (Bottom 5 – Top 5 States)</b>										
Narrowed by 5% or more	13	37%	0	0%	8	57%	3	33%	2	25%
Widened by 5% or more	11	31%	3	75%	3	21%	4	44%	1	13%
No change or less than 5% change	11	31%	1	25%	3	21%	2	22%	5	63%

\* Three indicators are excluded because data do not allow assessment of trends.  
SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

## Summary of Performance Across Indicators With Trends by State

State	Total indicators with trends	State Rate Improved by 5% or more		State Rate Worsened by 5% or more		No Change or Less than 5% Change in State Rate	
		Count	Percent	Count	Percent	Count	Percent
Alabama	34	12	35%	7	21%	15	44%
Alaska	32	13	41%	7	22%	12	38%
Arizona	35	15	43%	7	20%	13	37%
Arkansas	34	17	50%	8	24%	9	26%
California	35	15	43%	7	20%	13	37%
Colorado	35	16	46%	10	29%	9	26%
Connecticut	34	15	44%	9	26%	10	29%
Delaware	34	17	50%	7	21%	10	29%
District of Columbia	31	17	55%	8	26%	6	19%
Florida	35	15	43%	6	17%	14	40%
Georgia	35	15	43%	8	23%	12	34%
Hawaii	33	15	45%	10	30%	8	24%
Idaho	34	12	35%	6	18%	16	47%
Illinois	32	13	41%	11	34%	8	25%
Indiana	34	14	41%	8	24%	12	35%
Iowa	35	14	40%	7	20%	14	40%
Kansas	34	13	38%	7	21%	14	41%
Kentucky	35	17	49%	6	17%	12	34%
Louisiana	34	13	38%	5	15%	16	47%
Maine	34	13	38%	8	24%	13	38%
Maryland	34	16	47%	7	21%	11	32%
Massachusetts	34	14	41%	9	26%	11	32%
Michigan	34	13	38%	11	32%	10	29%
Minnesota	35	15	43%	7	20%	13	37%
Mississippi	34	13	38%	8	24%	13	38%
Missouri	35	15	43%	9	26%	11	31%
Montana	34	11	32%	11	32%	12	35%
Nebraska	34	12	35%	9	26%	13	38%
Nevada	35	15	43%	7	20%	13	37%
New Hampshire	35	12	34%	10	29%	13	37%
New Jersey	35	17	49%	6	17%	12	34%
New Mexico	34	9	26%	11	32%	14	41%
New York	35	15	43%	7	20%	13	37%
North Carolina	35	14	40%	10	29%	11	31%
North Dakota	34	14	41%	6	18%	14	41%
Ohio	35	17	49%	10	29%	8	23%
Oklahoma	34	11	32%	8	24%	15	44%
Oregon	34	15	44%	9	26%	10	29%
Pennsylvania	34	15	44%	4	12%	15	44%
Rhode Island	34	16	47%	9	26%	9	26%
South Carolina	35	14	40%	8	23%	13	37%
South Dakota	34	13	38%	6	18%	15	44%
Tennessee	35	13	37%	7	20%	15	43%
Texas	35	14	40%	5	14%	16	46%
Utah	35	17	49%	8	23%	10	29%
Vermont	35	14	40%	7	20%	14	40%
Virginia	34	14	41%	7	21%	13	38%
Washington	35	14	40%	10	29%	11	31%
West Virginia	35	18	51%	6	17%	11	31%
Wisconsin	35	14	40%	7	20%	14	40%
Wyoming	34	11	32%	9	26%	14	41%

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

## Summary of Improvement in Closing Equity Gaps by State

State	Total equity indicators with trends	Overall		Income		Insurance Coverage		Race/Ethnicity	
		Gap Narrowed and Vulnerable Group Improved		Gap Narrowed and Low-Income Group Improved		Gap Narrowed and Uninsured Group Improved		Gap Narrowed and Non-White Group Improved	
		Count	Percent	Count	Percent	Count	Percent	Count	Percent
Alabama	17	8	47%	2	33%	1	25%	5	71%
Alaska	17	5	29%	1	17%	1	25%	3	43%
Arizona	17	3	18%	0	0%	1	25%	2	29%
Arkansas	17	3	18%	0	0%	0	0%	3	43%
California	17	6	35%	3	50%	0	0%	3	43%
Colorado	17	3	18%	1	17%	1	25%	1	14%
Connecticut	17	10	59%	3	50%	3	75%	4	57%
Delaware	17	10	59%	3	50%	1	25%	6	86%
District of Columbia	16	6	38%	2	40%	1	25%	3	43%
Florida	17	3	18%	0	0%	1	25%	2	29%
Georgia	17	8	47%	3	50%	2	50%	3	43%
Hawaii	17	6	35%	2	33%	1	25%	3	43%
Idaho	16	3	19%	0	0%	0	0%	3	50%
Illinois	16	4	25%	1	20%	0	0%	3	43%
Indiana	17	7	41%	4	67%	2	50%	1	14%
Iowa	16	6	38%	1	17%	1	25%	4	67%
Kansas	16	5	31%	2	40%	1	25%	2	29%
Kentucky	17	2	12%	0	0%	0	0%	2	29%
Louisiana	17	1	6%	1	17%	0	0%	0	0%
Maine	13	6	46%	4	67%	1	25%	1	33%
Maryland	16	6	38%	1	20%	3	75%	2	29%
Massachusetts	16	7	44%	3	60%	0	0%	4	57%
Michigan	16	8	50%	2	40%	2	50%	4	57%
Minnesota	16	7	44%	1	17%	2	50%	4	67%
Mississippi	17	6	35%	2	33%	2	50%	2	29%
Missouri	17	3	18%	0	0%	0	0%	3	43%
Montana	15	8	53%	2	33%	1	25%	5	100%
Nebraska	16	3	19%	0	0%	2	50%	1	14%
Nevada	17	8	47%	3	50%	0	0%	5	71%
New Hampshire	13	5	38%	1	17%	1	25%	3	100%
New Jersey	17	4	24%	0	0%	1	25%	3	43%
New Mexico	17	2	12%	0	0%	0	0%	2	29%
New York	17	10	59%	3	50%	3	75%	4	57%
North Carolina	17	2	12%	0	0%	0	0%	2	29%
North Dakota	14	5	36%	1	17%	2	50%	2	50%
Ohio	17	5	29%	2	33%	2	50%	1	14%
Oklahoma	17	8	47%	3	50%	2	50%	3	43%
Oregon	16	9	56%	2	40%	2	50%	5	71%
Pennsylvania	17	7	41%	2	33%	2	50%	3	43%
Rhode Island	16	7	44%	2	40%	2	50%	3	43%
South Carolina	17	6	35%	2	33%	2	50%	2	29%
South Dakota	15	3	20%	1	17%	2	50%	0	0%
Tennessee	17	8	47%	1	17%	2	50%	5	71%
Texas	17	8	47%	4	67%	2	50%	2	29%
Utah	17	9	53%	4	67%	1	25%	4	57%
Vermont	13	4	31%	2	33%	1	25%	1	33%
Virginia	17	4	24%	1	17%	1	25%	2	29%
Washington	17	7	41%	1	17%	1	25%	5	71%
West Virginia	16	7	44%	4	67%	1	25%	2	33%
Wisconsin	17	10	59%	4	67%	3	75%	3	43%
Wyoming	13	2	15%	1	20%	0	0%	1	25%

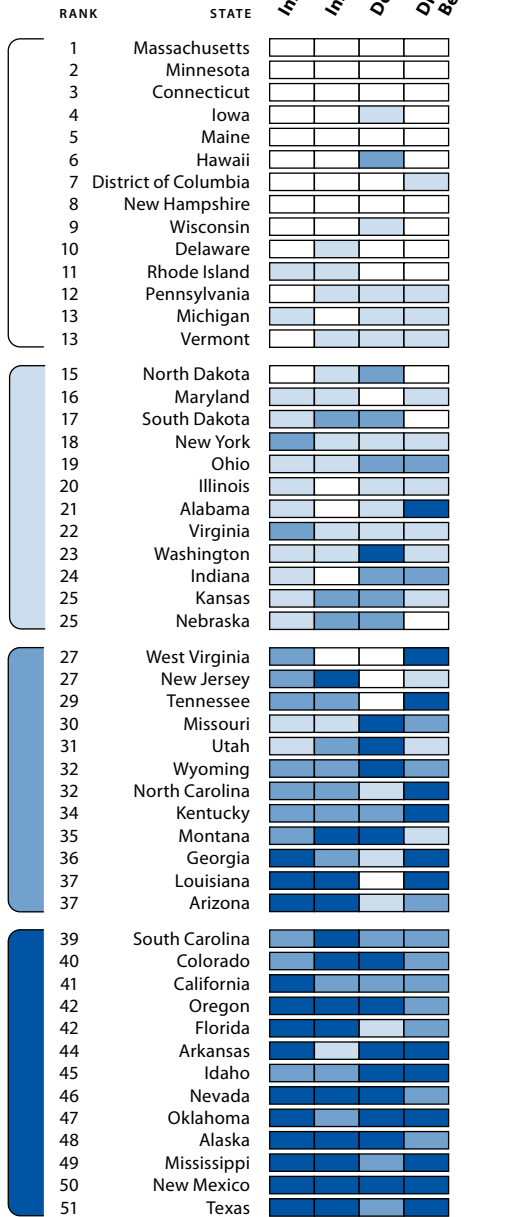
SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

**Access: Dimension and Indicator Ranking**

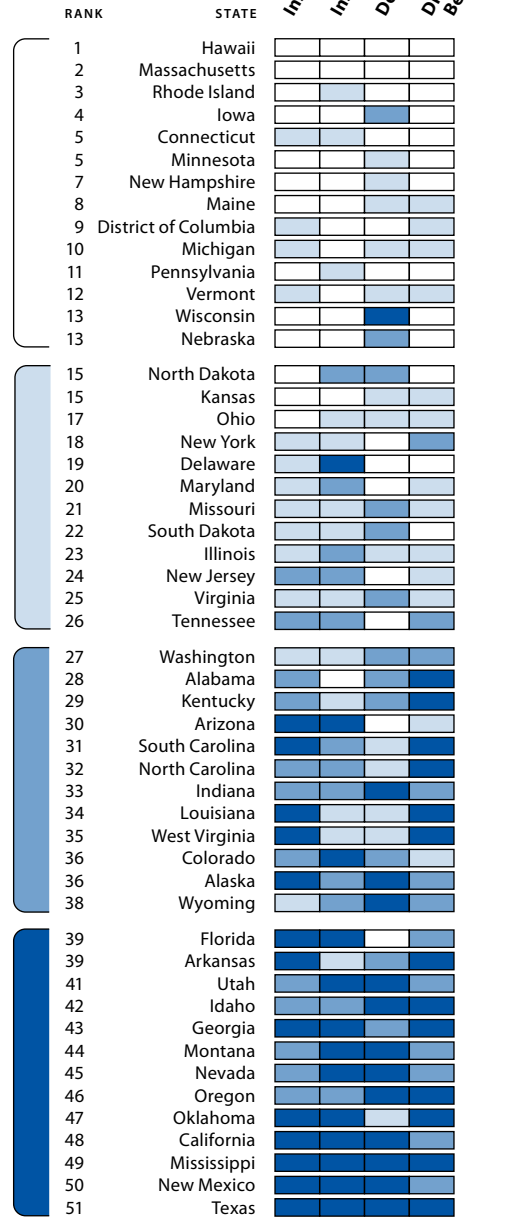
**State Rank**

- Top Quartile
- Second Quartile
- Third Quartile
- Bottom Quartile

**2009 Ranking**



**Revised 2007 Ranking<sup>a</sup>**



<sup>a</sup> Some state rates from the 2007 edition have been revised to match methodology used in the 2009 edition.  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

### Access: Dimension Ranking and Performance on Indicators

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Current Dimension Rank	Past Dimension Rank	Indicator Performance					
			Percent Nonelderly Adults (Ages 18–64) Insured			Percent Children (Ages 0–17) Insured		
			Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
<b>United States</b>			<b>80.0</b>	<b>-0.4</b>	<b>-0.5%</b>	<b>89.6</b>	<b>0.3</b>	<b>0.3%</b>
Alabama	21	28	83.0	2.1	2.6%	94.5	-0.1	-0.1%
Alaska	48	36	75.9	-1.8	-2.3%	87.1	-3.8	-4.2%
Arizona	37	30	76.4	-0.4	-0.5%	85.1	0.3	0.4%
Arkansas	44	39	76.0	-0.1	-0.1%	92.3	0.8	0.9%
California	41	48	75.6	-0.7	-0.9%	89.4	2.0	2.3%
Colorado	40	36	80.3	-0.4	-0.5%	87.3	1.4	1.6%
Connecticut	3	5	86.7	1.2	1.4%	94.7	2.1	2.3%
Delaware	10	19	85.7	1.3	1.5%	91.7	3.4	3.9%
District of Columbia	7	9	88.0	4.3	5.1%	93.8	0.6	0.6%
Florida	42	39	74.1	0.3	0.4%	82.0	-1.8	-2.1%
Georgia	36	43	77.2	-0.1	-0.1%	89.0	0.2	0.2%
Hawaii	6	1	89.4	1.3	1.5%	94.9	-0.5	-0.5%
Idaho	45	42	79.9	-1.1	-1.4%	90.1	0.1	0.1%
Illinois	20	23	82.2	-0.8	-1.0%	93.5	3.8	4.2%
Indiana	24	33	83.4	1.1	1.3%	94.4	3.5	3.9%
Iowa	4	4	87.2	-1.2	-1.4%	95.0	0.5	0.5%
Kansas	25	15	83.9	-1.8	-2.1%	90.6	-3.1	-3.3%
Kentucky	34	29	80.1	-2.2	-2.7%	91.0	-1.5	-1.6%
Louisiana	37	34	73.8	-2.0	-2.6%	88.1	-4.2	-4.6%
Maine	5	8	86.7	-0.6	-0.7%	94.6	0.7	0.7%
Maryland	16	20	83.2	0.6	0.7%	91.7	0.5	0.5%
Massachusetts	1	2	92.8	6.7	7.8%	96.8	1.8	1.9%
Michigan	13	10	83.9	-1.3	-1.5%	94.5	0.0	0.0%
Minnesota	2	5	89.2	-0.4	-0.4%	93.5	-0.4	-0.4%
Mississippi	49	49	75.8	-2.2	-2.8%	87.3	-0.4	-0.5%
Missouri	30	21	83.4	-0.8	-1.0%	91.4	-1.2	-1.3%
Montana	35	44	78.9	0.6	0.8%	88.4	2.4	2.8%
Nebraska	25	13	84.2	-1.4	-1.6%	90.0	-4.4	-4.7%
Nevada	46	45	78.4	0.3	0.4%	83.3	-1.6	-1.9%
New Hampshire	8	7	86.1	-0.7	-0.8%	95.0	0.8	0.8%
New Jersey	27	24	81.2	-0.7	-0.9%	87.9	-1.8	-2.0%
New Mexico	50	50	69.8	-4.9	-6.6%	84.2	1.5	1.8%
New York	18	18	82.0	-0.7	-0.8%	92.0	-0.8	-0.9%
North Carolina	32	32	78.9	-1.4	-1.7%	89.3	0.2	0.2%
North Dakota	15	15	85.7	-0.9	-1.0%	92.1	1.1	1.2%
Ohio	19	17	84.5	-1.2	-1.4%	92.8	0.6	0.7%
Oklahoma	47	47	78.0	2.9	3.9%	90.1	3.6	4.2%
Oregon	42	46	78.4	-0.4	-0.5%	88.9	-0.7	-0.8%
Pennsylvania	12	11	87.1	0.4	0.5%	92.9	1.4	1.5%
Rhode Island	11	3	85.6	-0.2	-0.2%	91.6	-1.0	-1.1%
South Carolina	39	31	79.4	1.4	1.8%	86.5	-4.5	-4.9%
South Dakota	17	22	84.9	0.2	0.2%	91.1	-0.9	-1.0%
Tennessee	29	26	79.9	-2.4	-2.9%	90.7	-0.1	-0.1%
Texas	51	51	68.5	-1.9	-2.7%	80.4	0.2	0.2%
Utah	31	41	83.8	2.2	2.7%	90.0	1.3	1.5%
Vermont	13	12	86.5	1.5	1.8%	93.4	-1.6	-1.7%
Virginia	22	25	82.1	-0.7	-0.8%	91.5	-0.6	-0.7%
Washington	23	27	84.3	1.4	1.7%	93.2	0.9	1.0%
West Virginia	27	35	78.9	2.3	3.0%	94.6	2.3	2.5%
Wisconsin	9	13	88.1	1.2	1.4%	94.2	0.0	0.0%
Wyoming	32	38	81.8	-0.6	-0.7%	90.8	0.6	0.7%
			<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>	
<b>Number of states with trends:</b>			<b>51</b>	<b>51</b>		<b>51</b>	<b>51</b>	
		Rate improved (+)	20	2		28	0	
		Rate worsened (-)	31	1		21	0	
		Little/no change in rate	0	48		2	51	

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

**Access: Dimension Ranking and Performance on Indicators** (continued)

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Indicator Performance					
	Percent At-Risk Adults Visited Doctor for Routine Checkup in Past Two Years			Percent Adults Without Time When Could Not See Doctor Because of Cost		
	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
United States	84.6	-2.4	-2.8%	86.6	-0.3	-0.3%
Alabama	86.6	1.5	1.8%	83.7	-1.1	-1.3%
Alaska	77.6	-5.6	-6.7%	85.6	-1.6	-1.8%
Arizona	84.5	-5.6	-6.2%	86.8	-1.0	-1.1%
Arkansas	79.1	-6.7	-7.8%	83.0	-0.8	-1.0%
California	82.2	1.6	2.0%	86.2	-1.1	-1.3%
Colorado	78.9	-6.6	-7.7%	87.1	-0.5	-0.6%
Connecticut	88.0	-3.6	-3.9%	90.9	0.1	0.1%
Delaware	91.8	0.6	0.7%	90.7	-0.2	-0.2%
District of Columbia	90.9	-2.6	-2.8%	90.1	1.4	1.6%
Florida	87.5	-2.5	-2.8%	84.9	-0.4	-0.5%
Georgia	85.5	0.0	0.0%	84.6	0.3	0.4%
Hawaii	84.0	-6.3	-7.0%	93.1	-0.6	-0.6%
Idaho	76.1	-2.9	-3.7%	84.2	-1.0	-1.2%
Illinois	84.1	-5.1	-5.7%	87.5	-1.2	-1.4%
Indiana	81.7	-1.3	-1.6%	86.5	-0.5	-0.6%
Iowa	85.6	-0.6	-0.7%	92.2	0.4	0.4%
Kansas	83.1	-4.3	-4.9%	89.3	1.0	1.1%
Kentucky	83.3	-2.4	-2.8%	82.5	0.3	0.4%
Louisiana	88.7	0.6	0.7%	82.5	-0.1	-0.1%
Maine	88.0	-0.5	-0.6%	90.7	1.3	1.5%
Maryland	88.1	-3.6	-3.9%	89.5	1.2	1.4%
Massachusetts	91.3	-1.8	-1.9%	92.7	0.1	0.1%
Michigan	86.0	-3.2	-3.6%	88.0	-0.5	-0.6%
Minnesota	88.7	0.9	1.0%	90.9	0.2	0.2%
Mississippi	82.1	-1.6	-1.9%	81.3	0.5	0.6%
Missouri	80.4	-6.4	-7.4%	85.9	-2.4	-2.7%
Montana	80.0	-2.4	-2.9%	88.0	1.0	1.1%
Nebraska	81.0	-4.6	-5.4%	90.7	0.3	0.3%
Nevada	77.6	-6.6	-7.8%	85.9	0.0	0.0%
New Hampshire	88.0	-1.2	-1.3%	90.3	0.3	0.3%
New Jersey	88.3	-3.1	-3.4%	88.0	0.3	0.3%
New Mexico	80.1	-3.6	-4.3%	84.8	-0.8	-0.9%
New York	87.2	-4.0	-4.4%	88.7	1.5	1.7%
North Carolina	85.8	-3.6	-4.0%	83.5	-0.6	-0.7%
North Dakota	81.1	-5.4	-6.2%	92.7	-0.5	-0.5%
Ohio	83.9	-4.1	-4.7%	87.3	-2.2	-2.5%
Oklahoma	75.0	-12.0	-13.8%	82.6	-0.1	-0.1%
Oregon	80.2	-2.6	-3.1%	86.5	3.1	3.7%
Pennsylvania	86.4	-3.5	-3.9%	90.1	0.0	0.0%
Rhode Island	93.0	-1.2	-1.3%	90.4	-0.3	-0.3%
South Carolina	83.4	-5.4	-6.1%	85.1	0.5	0.6%
South Dakota	83.1	-2.2	-2.6%	91.0	-0.1	-0.1%
Tennessee	90.5	0.8	0.9%	84.4	-2.7	-3.1%
Texas	81.6	-1.1	-1.3%	80.7	-0.1	-0.1%
Utah	76.8	-4.9	-6.0%	87.9	0.8	0.9%
Vermont	84.4	-2.8	-3.2%	89.9	0.0	0.0%
Virginia	84.7	-2.0	-2.3%	89.0	0.8	0.9%
Washington	80.9	-4.9	-5.7%	87.6	1.2	1.4%
West Virginia	87.7	0.3	0.3%	82.8	1.4	1.7%
Wisconsin	84.8	2.9	3.5%	91.5	-0.1	-0.1%
Wyoming	75.3	-5.5	-6.8%	87.2	0.3	0.3%
		<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>
Number of states with trends:		51	51		51	51
Rate improved (+)		8	0		23	0
Rate worsened (-)		42	15		25	0
Little/no change in rate		1	36		3	51

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.  
SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

### Uninsured Rates and Medicaid/CHIP Income Eligibility Standards by State

	Percent Uninsured, 2007–08		Income Eligibility for Medicaid/CHIP (Percent of federal poverty levels), 2009		
	Children (under age 18)	Adults (ages 18–64)	Children	Parents	Childless Adults
Alabama	5.5%	17.0%	200	25	NA
Alaska	12.9%	24.1%	175	85	NA
Arizona	14.9%	23.6%	200	200	100
Arkansas	7.7%	24.0%	200	17	NA
California	10.6%	24.4%	250	106	NA
Colorado	12.7%	19.7%	205	66	NA
Connecticut	5.3%	13.3%	300	191/300*	300*
Delaware	8.3%	14.3%	200	121	100
District of Columbia	6.2%	12.0%	300	207	200*
Florida	18.0%	25.9%	200	55	NA
Georgia	11.0%	22.8%	235	52	NA
Hawaii	5.1%	10.6%	300	100/200*	100 <sup>^</sup> /200*
Idaho	9.9%	20.1%	185	28	NA
Illinois	6.5%	17.8%	200	185	NA
Indiana	5.6%	16.6%	250	26/200*	200* <sup>^</sup>
Iowa	5.0%	12.8%	200	86/200*	200*
Kansas	9.4%	16.1%	200	34	NA
Kentucky	9.0%	19.9%	200	62	NA
Louisiana	11.9%	26.2%	250	26	NA
Maine	5.4%	13.3%	200	206/300*	100* <sup>^</sup> /300*
Maryland	8.3%	16.8%	300	116	116*
Massachusetts	3.2%	7.2%	300	133/300*	133/300*
Michigan	5.5%	16.1%	200	66	35*
Minnesota	6.5%	10.8%	275	200/275*	200*
Mississippi	12.7%	24.2%	200	46	NA
Missouri	8.6%	16.6%	300	26	NA
Montana	11.6%	21.1%	175	58	NA
Nebraska	10.0%	15.8%	185	58	NA
Nevada	16.7%	21.6%	200	91	NA
New Hampshire	5.0%	13.9%	300	51	NA
New Jersey	12.1%	18.8%	350	200	NA
New Mexico	15.8%	30.2%	235	69/200*	200*
New York	8.0%	18.0%	250	150	100
North Carolina	10.7%	21.1%	200	51	NA
North Dakota	7.9%	14.3%	150	62	NA
Ohio	7.2%	15.5%	200	90	NA
Oklahoma	9.9%	22.0%	185	48/200*	200*
Oregon	11.1%	21.6%	185	42/100* <sup>^</sup> /185* <sup>^</sup>	100* <sup>^</sup> /185* <sup>^</sup>
Pennsylvania	7.1%	12.9%	300	36/200* <sup>^</sup>	200* <sup>^</sup>
Rhode Island	8.4%	14.4%	250	181	NA
South Carolina	13.5%	20.6%	200	90	NA
South Dakota	8.9%	15.1%	200	54	NA
Tennessee	9.3%	20.1%	250	134	NA
Texas	19.6%	31.5%	200	27	NA
Utah	10.0%	16.2%	200	68/150*	150*
Vermont	6.6%	13.5%	300	191/300*	150/300*
Virginia	8.5%	17.9%	200	30	NA
Washington	6.8%	15.7%	250	77/200* <sup>^</sup>	200* <sup>^</sup>
West Virginia	5.4%	21.1%	220	34	NA
Wisconsin	5.8%	11.9%	250	200	200*
Wyoming	9.2%	18.2%	200	54	NA

\* Denotes income eligibility for a waiver or state-funded program with more limited benefits and/or higher cost-sharing than Medicaid.

<sup>^</sup> Denotes enrollment is closed to new applicants.

NA= Not applicable because state does not provide a waiver or state-funded coverage to childless adults.

Note: Income eligibility listed for children is the highest level reported among regular Medicaid, SCHIP-funded Medicaid expansion program, or separate state program.  
 DATA: Uninsured—2008–09 CPS ASEC Supplement; Children eligibility—Kaiser Commission on Medicaid and the Uninsured, *Challenges of Providing Health Coverage for Children and Parents in a Recession: A 50 State Update on Eligibility Rules, Enrollment and Renewal Procedures, and Cost-Sharing Practices in Medicaid and SCHIP in 2009*, Jan. 2009; Parents and childless adults eligibility—Kaiser Commission on Medicaid and the Uninsured, *Expanding Health Coverage for Low-Income Adults: Filling the Gaps in Medicaid Eligibility*, May 2009.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009



**Prevention and Treatment: Dimension and Indicator Ranking on Effective Care, Coordinated Care, and Patient-Centered Care**

**State Rank**  
 □ Top Quartile  
 □ Second Quartile  
 □ Third Quartile  
 ■ Bottom Quartile  
 \* Data Not Available

Adult Preventive Care  
 Diabetic Preventive Care  
 Child Recommended Vaccines  
 Child Medical & Dental Visit  
 Child Mental Health Care  
 Hospital Quality Composite  
 Surgical Care to Prevent Complications  
 Home Health Patients Walking or Moving  
 Adult Usual Source of Care  
 Child Medical Home  
 Heart Failure Instructions at Discharge  
 Medicare Good Communication  
 Medicare Best Rating for Care  
 Nursing Home Pressure Sores  
 Nursing Home Restrained

**2009 Ranking**

RANK	STATE	INDICATOR RANKING											
		EFFECTIVE CARE				COORDINATED CARE				PATIENT-CENTERED CARE			
1	Maine	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
2	New Hampshire	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
3	Vermont	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
4	Delaware	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
5	Massachusetts	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
6	Iowa	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
7	Rhode Island	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
8	Minnesota	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
9	Nebraska	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
10	Pennsylvania	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
11	Connecticut	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
12	South Dakota	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
13	Wisconsin	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
14	North Dakota	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
15	Michigan	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
16	Hawaii	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
17	Kansas	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
18	South Carolina	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
19	Virginia	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
20	Maryland	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
21	New Jersey	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
22	New York	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
23	West Virginia	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
24	Ohio	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
25	Montana	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
26	Indiana	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
27	Tennessee	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
28	Colorado	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
29	Alabama	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
30	Missouri	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
31	District of Columbia	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
32	North Carolina	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
33	Kentucky	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
34	Washington	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
35	Utah	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
36	Florida	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
37	Idaho	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
38	Arkansas	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
39	Georgia	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
40	Alaska	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
41	Wyoming	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
42	California	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
43	Texas	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
44	Illinois	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
45	Louisiana	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
46	Oregon	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
47	Arizona	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
48	Oklahoma	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
49	Mississippi	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
50	New Mexico	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
51	Nevada	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

**Prevention and Treatment: Dimension and Indicator Ranking on Effective Care, Coordinated Care, and Patient-Centered Care** (continued)

**State Rank**  
 □ Top Quartile  
 □ Second Quartile  
 □ Third Quartile  
 ■ Bottom Quartile  
 \* Data Not Available

Adult Preventive Care  
 Diabetic Preventive Care  
 Child Recommended Vaccines  
 Child Medical & Dental Visit  
 Child Mental Health Care  
 Hospital Quality Composite  
 Surgical Care to Prevent Complications  
 Home Health Patients Walking or Moving  
 Adult Usual Source of Care  
 Child Medical Home  
 Heart Failure Instructions at Discharge  
 Medicare Good Communication  
 Medicare Best Rating for Care  
 Nursing Home Pressure Sores  
 Nursing Home Restrained

**Revised 2007 Ranking<sup>a</sup>**

RANK	STATE	INDICATOR RANKING											
		EFFECTIVE CARE				COORDINATED CARE				PATIENT-CENTERED CARE			
1	Maine	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
2	Rhode Island	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
3	Massachusetts	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
4	Connecticut	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
5	Iowa	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
6	Nebraska	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
6	Vermont	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
8	New Hampshire	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
9	Wisconsin	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
10	South Dakota	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
11	Michigan	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
12	Pennsylvania	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
13	New Jersey	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
13	Minnesota	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
15	Kansas	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
16	Maryland	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
16	Montana	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
16	Hawaii	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
19	Alabama	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
20	Delaware	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
20	South Carolina	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
22	Virginia	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
23	North Carolina	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
24	Tennessee	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
25	North Dakota	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
26	Indiana	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
27	West Virginia	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
28	Illinois	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
29	Ohio	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
30	District of Columbia	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
31	Wyoming	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
32	New York	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
33	Missouri	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
34	Colorado	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
35	Washington	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
36	Kentucky	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
37	Georgia	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
38	Mississippi	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
38	New Mexico	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
40	Oregon	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
41	Idaho	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
42	Arkansas	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
43	Florida	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
44	Louisiana	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
45	Texas	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
45	Oklahoma	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
47	Utah	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
48	Arizona	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
49	Alaska	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
50	California	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top
51	Nevada	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top	Top

<sup>a</sup> Some state rates from the 2007 edition have been revised to match methodology used in the 2009 edition.  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

## Prevention and Treatment: Dimension Ranking and Performance on Indicators

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Current Dimension Rank	Past Dimension Rank	Indicator Performance								
			Percent Adults Age 50+ Received Recommended Preventive Care			Percent Adult Diabetics Received Recommended Preventive Care			Percent Children Ages 19–35 Months Received Five Vaccines		
			Effective Care								
			Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
<b>United States</b>			<b>42.3</b>	<b>2.6</b>	<b>6.6%</b>	<b>44.3</b>	<b>3.3</b>	<b>8.1%</b>	<b>80.1</b>	<b>-0.7</b>	<b>-0.9%</b>
Alabama	29	19	37.2	1.5	4.2%	39.1	-1.3	-3.2%	81.6	-1.7	-2.0%
Alaska	40	49	39.7	1.2	3.1%	41.8	1.1	2.7%	78.6	3.2	4.2%
Arizona	47	48	40.7	1.3	3.3%	41.5	4.7	12.8%	80.2	1.0	1.3%
Arkansas	38	42	35.7	3.0	9.2%	34.2	2.0	6.2%	75.0	7.2	10.6%
California	42	50	38.9	1.6	4.3%	47.5	12.4	35.4%	79.4	1.5	1.9%
Colorado	28	34	45.7	4.5	10.9%	43.9	-4.5	-9.3%	78.6	-4.8	-5.8%
Connecticut	11	4	51.1	3.8	8.0%	47.4	1.9	4.2%	89.3	3.2	3.7%
Delaware	4	20	52.5	6.2	13.4%	49.0	-3.4	-6.5%	81.8	-2.4	-2.9%
District of Columbia	31	30	43.2	-2.4	-5.3%	44.8	*	*	82.8	9.3	12.7%
Florida	36	43	40.6	-0.2	-0.5%	45.5	4.1	9.9%	82.4	3.1	3.9%
Georgia	39	37	43.2	1.8	4.3%	44.4	3.3	8.0%	80.8	-3.9	-4.6%
Hawaii	16	16	41.4	4.8	13.1%	49.3	-13.0	-20.9%	87.8	7.7	9.6%
Idaho	37	41	36.0	3.4	10.4%	37.1	-0.2	-0.5%	75.8	-2.3	-2.9%
Illinois	44	28	38.3	2.6	7.3%	*	*	*	76.9	-6.6	-7.9%
Indiana	26	26	37.9	1.7	4.7%	43.1	2.5	6.2%	76.8	-1.3	-1.7%
Iowa	6	5	42.9	0.9	2.1%	48.7	-0.4	-0.8%	80.0	-4.9	-5.8%
Kansas	17	15	41.0	1.4	3.5%	*	*	*	81.7	-2.1	-2.5%
Kentucky	33	36	40.3	5.2	14.8%	40.2	3.9	10.7%	80.9	1.2	1.5%
Louisiana	45	44	37.5	0.3	0.8%	36.9	-1.5	-3.9%	77.7	1.7	2.2%
Maine	1	1	48.8	2.0	4.3%	54.5	7.6	16.2%	77.6	-5.7	-6.8%
Maryland	20	16	49.9	0.7	1.4%	*	*	*	92.4	10.1	12.3%
Massachusetts	5	3	49.5	2.8	6.0%	*	*	*	83.9	-9.6	-10.3%
Michigan	15	11	49.9	7.1	16.6%	44.5	*	*	80.6	-2.1	-2.5%
Minnesota	8	13	50.8	0.6	1.2%	66.9	4.5	7.2%	84.7	-0.5	-0.6%
Mississippi	49	38	35.7	2.7	8.2%	33.3	4.6	16.0%	78.7	-4.9	-5.9%
Missouri	30	33	42.4	4.0	10.4%	44.2	-0.3	-0.7%	77.2	-2.1	-2.6%
Montana	25	16	41.6	0.5	1.2%	47.0	-2.8	-5.6%	75.0	-4.6	-5.8%
Nebraska	9	6	39.5	2.3	6.2%	*	*	*	85.2	-3.9	-4.4%
Nevada	51	51	38.8	4.5	13.1%	35.1	0.7	2.0%	66.7	0.0	0.0%
New Hampshire	2	8	48.8	0.2	0.4%	54.1	2.1	4.0%	93.2	10.4	12.6%
New Jersey	21	13	42.8	0.2	0.5%	43.1	0.0	0.0%	82.3	4.1	5.2%
New Mexico	50	38	38.5	-0.2	-0.5%	45.5	-3.7	-7.5%	78.9	0.5	0.6%
New York	22	32	45.8	3.9	9.3%	46.6	4.2	9.9%	83.0	1.4	1.7%
North Carolina	32	23	48.0	2.3	5.0%	45.8	-1.2	-2.6%	80.0	-5.2	-6.1%
North Dakota	14	25	40.6	1.8	4.6%	54.2	9.7	21.8%	81.7	-3.3	-3.9%
Ohio	24	29	43.1	4.9	12.9%	42.7	3.7	9.5%	80.4	-3.7	-4.4%
Oklahoma	48	45	35.0	0.8	2.3%	40.6	3.4	9.1%	80.1	4.4	5.8%
Oregon	46	40	43.7	3.7	9.2%	50.0	*	*	72.4	-0.5	-0.7%
Pennsylvania	10	12	43.4	5.1	13.3%	47.5	1.5	3.3%	81.4	-1.8	-2.2%
Rhode Island	7	2	50.5	1.9	3.9%	*	*	*	80.0	-3.1	-3.7%
South Carolina	18	20	43.1	1.4	3.4%	39.9	-1.4	-3.4%	81.1	2.6	3.3%
South Dakota	12	10	40.7	1.2	3.0%	50.1	-4.8	-8.7%	87.1	0.2	0.2%
Tennessee	27	24	42.4	2.4	6.0%	46.7	-1.0	-2.1%	80.5	-2.4	-2.9%
Texas	43	45	38.9	4.0	11.5%	38.5	4.3	12.6%	78.2	-0.2	-0.3%
Utah	35	47	39.5	1.9	5.1%	40.0	-0.6	-1.5%	78.5	4.4	5.9%
Vermont	3	6	49.3	4.9	11.0%	55.3	9.8	21.6%	79.8	-1.7	-2.1%
Virginia	19	22	49.3	4.2	9.3%	46.3	1.9	4.3%	79.6	-6.2	-7.2%
Washington	34	35	46.0	4.0	9.5%	50.7	3.1	6.5%	73.9	-3.9	-5.0%
West Virginia	23	27	41.3	3.8	10.1%	41.4	1.0	2.5%	80.7	5.8	7.7%
Wisconsin	13	9	45.3	1.5	3.4%	54.3	4.5	9.0%	79.4	-2.8	-3.4%
Wyoming	41	31	37.3	0.1	0.3%	42.0	1.5	3.7%	76.8	-1.8	-2.3%
				<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>
Number of states with trends:			51	51		42	42		51	51	
Rate improved (+)			48	26		26	18		20	9	
Rate worsened (-)			3	1		15	6		30	10	
Little/no change in rate			0	24		1	18		1	32	

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.

<sup>b</sup> Current and past data are not comparable because of changes in survey design.

\* Data could not be updated for this state.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

## Prevention and Treatment: Dimension Ranking and Performance on Indicators (continued)

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Indicator Performance														
	Percent Children with Medical and Dental Preventive Care Visits <sup>b</sup>			Percent Children Received Needed Mental Health Care			Percent Hospitalized Patients Received Recommended Care for Heart Attack, Heart Failure, and Pneumonia			Percent Surgical Patients Received Appropriate Care to Prevent Complications			Percent Home Health Patients Better at Walking or Moving Around		
	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
United States	71.6	— <sup>b</sup>	— <sup>b</sup>	60.0	1.3	2.2%	91.3	8.5	10.3%	84.6	15.2	21.9%	40.3	3.4	9.2%
Alabama	69.9	— <sup>b</sup>	— <sup>b</sup>	61.7	-5.3	-7.9%	91.4	8.3	10.0%	83.2	12.0	16.9%	42.8	4.0	10.3%
Alaska	70.7	— <sup>b</sup>	— <sup>b</sup>	63.0	10.8	20.7%	92.0	5.7	6.6%	81.5	15.8	24.1%	33.8	1.2	3.7%
Arizona	67.4	— <sup>b</sup>	— <sup>b</sup>	62.1	7.1	12.9%	90.1	6.1	7.3%	82.5	15.5	23.1%	37.6	2.6	7.4%
Arkansas	65.0	— <sup>b</sup>	— <sup>b</sup>	56.5	8.8	18.4%	92.2	11.2	13.8%	82.9	14.2	20.7%	39.5	4.9	14.2%
California	71.5	— <sup>b</sup>	— <sup>b</sup>	53.5	-0.5	-0.9%	90.9	11.4	14.3%	80.4	21.7	36.9%	41.4	3.5	9.2%
Colorado	70.0	— <sup>b</sup>	— <sup>b</sup>	64.8	7.9	13.9%	93.4	5.9	6.7%	85.2	13.6	19.0%	37.4	2.3	6.6%
Connecticut	82.4	— <sup>b</sup>	— <sup>b</sup>	78.8	4.7	6.3%	91.6	4.8	5.5%	89.7	-0.3	-0.3%	38.4	4.1	12.0%
Delaware	72.7	— <sup>b</sup>	— <sup>b</sup>	76.9	20.2	35.6%	92.4	8.7	10.4%	87.0	13.7	18.7%	37.3	5.9	18.8%
District of Columbia	82.0	— <sup>b</sup>	— <sup>b</sup>	56.5	-9.6	-14.5%	84.9	6.5	8.3%	81.5	15.4	23.3%	39.2	7.4	23.3%
Florida	64.7	— <sup>b</sup>	— <sup>b</sup>	52.0	-2.7	-4.9%	91.1	9.7	11.9%	84.4	15.6	22.7%	41.6	4.4	11.8%
Georgia	73.3	— <sup>b</sup>	— <sup>b</sup>	51.2	-9.6	-15.8%	89.5	10.1	12.7%	81.8	17.7	27.6%	45.2	5.7	14.4%
Hawaii	80.3	— <sup>b</sup>	— <sup>b</sup>	62.8	-3.3	-5.0%	87.5	6.8	8.4%	78.3	20.9	36.4%	40.5	1.6	4.1%
Idaho	60.2	— <sup>b</sup>	— <sup>b</sup>	63.4	6.5	11.4%	94.5	8.6	10.0%	83.3	10.5	14.4%	39.9	5.4	15.7%
Illinois	73.7	— <sup>b</sup>	— <sup>b</sup>	53.0	-10.0	-15.9%	90.7	7.5	9.0%	84.6	16.4	24.1%	39.0	1.5	4.0%
Indiana	70.3	— <sup>b</sup>	— <sup>b</sup>	64.3	-1.8	-2.7%	92.7	8.2	9.7%	85.8	20.5	31.4%	39.3	1.4	3.7%
Iowa	75.4	— <sup>b</sup>	— <sup>b</sup>	74.5	6.9	10.2%	94.9	6.6	7.5%	86.8	9.1	11.7%	34.8	1.8	5.5%
Kansas	73.9	— <sup>b</sup>	— <sup>b</sup>	72.3	11.0	17.9%	90.1	2.6	3.0%	83.8	15.5	22.7%	42.0	6.1	17.0%
Kentucky	70.9	— <sup>b</sup>	— <sup>b</sup>	65.5	3.0	4.8%	91.1	9.6	11.8%	81.8	11.3	16.0%	42.6	4.6	12.1%
Louisiana	69.6	— <sup>b</sup>	— <sup>b</sup>	55.3	11.1	25.1%	89.6	7.9	9.7%	81.1	20.2	33.2%	42.6	6.1	16.7%
Maine	75.8	— <sup>b</sup>	— <sup>b</sup>	70.8	3.2	4.7%	93.4	8.7	10.3%	92.7	16.4	21.5%	40.9	3.0	7.9%
Maryland	75.8	— <sup>b</sup>	— <sup>b</sup>	59.4	0.5	0.8%	89.2	5.7	6.8%	84.6	13.8	19.5%	41.8	3.5	9.1%
Massachusetts	82.6	— <sup>b</sup>	— <sup>b</sup>	66.6	-1.0	-1.5%	91.8	6.7	7.9%	90.3	13.4	17.4%	40.9	5.8	16.5%
Michigan	74.6	— <sup>b</sup>	— <sup>b</sup>	60.4	-3.4	-5.3%	92.6	6.6	7.7%	89.4	12.0	15.5%	40.3	2.8	7.5%
Minnesota	67.5	— <sup>b</sup>	— <sup>b</sup>	67.0	2.4	3.7%	93.3	7.4	8.6%	88.2	13.1	17.4%	33.8	0.7	2.1%
Mississippi	64.2	— <sup>b</sup>	— <sup>b</sup>	43.0	-7.1	-14.2%	89.8	10.0	12.5%	79.3	16.9	27.1%	43.2	3.9	9.9%
Missouri	66.7	— <sup>b</sup>	— <sup>b</sup>	73.9	13.7	22.8%	92.9	8.1	9.6%	85.1	14.1	19.8%	42.2	5.0	13.4%
Montana	64.1	— <sup>b</sup>	— <sup>b</sup>	67.9	-0.5	-0.7%	93.3	5.9	6.8%	89.7	7.8	9.5%	41.4	6.5	18.6%
Nebraska	68.7	— <sup>b</sup>	— <sup>b</sup>	71.0	-1.8	-2.5%	95.1	7.1	8.1%	90.8	13.8	17.9%	40.0	4.5	12.7%
Nevada	61.1	— <sup>b</sup>	— <sup>b</sup>	53.1	-0.1	-0.2%	90.2	9.0	11.1%	80.5	29.8	58.7%	42.0	3.3	8.5%
New Hampshire	81.0	— <sup>b</sup>	— <sup>b</sup>	63.0	-0.5	-0.8%	95.6	10.4	12.2%	91.7	23.1	33.7%	38.6	2.7	7.5%
New Jersey	77.6	— <sup>b</sup>	— <sup>b</sup>	55.2	-3.5	-6.0%	93.7	6.8	7.8%	87.1	10.0	13.0%	44.1	4.8	12.2%
New Mexico	71.2	— <sup>b</sup>	— <sup>b</sup>	53.5	-4.8	-8.2%	88.5	4.1	4.9%	78.5	8.4	12.0%	43.2	3.4	8.5%
New York	79.3	— <sup>b</sup>	— <sup>b</sup>	61.1	4.0	7.0%	90.9	8.1	9.8%	87.3	18.7	27.3%	36.1	1.7	4.9%
North Carolina	71.4	— <sup>b</sup>	— <sup>b</sup>	61.7	-1.9	-3.0%	90.8	8.2	9.9%	85.7	11.9	16.1%	40.8	2.4	6.3%
North Dakota	62.2	— <sup>b</sup>	— <sup>b</sup>	72.4	6.3	9.5%	95.6	8.9	10.3%	88.2	10.3	13.2%	42.4	7.0	19.8%
Ohio	72.3	— <sup>b</sup>	— <sup>b</sup>	66.2	5.0	8.2%	92.8	7.8	9.2%	87.5	22.3	34.2%	38.3	2.1	5.8%
Oklahoma	67.6	— <sup>b</sup>	— <sup>b</sup>	53.6	5.4	11.2%	93.3	8.0	9.4%	84.4	3.7	4.6%	38.2	3.9	11.4%
Oregon	62.3	— <sup>b</sup>	— <sup>b</sup>	46.2	-16.5	-26.3%	90.2	5.8	6.9%	82.5	9.4	12.9%	36.3	0.3	0.8%
Pennsylvania	78.9	— <sup>b</sup>	— <sup>b</sup>	81.5	5.7	7.5%	91.1	10.5	13.0%	86.1	22.7	35.8%	42.9	3.9	10.0%
Rhode Island	85.3	— <sup>b</sup>	— <sup>b</sup>	76.0	8.5	12.6%	90.8	2.5	2.8%	90.2	4.8	5.6%	37.3	4.2	12.7%
South Carolina	74.3	— <sup>b</sup>	— <sup>b</sup>	62.7	2.9	4.8%	93.5	9.7	11.6%	87.0	12.7	17.1%	45.0	3.2	7.7%
South Dakota	65.2	— <sup>b</sup>	— <sup>b</sup>	69.3	-1.7	-2.4%	94.6	7.0	8.0%	90.4	13.0	16.8%	41.1	5.4	15.1%
Tennessee	70.9	— <sup>b</sup>	— <sup>b</sup>	64.1	2.2	3.6%	90.9	7.6	9.1%	82.1	14.8	22.0%	47.4	6.9	17.0%
Texas	67.3	— <sup>b</sup>	— <sup>b</sup>	41.7	-1.7	-3.9%	91.1	10.5	13.0%	81.4	19.2	30.9%	38.6	2.5	6.9%
Utah	64.8	— <sup>b</sup>	— <sup>b</sup>	66.8	7.6	12.8%	90.9	6.9	8.2%	85.7	19.7	29.8%	48.2	6.8	16.4%
Vermont	79.4	— <sup>b</sup>	— <sup>b</sup>	69.3	-0.7	-1.0%	94.5	6.2	7.0%	91.0	18.9	26.2%	38.8	3.0	8.4%
Virginia	72.1	— <sup>b</sup>	— <sup>b</sup>	72.2	10.4	16.8%	92.0	10.0	12.2%	85.3	16.4	23.8%	42.1	3.0	7.7%
Washington	71.0	— <sup>b</sup>	— <sup>b</sup>	62.4	6.0	10.6%	90.1	6.6	7.9%	86.9	14.6	20.2%	39.3	3.3	9.2%
West Virginia	74.4	— <sup>b</sup>	— <sup>b</sup>	72.0	8.7	13.7%	91.2	9.7	11.9%	83.3	13.8	19.9%	44.9	3.8	9.2%
Wisconsin	68.2	— <sup>b</sup>	— <sup>b</sup>	61.4	-5.4	-8.1%	93.6	6.7	7.7%	90.2	17.4	23.9%	37.9	3.3	9.5%
Wyoming	68.1	— <sup>b</sup>	— <sup>b</sup>	67.6	-9.6	-12.4%	93.4	8.3	9.8%	85.6	16.5	23.9%	34.6	-4.3	-11.1%
		Any change	5% change or more		Any change	5% change or more		Any change	5% change or more		Any change	5% change or more		Any change	5% change or more
Number of states with trends:	— <sup>b</sup>	— <sup>b</sup>		51	51		51	51		51	51		51	51	
Rate improved (+)	— <sup>b</sup>	— <sup>b</sup>		27	21		51	48		50	49		50	43	
Rate worsened (-)	— <sup>b</sup>	— <sup>b</sup>		24	12		0	0		1	0		1	1	
Little/no change in rate	— <sup>b</sup>	— <sup>b</sup>		0	18		0	3		0	2		0	7	

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.

<sup>b</sup> Current and past data are not comparable because of changes in survey design.

\* Data could not be updated for this state.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

## Prevention and Treatment: Dimension Ranking and Performance on Indicators (continued)

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Indicator Performance								
	Percent Adults with a Usual Source of Care			Percent Children with a Medical Home <sup>b</sup>			Percent Heart Failure Patients Given Instructions at Discharge		
	Coordinated Care								
	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
<b>United States</b>	<b>79.7</b>	<b>0.5</b>	<b>0.6%</b>	<b>57.5</b>	<b>—<sup>b</sup></b>	<b>—<sup>b</sup></b>	<b>74.7</b>	<b>24.1</b>	<b>47.6%</b>
Alabama	81.5	1.1	1.4%	56.1	— <sup>b</sup>	— <sup>b</sup>	74.2	24.0	47.8%
Alaska	69.3	-1.7	-2.4%	52.3	— <sup>b</sup>	— <sup>b</sup>	53.8	26.5	96.9%
Arizona	72.7	-0.9	-1.2%	50.0	— <sup>b</sup>	— <sup>b</sup>	66.3	25.5	62.4%
Arkansas	82.2	0.1	0.1%	60.7	— <sup>b</sup>	— <sup>b</sup>	77.4	23.4	43.4%
California	72.2	0.3	0.4%	49.6	— <sup>b</sup>	— <sup>b</sup>	75.0	30.8	69.7%
Colorado	78.1	-1.0	-1.3%	59.3	— <sup>b</sup>	— <sup>b</sup>	78.1	37.2	90.9%
Connecticut	86.3	0.0	0.0%	62.4	— <sup>b</sup>	— <sup>b</sup>	70.6	6.7	10.5%
Delaware	89.0	0.3	0.3%	59.9	— <sup>b</sup>	— <sup>b</sup>	84.2	39.6	88.8%
District of Columbia	79.7	2.2	2.8%	49.7	— <sup>b</sup>	— <sup>b</sup>	63.6	3.5	5.8%
Florida	76.6	1.2	1.6%	56.8	— <sup>b</sup>	— <sup>b</sup>	75.3	26.7	54.9%
Georgia	79.2	1.6	2.1%	58.5	— <sup>b</sup>	— <sup>b</sup>	69.6	21.3	44.0%
Hawaii	85.9	5.2	6.4%	60.1	— <sup>b</sup>	— <sup>b</sup>	65.4	36.3	124.7%
Idaho	71.7	-1.8	-2.4%	56.1	— <sup>b</sup>	— <sup>b</sup>	84.8	27.6	48.3%
Illinois	81.8	-1.3	-1.6%	55.9	— <sup>b</sup>	— <sup>b</sup>	76.5	20.9	37.6%
Indiana	83.5	-0.5	-0.6%	61.7	— <sup>b</sup>	— <sup>b</sup>	80.8	28.0	53.1%
Iowa	84.6	-0.2	-0.2%	66.9	— <sup>b</sup>	— <sup>b</sup>	81.6	14.9	22.3%
Kansas	83.9	0.0	0.0%	61.3	— <sup>b</sup>	— <sup>b</sup>	68.8	12.5	22.2%
Kentucky	83.5	1.0	1.2%	61.8	— <sup>b</sup>	— <sup>b</sup>	71.4	30.7	75.4%
Louisiana	77.6	0.9	1.2%	55.3	— <sup>b</sup>	— <sup>b</sup>	70.0	18.2	35.1%
Maine	88.8	0.5	0.6%	65.5	— <sup>b</sup>	— <sup>b</sup>	81.5	21.7	36.3%
Maryland	84.2	0.6	0.7%	58.6	— <sup>b</sup>	— <sup>b</sup>	78.0	21.0	36.8%
Massachusetts	88.5	1.6	1.8%	66.2	— <sup>b</sup>	— <sup>b</sup>	75.1	23.4	45.2%
Michigan	85.0	1.3	1.6%	62.5	— <sup>b</sup>	— <sup>b</sup>	79.6	17.8	28.8%
Minnesota	78.1	3.2	4.3%	63.0	— <sup>b</sup>	— <sup>b</sup>	76.6	17.0	28.5%
Mississippi	78.0	0.6	0.8%	51.6	— <sup>b</sup>	— <sup>b</sup>	68.7	18.9	38.0%
Missouri	82.1	-1.1	-1.3%	64.8	— <sup>b</sup>	— <sup>b</sup>	73.3	23.3	46.6%
Montana	72.1	-1.9	-2.6%	61.5	— <sup>b</sup>	— <sup>b</sup>	68.6	22.3	48.2%
Nebraska	84.4	1.3	1.6%	69.1	— <sup>b</sup>	— <sup>b</sup>	81.5	26.6	48.4%
Nevada	69.2	3.6	5.5%	45.4	— <sup>b</sup>	— <sup>b</sup>	67.8	42.7	170.3%
New Hampshire	88.0	0.4	0.5%	69.3	— <sup>b</sup>	— <sup>b</sup>	85.0	23.6	38.4%
New Jersey	83.5	0.8	1.0%	56.8	— <sup>b</sup>	— <sup>b</sup>	84.0	15.9	23.3%
New Mexico	74.1	-1.5	-2.0%	49.0	— <sup>b</sup>	— <sup>b</sup>	53.8	39.5	277.3%
New York	84.1	1.7	2.1%	56.9	— <sup>b</sup>	— <sup>b</sup>	77.5	35.4	84.0%
North Carolina	77.8	-1.5	-1.9%	60.9	— <sup>b</sup>	— <sup>b</sup>	74.3	22.2	42.6%
North Dakota	75.7	-0.5	-0.7%	64.0	— <sup>b</sup>	— <sup>b</sup>	88.8	44.2	99.2%
Ohio	84.4	-0.2	-0.2%	66.2	— <sup>b</sup>	— <sup>b</sup>	81.1	20.3	33.4%
Oklahoma	78.8	0.5	0.6%	55.7	— <sup>b</sup>	— <sup>b</sup>	72.9	28.7	65.0%
Oregon	77.6	1.4	1.8%	63.4	— <sup>b</sup>	— <sup>b</sup>	66.3	32.2	94.3%
Pennsylvania	89.0	0.0	0.0%	61.9	— <sup>b</sup>	— <sup>b</sup>	72.4	24.7	51.8%
Rhode Island	85.7	0.6	0.7%	63.6	— <sup>b</sup>	— <sup>b</sup>	73.8	3.8	5.4%
South Carolina	82.0	0.5	0.6%	58.8	— <sup>b</sup>	— <sup>b</sup>	78.2	22.9	41.4%
South Dakota	79.6	-3.4	-4.1%	63.3	— <sup>b</sup>	— <sup>b</sup>	91.4	7.2	8.6%
Tennessee	83.6	1.4	1.7%	61.4	— <sup>b</sup>	— <sup>b</sup>	70.8	20.1	39.7%
Texas	71.5	-0.4	-0.6%	50.3	— <sup>b</sup>	— <sup>b</sup>	74.5	27.1	57.1%
Utah	76.9	3.7	5.1%	63.0	— <sup>b</sup>	— <sup>b</sup>	79.4	34.3	76.1%
Vermont	86.8	0.4	0.5%	67.2	— <sup>b</sup>	— <sup>b</sup>	82.3	27.5	50.1%
Virginia	82.1	0.3	0.4%	58.8	— <sup>b</sup>	— <sup>b</sup>	76.1	27.0	55.0%
Washington	78.3	0.0	0.0%	59.9	— <sup>b</sup>	— <sup>b</sup>	70.7	34.8	96.8%
West Virginia	78.8	1.1	1.4%	64.6	— <sup>b</sup>	— <sup>b</sup>	77.4	13.5	21.1%
Wisconsin	85.2	2.3	2.8%	62.9	— <sup>b</sup>	— <sup>b</sup>	76.2	15.1	24.7%
Wyoming	73.4	-1.9	-2.5%	59.3	— <sup>b</sup>	— <sup>b</sup>	70.2	31.6	81.8%
		<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>
Number of states with trends:		51	51		— <sup>b</sup>	— <sup>b</sup>		51	51
Rate improved (+)		31	3		— <sup>b</sup>	— <sup>b</sup>		51	51
Rate worsened (-)		16	0		— <sup>b</sup>	— <sup>b</sup>		0	0
Little/no change in rate		4	48		— <sup>b</sup>	— <sup>b</sup>		0	0

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.

<sup>b</sup> Current and past data are not comparable because of changes in survey design.

\* Data could not be updated for this state.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

**Prevention and Treatment: Dimension Ranking and Performance on Indicators (continued)**

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Indicator Performance														
	Percent Medicare Patients Experienced Good Communication with Provider			Percent Medicare Patients Giving Best Rating for Care Received			Percent High-Risk Nursing Home Residents with Pressure Sores			Percent Long-Stay Nursing Home Residents Physically Restrained			Percent Long-Stay Nursing Home Residents with Moderate to Severe Pain		
	Patient-Centered Care														
	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
United States	NA	NA	NA	NA	NA	NA	12.0	1.4	10.4%	5.1	2.3	31.1%	4.4	2.0	31.3%
Alabama	75.2	5.9	8.5%	60.7	-11.2	-15.6%	9.8	1.9	16.2%	2.8	2.2	44.5%	3.3	2.4	42.1%
Alaska	74.9	7.3	10.8%	59.6	-5.8	-8.9%	9.8	3.5	26.4%	1.8	3.7	67.3%	5.6	4.6	45.1%
Arizona	71.7	8.6	13.6%	55.0	-9.3	-14.5%	10.5	0.5	4.5%	4.7	4.3	47.4%	5.7	2.9	33.7%
Arkansas	75.1	5.6	8.1%	58.9	-12.3	-17.3%	11.7	1.0	7.9%	11.0	4.9	30.7%	3.3	2.2	40.7%
California	72.0	5.4	8.1%	61.1	-6.8	-10.0%	13.2	0.4	3.0%	10.7	4.7	30.5%	4.5	1.1	20.0%
Colorado	74.5	8.6	13.0%	61.1	-1.3	-2.1%	8.6	1.1	11.3%	5.0	1.4	21.9%	4.7	4.3	47.8%
Connecticut	73.6	5.0	7.3%	61.8	-9.3	-13.1%	11.0	2.2	16.6%	3.9	3.4	46.6%	3.3	1.2	26.7%
Delaware	78.0	11.1	16.6%	69.3	0.6	0.9%	12.3	2.2	15.1%	1.5	1.1	42.6%	4.0	1.6	28.6%
District of Columbia	75.1	4.1	5.8%	62.8	-4.7	-7.0%	14.6	4.8	24.8%	1.6	0.9	36.4%	0.9	0.7	43.8%
Florida	72.5	7.4	11.4%	60.2	-6.8	-10.1%	12.9	1.3	9.2%	7.0	2.4	25.5%	3.9	2.5	39.1%
Georgia	71.5	3.3	4.8%	59.7	-10.9	-15.4%	13.6	1.5	10.0%	5.7	4.5	44.2%	5.8	2.8	32.9%
Hawaii	77.4	5.6	7.8%	66.0	-8.3	-11.2%	7.6	1.4	15.6%	2.9	0.7	19.8%	2.2	0.8	26.7%
Idaho	72.7	5.5	8.2%	60.0	-10.3	-14.7%	8.8	-0.5	-6.0%	4.3	1.9	30.7%	5.2	2.9	35.8%
Illinois	*	*	*	*	*	*	15.0	1.4	8.5%	4.0	0.7	14.8%	5.6	0.4	6.7%
Indiana	74.9	6.0	8.7%	63.5	-7.0	-9.9%	11.6	2.8	19.4%	4.4	1.4	24.0%	4.1	2.0	33.3%
Iowa	74.5	6.0	8.8%	67.6	-2.9	-4.1%	8.0	0.8	9.0%	1.8	0.8	31.5%	4.7	2.1	31.3%
Kansas	76.1	7.8	11.4%	65.3	-6.2	-8.7%	8.9	3.2	26.3%	1.8	1.8	50.6%	4.8	3.7	43.5%
Kentucky	73.0	4.3	6.3%	58.9	-9.6	-14.0%	12.5	1.3	9.5%	5.4	1.5	21.7%	4.7	2.3	32.9%
Louisiana	76.8	4.4	6.1%	68.3	-3.5	-4.9%	17.2	0.8	4.4%	9.9	4.2	29.7%	5.1	1.8	26.1%
Maine	76.9	3.5	4.8%	66.2	-7.2	-9.8%	8.1	2.4	22.9%	2.1	2.7	57.2%	3.2	2.1	39.6%
Maryland	74.9	6.7	9.8%	60.3	-7.4	-10.9%	13.1	0.9	6.4%	3.8	2.9	43.7%	2.0	1.0	33.3%
Massachusetts	75.1	3.5	4.9%	62.5	-9.3	-13.0%	10.9	2.4	18.0%	4.7	2.0	29.8%	2.5	2.0	44.4%
Michigan	75.0	6.3	9.2%	63.3	-8.0	-11.2%	10.8	1.9	15.0%	5.0	1.6	24.2%	4.2	2.0	32.3%
Minnesota	77.4	8.2	11.9%	66.4	-4.3	-6.1%	7.7	1.3	14.5%	2.3	2.3	50.9%	3.6	3.7	50.7%
Mississippi	76.5	6.1	8.7%	57.2	-14.4	-20.1%	12.8	-0.6	-4.9%	7.7	4.1	34.6%	4.1	0.6	12.8%
Missouri	72.0	3.6	5.3%	62.5	-6.6	-9.6%	11.6	1.9	14.0%	5.9	1.2	17.0%	4.8	2.2	31.4%
Montana	75.5	3.3	4.6%	61.1	-13.3	-17.9%	7.5	0.2	2.6%	2.2	0.8	26.9%	5.5	1.6	22.5%
Nebraska	72.7	1.5	2.1%	64.0	-7.2	-10.1%	8.1	0.0	0.0%	1.5	0.4	20.8%	4.9	3.6	42.4%
Nevada	73.8	7.8	11.8%	56.2	-9.7	-14.7%	12.8	0.4	3.0%	5.9	5.4	47.9%	5.8	2.9	33.3%
New Hampshire	74.2	5.8	8.5%	58.7	-11.1	-15.9%	9.4	1.8	16.2%	1.6	1.7	51.1%	3.7	2.0	35.7%
New Jersey	73.6	4.5	6.5%	57.8	-10.5	-15.4%	16.9	1.5	8.2%	4.1	1.1	21.2%	2.7	1.7	39.5%
New Mexico	71.5	7.1	11.0%	56.8	-4.4	-7.2%	11.7	-0.2	-1.7%	7.3	0.9	11.0%	6.0	0.8	11.8%
New York	74.7	7.3	10.8%	60.9	-6.4	-9.5%	13.7	0.8	5.5%	3.6	1.1	23.1%	3.0	1.2	29.3%
North Carolina	74.3	5.3	7.7%	60.0	-9.5	-13.7%	11.1	2.9	20.7%	6.9	3.0	30.4%	3.5	2.8	44.4%
North Dakota	70.8	3.5	5.2%	59.7	-7.5	-11.2%	7.5	0.1	1.3%	1.9	0.6	23.4%	4.2	2.6	38.8%
Ohio	73.6	5.0	7.3%	60.6	-9.4	-13.4%	11.6	1.7	12.8%	5.4	1.7	24.0%	6.6	2.6	28.3%
Oklahoma	69.9	1.2	1.7%	59.6	-10.6	-15.1%	14.4	2.1	12.8%	9.1	3.6	28.4%	6.2	1.3	17.6%
Oregon	72.1	4.4	6.5%	55.0	-14.0	-20.3%	10.3	0.4	3.8%	4.2	5.0	54.5%	6.5	2.2	25.3%
Pennsylvania	76.7	6.5	9.3%	62.1	-10.4	-14.3%	11.6	2.1	15.4%	3.2	1.5	32.2%	3.8	1.4	26.9%
Rhode Island	77.8	4.6	6.3%	65.5	-8.6	-11.6%	11.3	4.0	26.2%	2.4	1.6	40.2%	2.7	1.4	35.0%
South Carolina	77.7	6.7	9.4%	61.5	-10.2	-14.2%	12.0	1.4	10.5%	6.7	3.1	31.7%	3.3	2.2	40.0%
South Dakota	73.4	3.1	4.4%	64.2	-8.0	-11.1%	9.7	2.4	19.9%	2.1	2.6	54.6%	5.0	3.4	40.5%
Tennessee	74.6	4.9	7.0%	64.2	-6.5	-9.2%	12.1	1.0	7.6%	7.2	3.4	32.3%	4.5	3.5	43.8%
Texas	74.1	4.6	6.6%	63.6	-6.8	-9.7%	11.5	0.8	6.5%	4.3	3.5	44.5%	4.1	1.8	30.5%
Utah	68.7	4.4	6.8%	59.7	-5.5	-8.4%	10.7	1.6	13.0%	8.5	3.8	30.9%	8.2	3.0	27.0%
Vermont	74.5	-0.4	-0.5%	61.5	-9.7	-13.6%	9.4	6.3	40.1%	2.4	1.2	33.4%	3.6	2.2	37.9%
Virginia	74.8	4.7	6.7%	61.3	-8.5	-12.2%	13.3	2.5	15.8%	2.8	1.7	37.9%	3.6	2.7	42.9%
Washington	70.0	3.6	5.4%	60.0	-5.8	-8.8%	11.9	0.3	2.5%	2.1	1.8	47.0%	6.5	2.2	25.3%
West Virginia	73.9	5.3	7.7%	57.0	-9.6	-14.4%	11.9	3.0	20.2%	3.5	1.1	23.9%	4.0	1.4	25.9%
Wisconsin	75.1	5.1	7.3%	65.0	-5.1	-7.3%	10.1	0.5	4.7%	1.8	1.4	44.3%	3.9	1.8	31.6%
Wyoming	71.0	-0.6	-0.8%	54.0	-16.9	-23.8%	10.5	1.1	9.5%	2.9	3.3	53.3%	6.8	4.6	40.4%
		Any change	5% change or more		Any change	5% change or more		Any change	5% change or more		Any change	5% change or more		Any change	5% change or more
Number of states with trends:		50	50		50	50		51	51		51	51		51	51
Rate improved (+)		48	41		1	0		47	38		51	51		51	51
Rate worsened (-)		2	0		49	46		3	1		0	0		0	0
Little/no change in rate		0	9		0	4		1	12		0	0		0	0

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.  
<sup>b</sup> Current and past data are not comparable because of changes in survey design.  
<sup>\*</sup> Data could not be updated for this state. NA = Not available.  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

**Hospital Quality Indicator Composite Percent and Rank: Hospitalized Patients Who Received Recommended Care for Heart Attack, Heart Failure, and Pneumonia, 2007**

State	Percent				Rank			
	Composite	Heart Attack	Heart Failure	Pneumonia	Composite	Heart Attack	Heart Failure	Pneumonia
Alabama	91.4	94.7	82.4	88.7	27	30	36	42
Alaska	92.0	96.6	79.9	89.6	23	11	45	33
Arizona	90.1	93.9	82.4	88.2	42	40	36	44
Arkansas	92.2	94.6	85.2	90.4	22	33	29	25
California	90.9	94.7	85.4	89.4	33	30	28	36
Colorado	93.4	97.2	87.2	90.4	11	7	16	25
Connecticut	91.6	96.3	87.5	91.3	26	15	14	12
Delaware	92.4	96.1	90.9	90.9	21	17	4	18
District of Columbia	84.9	93.2	80.8	81.5	51	47	42	51
Florida	91.1	93.8	86.2	90.7	29	42	24	22
Georgia	89.5	93.2	82.1	87.7	47	47	38	46
Hawaii	87.5	94.0	80.2	87.0	50	39	44	48
Idaho	94.5	97.1	86.8	91.2	6	8	20	14
Illinois	90.7	93.8	87.1	89.0	39	42	17	39
Indiana	92.7	95.5	87.6	91.1	19	24	13	16
Iowa	94.9	97.7	85.6	92.5	4	5	27	5
Kansas	90.1	94.5	71.1	85.7	42	35	51	49
Kentucky	91.1	93.9	79.4	89.5	29	40	47	34
Louisiana	89.6	93.4	81.6	87.9	46	45	40	45
Maine	93.4	96.6	90.2	93.9	11	11	5	3
Maryland	89.2	93.7	88.2	89.2	48	44	10	37
Massachusetts	91.8	96.2	87.0	90.9	25	16	18	18
Michigan	92.6	95.7	87.8	91.6	20	20	11	8
Minnesota	93.3	96.7	84.3	90.0	14	9	30	32
Mississippi	89.8	91.3	77.8	88.6	45	51	48	43
Missouri	92.9	96.0	81.7	90.3	17	18	39	28
Montana	93.3	96.4	82.7	91.6	14	14	35	8
Nebraska	95.1	97.8	86.6	90.9	3	3	23	18
Nevada	90.2	94.4	83.7	87.3	40	37	32	47
New Hampshire	95.6	98.0	91.3	94.8	1	1	2	2
New Jersey	93.7	95.6	91.5	93.9	8	22	1	3
New Mexico	88.5	93.1	71.9	85.7	49	49	50	49
New York	90.9	95.0	87.8	90.3	33	28	11	28
North Carolina	90.8	94.5	86.0	91.1	37	35	25	16
North Dakota	95.6	97.5	91.3	90.7	1	6	2	22
Ohio	92.8	95.5	88.8	92.0	18	24	8	7
Oklahoma	93.3	94.8	79.9	90.4	14	29	45	25
Oregon	90.2	95.6	80.8	90.1	40	22	42	31
Pennsylvania	91.1	94.7	84.3	90.9	29	30	30	18
Rhode Island	90.8	95.4	87.4	91.3	37	26	15	12
South Carolina	93.5	95.8	86.9	91.2	10	19	19	14
South Dakota	94.6	97.8	89.0	89.1	5	3	7	38
Tennessee	90.9	94.6	81.0	90.6	33	33	41	24
Texas	91.1	94.2	83.5	89.5	29	38	33	34
Utah	90.9	93.3	88.3	90.3	33	46	9	28
Vermont	94.5	98.0	90.0	94.9	6	1	6	1
Virginia	92.0	95.7	86.7	91.5	23	20	21	10
Washington	90.1	95.1	83.2	88.9	42	27	34	40
West Virginia	91.2	92.7	85.8	88.9	28	50	26	40
Wisconsin	93.6	96.7	86.7	92.1	9	9	21	6
Wyoming	93.4	96.5	77.1	91.4	11	13	49	11

Note: See Appendix B for description of clinical indicators.  
 DATA: 2007 CMS Hospital Compare data  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

### Avoidable Hospital Use and Costs: Dimension and Indicator Ranking

**State Rank**  
 □ Top Quartile  
 □ Second Quartile  
 □ Third Quartile  
 ■ Bottom Quartile  
 \* Data Not Available

**2009 Ranking**

*Admissions for Pediatric Asthma*  
*Asthmatics with an Emergency Room Visit*  
*Medicare Admissions for ACS Conditions*  
*Medicare 30-Day Readmissions*  
*Nursing Home Admissions*  
*Nursing Home Readmissions*  
*Home Health Admissions*  
*Hospital Care Intensity Index*  
*Single Health Insurance Premium*  
*Medicare Reimbursements per Enrollee*

RANK	STATE	INDICATOR RANKING								
		POTENTIALLY AVOIDABLE HOSPITAL USE						COSTS		
1	Utah	□	□	□	□	□	□	□	□	□
2	Idaho	*	□	□	□	□	□	□	□	□
3	Oregon	□	*	□	□	□	□	□	□	□
4	North Dakota	*	*	□	□	□	□	□	□	□
5	Hawaii	□	□	□	*	*	■	□	□	□
6	Washington	□	□	□	□	□	□	□	□	□
7	Montana	*	□	□	□	□	□	□	□	□
7	South Dakota	*	□	■	□	□	□	□	□	□
9	Wyoming	*	*	□	□	□	□	□	□	□
10	New Mexico	*	□	□	□	□	□	□	□	□
11	Vermont	□	□	□	□	□	□	□	■	□
12	Minnesota	□	□	□	□	□	□	□	□	□
13	Nebraska	□	*	□	□	□	□	□	□	□
14	Iowa	□	□	□	□	□	□	□	■	□
15	Colorado	□	*	□	□	□	□	□	□	□
16	Wisconsin	□	□	□	□	□	□	□	□	□
17	Alaska	*	□	□	*	*	□	□	□	□
18	Maine	*	*	□	□	□	□	□	□	□
18	Arizona	□	□	□	□	□	□	□	□	□
20	New Hampshire	□	□	□	□	□	□	□	□	□
21	Virginia	*	□	□	□	□	□	□	□	□
22	California	□	□	□	□	□	□	□	□	□
23	Kansas	□	*	□	□	□	□	□	□	□
24	Georgia	□	□	□	□	□	□	□	□	□
25	North Carolina	□	□	□	□	□	□	□	□	□
26	Indiana	□	□	□	□	□	□	□	□	□
27	Nevada	□	*	□	□	□	□	□	□	□
28	Missouri	□	□	□	□	□	□	□	□	□
29	South Carolina	□	*	□	□	□	□	□	□	□
29	Maryland	□	□	□	□	□	□	□	□	□
31	Pennsylvania	*	□	□	□	□	□	□	□	□
32	Connecticut	□	□	□	□	□	□	□	□	□
33	Massachusetts	□	□	□	□	□	□	□	□	□
34	Ohio	□	□	□	□	□	□	□	□	□
35	Florida	□	*	□	□	□	□	□	□	□
36	Rhode Island	□	□	□	□	□	□	□	□	□
37	Alabama	*	*	□	□	□	□	□	□	□
38	Delaware	*	□	□	□	□	□	□	□	□
39	Arkansas	□	*	□	□	□	□	□	□	□
40	Michigan	□	□	□	□	□	□	□	□	□
41	Tennessee	□	*	□	□	□	□	□	□	□
42	Texas	□	□	□	□	□	□	□	□	□
43	Kentucky	□	□	□	□	□	□	□	□	□
44	Oklahoma	*	□	□	□	□	□	□	□	□
45	Mississippi	*	□	□	□	□	□	□	□	□
46	District of Columbia	*	□	□	□	*	*	□	□	□
47	West Virginia	□	*	□	□	□	□	□	□	□
48	New Jersey	□	□	□	□	□	□	□	□	□
49	Illinois	□	*	□	□	□	□	□	□	□
50	New York	□	□	□	□	□	□	□	□	□
51	Louisiana	*	□	□	□	□	□	□	□	□

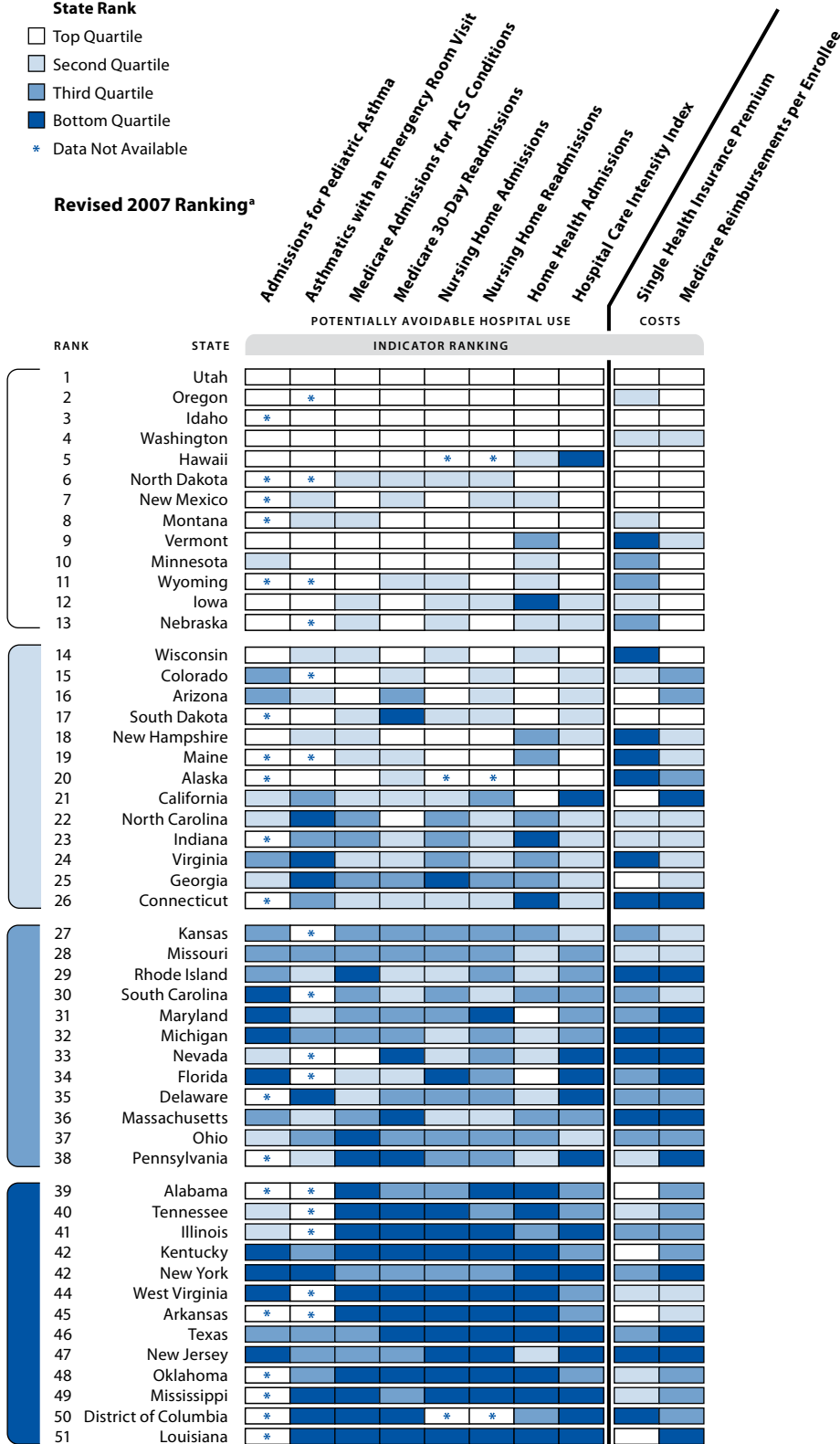
SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009



**Avoidable Hospital Use and Costs: Dimension and Indicator Ranking** (continued)

**State Rank**  
 □ Top Quartile  
 □ Second Quartile  
 □ Third Quartile  
 ■ Bottom Quartile  
 \* Data Not Available

**Revised 2007 Ranking<sup>a</sup>**



<sup>a</sup> Some state rates from the 2007 edition have been revised to match methodology used in the 2009 edition.  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

## Avoidable Hospital Use and Costs: Dimension Ranking and Performance on Indicators

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Current Dimension Rank	Past Dimension Rank	Indicator Performance								
			Hospital Admissions for Pediatric Asthma per 100,000 Children			Percent Adult Asthmatics with Emergency Room or Urgent Care Visit <sup>b</sup>			Medicare Admissions for ACS Conditions per 100,000 Beneficiaries		
			Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
<b>United States</b>			<b>164.9</b>	<b>13.2</b>	<b>7.4%</b>	<b>17.6</b>	<b>—<sup>b</sup></b>	<b>—<sup>b</sup></b>	<b>6,587</b>	<b>705</b>	<b>9.7%</b>
Alabama	37	39	*	*	*	*	— <sup>b</sup>	— <sup>b</sup>	7,633	1,117	12.8%
Alaska	17	20	*	*	*	13.1	— <sup>b</sup>	— <sup>b</sup>	4,867	300	5.8%
Arizona	18	16	119.7	33.7	22.0%	15.5	— <sup>b</sup>	— <sup>b</sup>	4,657	530	10.2%
Arkansas	39	45	109.3	*	*	*	— <sup>b</sup>	— <sup>b</sup>	7,727	762	9.0%
California	22	21	98.2	22.0	18.3%	18.3	— <sup>b</sup>	— <sup>b</sup>	5,360	651	10.8%
Colorado	15	15	135.5	22.5	14.2%	*	— <sup>b</sup>	— <sup>b</sup>	4,917	394	7.4%
Connecticut	32	26	149.1	*	*	16.6	— <sup>b</sup>	— <sup>b</sup>	6,389	-42	-0.7%
Delaware	38	35	*	*	*	21.6	— <sup>b</sup>	— <sup>b</sup>	5,427	1,176	17.8%
District of Columbia	46	50	*	*	*	26.3	— <sup>b</sup>	— <sup>b</sup>	7,257	1,403	16.2%
Florida	35	34	156.9	48.6	23.6%	*	— <sup>b</sup>	— <sup>b</sup>	5,795	717	11.0%
Georgia	24	25	147.0	-13.1	-9.8%	20.2	— <sup>b</sup>	— <sup>b</sup>	6,291	1,588	20.2%
Hawaii	5	5	81.0	2.1	2.5%	13.1	— <sup>b</sup>	— <sup>b</sup>	4,144	70	1.7%
Idaho	2	3	*	*	*	11.6	— <sup>b</sup>	— <sup>b</sup>	4,485	327	6.8%
Illinois	49	41	124.2	23.8	16.1%	*	— <sup>b</sup>	— <sup>b</sup>	7,553	595	7.3%
Indiana	26	23	106.9	*	*	19.2	— <sup>b</sup>	— <sup>b</sup>	7,118	554	7.2%
Iowa	14	12	81.0	5.9	6.8%	12.3	— <sup>b</sup>	— <sup>b</sup>	5,981	50	0.8%
Kansas	23	27	139.7	14.0	9.1%	*	— <sup>b</sup>	— <sup>b</sup>	6,826	88	1.3%
Kentucky	43	42	203.6	26.9	11.7%	19.2	— <sup>b</sup>	— <sup>b</sup>	8,576	1,413	14.1%
Louisiana	51	51	*	*	*	21.2	— <sup>b</sup>	— <sup>b</sup>	9,331	1,088	10.4%
Maine	18	19	*	*	*	*	— <sup>b</sup>	— <sup>b</sup>	5,992	56	0.9%
Maryland	29	31	143.8	37.8	20.8%	16.1	— <sup>b</sup>	— <sup>b</sup>	6,182	1,355	18.0%
Massachusetts	33	36	125.5	49.8	28.4%	13.7	— <sup>b</sup>	— <sup>b</sup>	7,262	131	1.8%
Michigan	40	32	188.1	-7.4	-4.1%	17.1	— <sup>b</sup>	— <sup>b</sup>	6,829	144	2.1%
Minnesota	12	10	102.2	16.7	14.0%	12.6	— <sup>b</sup>	— <sup>b</sup>	4,749	614	11.4%
Mississippi	45	49	*	*	*	29.7	— <sup>b</sup>	— <sup>b</sup>	7,844	2,703	25.6%
Missouri	28	28	167.2	7.3	4.2%	18.7	— <sup>b</sup>	— <sup>b</sup>	7,256	514	6.6%
Montana	7	8	*	*	*	15.1	— <sup>b</sup>	— <sup>b</sup>	6,221	421	6.3%
Nebraska	13	13	100.0	-13.2	-15.2%	*	— <sup>b</sup>	— <sup>b</sup>	5,708	408	6.7%
Nevada	27	33	107.4	26.8	20.0%	*	— <sup>b</sup>	— <sup>b</sup>	4,857	483	9.0%
New Hampshire	20	18	56.5	9.5	14.4%	15.9	— <sup>b</sup>	— <sup>b</sup>	6,054	-321	-5.6%
New Jersey	48	47	155.8	49.3	24.0%	16.4	— <sup>b</sup>	— <sup>b</sup>	7,350	597	7.5%
New Mexico	10	7	*	*	*	15.5	— <sup>b</sup>	— <sup>b</sup>	5,308	160	2.9%
New York	50	42	253.5	36.0	12.4%	21.2	— <sup>b</sup>	— <sup>b</sup>	7,269	310	4.1%
North Carolina	25	22	124.5	23.4	15.8%	27.1	— <sup>b</sup>	— <sup>b</sup>	6,401	783	10.9%
North Dakota	4	6	*	*	*	*	— <sup>b</sup>	— <sup>b</sup>	6,232	89	1.4%
Ohio	34	37	135.3	17.3	11.3%	19.2	— <sup>b</sup>	— <sup>b</sup>	7,608	663	8.0%
Oklahoma	44	48	*	*	*	18.4	— <sup>b</sup>	— <sup>b</sup>	7,256	1,624	18.3%
Oregon	3	2	48.6	6.4	11.6%	*	— <sup>b</sup>	— <sup>b</sup>	3,862	900	18.9%
Pennsylvania	31	38	*	*	*	14.9	— <sup>b</sup>	— <sup>b</sup>	6,924	1,231	15.1%
Rhode Island	36	29	143.8	12.3	7.9%	16.2	— <sup>b</sup>	— <sup>b</sup>	8,893	-715	-8.7%
South Carolina	29	30	167.8	38.3	18.6%	*	— <sup>b</sup>	— <sup>b</sup>	6,395	875	12.0%
South Dakota	7	17	*	*	*	12.5	— <sup>b</sup>	— <sup>b</sup>	6,403	442	6.5%
Tennessee	41	40	154.1	-9.7	-6.7%	*	— <sup>b</sup>	— <sup>b</sup>	7,593	1,512	16.6%
Texas	42	46	138.6	24.0	14.8%	16.5	— <sup>b</sup>	— <sup>b</sup>	7,137	847	10.6%
Utah	1	1	81.6	-4.0	-5.2%	10.8	— <sup>b</sup>	— <sup>b</sup>	3,725	581	13.5%
Vermont	11	9	50.2	14.3	22.2%	12.4	— <sup>b</sup>	— <sup>b</sup>	4,963	239	4.6%
Virginia	21	24	*	*	*	20.9	— <sup>b</sup>	— <sup>b</sup>	5,913	884	13.0%
Washington	6	4	114.5	-27.9	-32.2%	11.9	— <sup>b</sup>	— <sup>b</sup>	4,478	21	0.5%
West Virginia	47	44	148.7	54.4	26.8%	*	— <sup>b</sup>	— <sup>b</sup>	9,195	782	7.8%
Wisconsin	16	14	109.1	7.6	6.5%	14.5	— <sup>b</sup>	— <sup>b</sup>	5,872	123	2.1%
Wyoming	9	11	*	*	*	*	— <sup>b</sup>	— <sup>b</sup>	4,473	771	14.7%
				<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>
Number of states with trends:				32	32		0	0		51	51
Rate improved (+)				26	24		— <sup>b</sup>	— <sup>b</sup>		48	36
Rate worsened (-)				6	5		— <sup>b</sup>	— <sup>b</sup>		3	2
Little/no change in rate				0	3		— <sup>b</sup>	— <sup>b</sup>		0	13

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.

<sup>b</sup> Data not updated; data presented here are used for both past and current ranking.

\* Data could not be updated for this state.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

**Avoidable Hospital Use and Costs: Dimension Ranking and Performance on Indicators** (continued)

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Indicator Performance														
	Medicare 30-Day Hospital Readmission Rates			Percent Long-Stay Nursing Home Residents with Hospital Admission			Percent Short-Stay Nursing Home Residents with Readmission Within 30 Days			Percent Home Health Patients with Hospital Admission			Hospital Care Intensity Index, Chronically Ill Medicare Beneficiaries in Last Two Years of Life		
	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
United States	18.4	-0.4	-2.2%	19.9	-1.5	-8.2%	21.2	-2.1	-11.0%	31.9	-3.9	-13.9%	1.020	-0.001	-0.1%
Alabama	17.5	0.7	3.8%	22.6	-2.8	-14.1%	21.8	-0.2	-0.9%	31.1	2.6	7.7%	0.978	0.029	2.9%
Alaska	17.3	-0.3	-1.8%	*	*	*	*	*	*	24.1	0.2	0.8%	0.703	0.028	3.8%
Arizona	18.7	-0.1	-0.5%	8.5	0.7	7.6%	22.9	-4.9	-27.3%	26.8	-6.8	-34.0%	0.886	-0.033	-3.9%
Arkansas	21.3	0.3	1.4%	27.2	-2.1	-8.4%	25.7	-1.4	-5.8%	35.6	-0.1	-0.3%	1.000	0.057	5.4%
California	17.1	-0.4	-2.4%	18.1	-3.3	-22.3%	20.6	-2.3	-12.6%	26.5	-4.6	-21.0%	1.158	-0.014	-1.2%
Colorado	15.7	1.1	6.6%	10.8	-0.5	-4.9%	17.5	-1.5	-9.4%	28.6	-6.1	-27.1%	0.743	-0.006	-0.8%
Connecticut	17.3	-0.9	-5.5%	16.8	-3.1	-22.7%	19.0	-2.2	-13.1%	35.9	-5.5	-18.1%	0.964	-0.029	-3.1%
Delaware	20.6	-3.0	-17.1%	19.6	-2.0	-11.4%	23.0	-4.4	-23.7%	27.3	-1.0	-3.8%	1.091	0.080	6.8%
District of Columbia	22.7	-2.5	-12.3%	*	*	*	*	*	*	26.0	1.3	4.8%	1.255	0.000	0.0%
Florida	17.2	-0.1	-0.6%	22.7	-2.1	-10.2%	21.9	-2.1	-10.6%	24.9	-3.7	-17.4%	1.177	-0.010	-0.9%
Georgia	17.7	0.2	1.1%	20.9	-0.3	-1.5%	21.9	-1.7	-8.4%	28.2	0.7	2.4%	0.903	0.004	0.4%
Hawaii	16.6	-1.4	-9.2%	*	*	*	*	*	*	23.5	1.2	4.9%	1.051	0.134	11.3%
Idaho	14.3	0.2	1.4%	12.2	0.0	0.0%	14.6	-0.3	-2.1%	24.7	-1.9	-8.3%	0.535	0.012	2.2%
Illinois	20.3	-0.7	-3.6%	24.8	-3.5	-16.4%	23.8	-3.5	-17.2%	32.9	-4.9	-17.5%	1.142	-0.048	-4.4%
Indiana	18.3	-1.4	-8.3%	19.9	-1.0	-5.3%	18.9	-1.5	-8.6%	34.4	-4.1	-13.5%	0.854	-0.025	-3.0%
Iowa	15.9	-1.5	-10.4%	16.7	-0.4	-2.5%	18.3	-2.4	-15.1%	36.1	-4.6	-14.6%	0.753	-0.008	-1.1%
Kansas	19.2	-0.9	-4.9%	20.1	-1.8	-9.8%	20.9	-2.1	-11.1%	28.7	-1.5	-5.5%	0.886	-0.018	-2.1%
Kentucky	20.2	-0.9	-4.7%	25.7	-1.7	-7.1%	22.6	-2.0	-9.7%	34.2	1.9	5.3%	1.008	0.003	0.3%
Louisiana	21.3	1.3	5.8%	31.4	-1.9	-6.5%	26.8	-0.3	-1.1%	43.3	3.1	6.7%	1.206	0.038	3.1%
Maine	16.7	0.3	1.8%	14.2	-3.4	-31.4%	17.3	-2.6	-17.6%	27.7	-0.6	-2.2%	0.723	-0.005	-0.7%
Maryland	19.9	-1.4	-7.5%	19.4	-2.6	-15.4%	24.0	-2.7	-12.6%	24.6	-2.0	-8.8%	0.981	-0.004	-0.4%
Massachusetts	19.4	-0.1	-0.5%	14.8	0.6	3.9%	19.5	-1.6	-8.9%	34.1	-5.1	-17.6%	0.962	0.010	1.0%
Michigan	20.0	-1.7	-9.3%	19.6	-3.4	-20.9%	23.3	-5.0	-27.3%	28.8	-3.0	-11.7%	1.015	-0.018	-1.8%
Minnesota	16.6	-1.6	-10.7%	6.9	5.5	44.4%	17.6	-2.0	-12.8%	32.7	-5.8	-21.6%	0.697	0.027	3.7%
Mississippi	17.7	0.2	1.1%	29.9	-1.1	-3.8%	21.1	0.7	3.2%	40.1	-0.1	-0.2%	1.069	0.108	9.2%
Missouri	18.3	-0.1	-0.5%	21.6	-1.4	-6.9%	21.7	-1.9	-9.6%	26.9	-0.3	-1.1%	0.977	-0.003	-0.3%
Montana	15.0	0.4	2.6%	13.9	-1.5	-12.1%	15.5	-2.3	-17.4%	24.2	-1.3	-5.7%	0.646	-0.031	-5.0%
Nebraska	14.2	0.1	0.7%	16.5	-1.3	-8.6%	16.6	-0.8	-5.1%	25.3	-0.5	-2.0%	0.819	-0.028	-3.5%
Nevada	22.6	-0.1	-0.4%	15.1	0.1	0.7%	23.2	-3.4	-17.1%	27.8	-3.2	-13.0%	1.192	0.034	2.8%
New Hampshire	17.3	-1.5	-9.5%	11.8	-0.9	-8.3%	16.5	-2.1	-14.6%	30.4	-0.6	-2.0%	0.737	0.007	0.9%
New Jersey	19.0	-0.5	-2.7%	26.7	-1.6	-6.4%	25.0	-0.9	-3.7%	27.7	-1.2	-4.5%	1.548	0.016	1.0%
New Mexico	16.2	0.3	1.8%	13.5	-1.3	-10.6%	18.2	-1.2	-7.0%	29.0	-4.7	-19.3%	0.642	0.034	5.0%
New York	18.3	-0.3	-1.7%	20.6	-3.3	-19.1%	22.5	-4.1	-22.3%	39.3	-8.9	-29.2%	1.322	0.016	1.2%
North Carolina	16.8	-1.0	-6.3%	19.7	-1.3	-7.1%	19.5	-1.8	-10.2%	30.9	-3.6	-13.2%	0.837	0.023	2.7%
North Dakota	15.3	0.9	5.6%	14.3	-0.8	-5.9%	16.9	-0.5	-3.0%	22.1	1.7	7.2%	0.639	0.032	4.8%
Ohio	19.8	-1.1	-5.9%	19.1	-0.4	-2.1%	21.3	-1.9	-9.8%	37.3	-8.0	-27.3%	0.974	-0.049	-5.3%
Oklahoma	20.9	-0.7	-3.5%	25.0	0.7	2.7%	24.6	-1.8	-7.9%	39.2	-2.1	-5.7%	0.958	0.011	1.1%
Oregon	12.9	0.5	3.7%	8.9	-1.7	-23.7%	17.0	-2.4	-16.5%	22.1	-2.0	-9.9%	0.544	-0.013	-2.5%
Pennsylvania	19.6	0.1	0.5%	18.3	-0.5	-2.8%	20.9	-0.5	-2.5%	25.2	0.8	3.1%	1.141	0.003	0.3%
Rhode Island	18.5	-1.8	-10.7%	13.1	1.5	10.3%	22.0	-3.7	-20.2%	30.1	-3.7	-14.0%	0.907	0.064	6.6%
South Carolina	16.8	-0.1	-0.6%	19.9	-1.4	-7.6%	19.4	-1.3	-7.2%	31.7	-2.9	-10.1%	1.012	-0.036	-3.7%
South Dakota	14.1	4.8	25.4%	15.2	0.6	3.8%	15.2	1.5	9.0%	22.6	-0.1	-0.4%	0.748	0.047	5.9%
Tennessee	18.8	0.0	0.0%	24.2	-1.1	-4.8%	22.4	-2.3	-11.4%	33.4	1.2	3.5%	1.012	0.038	3.6%
Texas	19.4	0.2	1.0%	24.8	-0.8	-3.3%	23.1	-0.4	-1.8%	37.7	-3.2	-9.3%	1.127	-0.010	-0.9%
Utah	13.6	1.3	8.7%	9.7	-0.2	-2.1%	13.2	-0.8	-6.4%	21.2	-2.9	-15.9%	0.509	-0.014	-2.8%
Vermont	14.4	-1.5	-11.6%	11.3	-1.9	-20.2%	14.3	0.1	0.7%	30.0	0.2	0.7%	0.652	-0.052	-8.7%
Virginia	17.3	-0.8	-4.8%	20.3	-2.4	-13.4%	20.8	-3.1	-17.5%	29.1	-1.6	-5.8%	0.940	0.018	1.9%
Washington	16.2	-0.4	-2.5%	12.7	-2.3	-22.2%	16.9	-1.3	-8.4%	21.9	-0.9	-4.3%	0.593	-0.007	-1.2%
West Virginia	21.9	-3.1	-16.5%	23.0	-0.1	-0.4%	22.6	-1.2	-5.6%	28.8	6.1	17.5%	0.983	-0.002	-0.2%
Wisconsin	16.2	-1.1	-7.3%	13.8	-1.1	-8.7%	17.7	-3.2	-21.9%	27.7	-0.9	-3.4%	0.719	0.013	1.8%
Wyoming	16.0	0.0	0.0%	14.2	0.7	4.7%	15.7	0.0	0.0%	25.4	0.2	0.8%	0.599	0.011	1.8%
		<b>Any change</b>	<b>5% change or more</b>	<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>		<b>Any change</b>	<b>5% change or more</b>	
Number of states with trends:		51	51	48	48		48	48		51	51		51	51	
Rate improved (+)		17	5	8	3		3	1		13	5		27	7	
Rate worsened (-)		32	16	39	29		44	37		38	27		23	3	
Little/no change in rate		2	30	1	16		1	10		0	19		1	41	

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.

<sup>b</sup> Data not updated; data presented here are used for both past and current ranking.

\* Data could not be updated for this state.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

### Avoidable Hospital Use and Costs: Dimension Ranking and Performance on Indicators (continued)

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Indicator Performance					
	Total Single Health Insurance Premium per Enrolled Employee			Total Medicare Reimbursements per Enrollee		
	Annual Costs					
	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
<b>United States</b>	<b>4,386</b>	<b>-681</b>	<b>-18.4%</b>	<b>8,304</b>	<b>-1,336</b>	<b>-19.2%</b>
Alabama	4,139	-725	-21.2%	7,833	-996	-14.6%
Alaska	5,293	-914	-20.9%	7,700	-981	-14.6%
Arizona	4,214	-776	-22.6%	7,841	-1,399	-21.7%
Arkansas	3,923	-673	-20.7%	7,470	-1,346	-22.0%
California	4,280	-746	-21.1%	8,899	-1,063	-13.6%
Colorado	4,303	-619	-16.8%	7,496	-1,071	-16.7%
Connecticut	4,740	-876	-22.7%	8,972	-1,173	-15.0%
Delaware	4,733	-903	-23.6%	7,646	-635	-9.1%
District of Columbia	4,890	-672	-15.9%	7,551	-835	-12.4%
Florida	4,517	-710	-18.6%	9,379	-1,748	-22.9%
Georgia	4,160	-825	-24.7%	7,451	-1,149	-18.2%
Hawaii	3,831	-712	-22.8%	5,311	-532	-11.1%
Idaho	4,104	-675	-19.7%	6,411	-1,036	-19.3%
Illinois	4,643	-875	-23.2%	8,457	-1,515	-21.8%
Indiana	4,495	-909	-25.3%	7,698	-1,568	-25.6%
Iowa	4,146	-585	-16.4%	6,572	-1,463	-28.6%
Kansas	4,197	-486	-13.1%	7,421	-1,049	-16.5%
Kentucky	4,009	-467	-13.2%	8,260	-1,553	-23.2%
Louisiana	4,055	-570	-16.4%	9,401	-1,364	-17.0%
Maine	4,910	-794	-19.3%	6,952	-1,115	-19.1%
Maryland	4,360	-639	-17.2%	8,987	-1,324	-17.3%
Massachusetts	4,836	-695	-16.8%	9,379	-1,182	-14.4%
Michigan	4,388	-470	-12.0%	8,785	-1,551	-21.4%
Minnesota	4,432	-623	-16.4%	6,600	-1,061	-19.2%
Mississippi	4,124	-517	-14.3%	7,855	-985	-14.3%
Missouri	4,124	-565	-15.9%	7,709	-1,431	-22.8%
Montana	4,355	-675	-18.3%	6,340	-901	-16.6%
Nebraska	4,392	-667	-17.9%	6,922	-1,281	-22.7%
Nevada	3,927	-53	-1.4%	8,714	-1,157	-15.3%
New Hampshire	5,247	-1,163	-28.5%	7,814	-1,694	-27.7%
New Jersey	4,798	-916	-23.6%	9,551	-986	-11.5%
New Mexico	4,074	-673	-19.8%	6,803	-1,382	-25.5%
New York	4,638	-780	-20.2%	9,564	-1,362	-16.6%
North Carolina	4,460	-909	-25.6%	7,492	-1,294	-20.9%
North Dakota	3,830	-488	-14.6%	6,108	-1,128	-22.6%
Ohio	4,089	-307	-8.1%	8,249	-1,451	-21.3%
Oklahoma	4,072	-428	-11.7%	8,642	-1,628	-23.2%
Oregon	4,384	-678	-18.3%	6,122	-953	-18.4%
Pennsylvania	4,499	-828	-22.6%	8,215	-955	-13.2%
Rhode Island	4,930	-562	-12.9%	8,557	-1,383	-19.3%
South Carolina	4,477	-704	-18.7%	7,608	-1,297	-20.6%
South Dakota	4,233	-784	-22.7%	6,253	-995	-18.9%
Tennessee	4,276	-642	-17.7%	8,149	-1,429	-21.3%
Texas	4,205	-424	-11.2%	9,361	-1,809	-24.0%
Utah	4,197	-1,163	-38.3%	6,859	-1,216	-21.5%
Vermont	4,900	-826	-20.3%	7,284	-1,438	-24.6%
Virginia	4,202	-337	-8.7%	6,856	-996	-17.0%
Washington	4,404	-796	-22.1%	7,110	-1,284	-22.0%
West Virginia	4,892	-1,200	-32.5%	7,828	-1,520	-24.1%
Wisconsin	4,777	-850	-21.6%	6,978	-1,300	-22.9%
Wyoming	4,622	-861	-22.9%	6,591	-1,040	-18.7%
		<b>Any change</b>	<b>5% change or more</b>	<b>Any change</b>	<b>5% change or more</b>	
Number of states with trends:		51	51	51	51	
Rate improved (+)		0	0	0	0	
Rate worsened (-)		51	50	51	51	
Little/no change in rate		0	1	0	0	

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.

<sup>b</sup> Data not updated; data presented here are used for both past and current ranking.

\* Data could not be updated for this state.

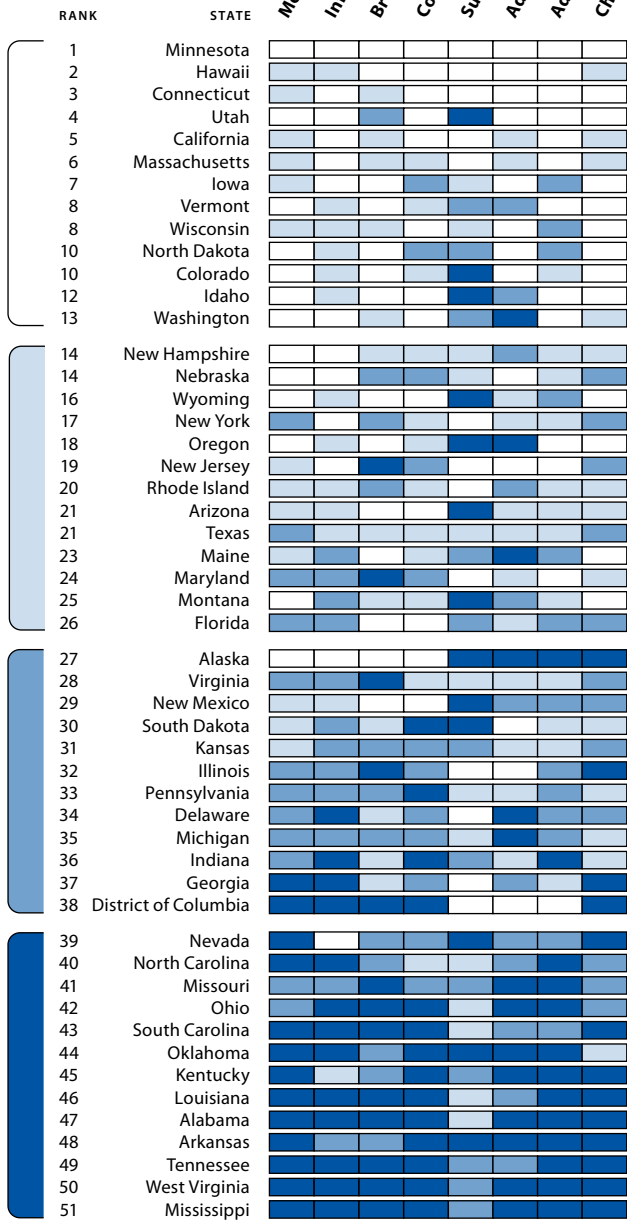
SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

### Healthy Lives: Dimension and Indicator Ranking

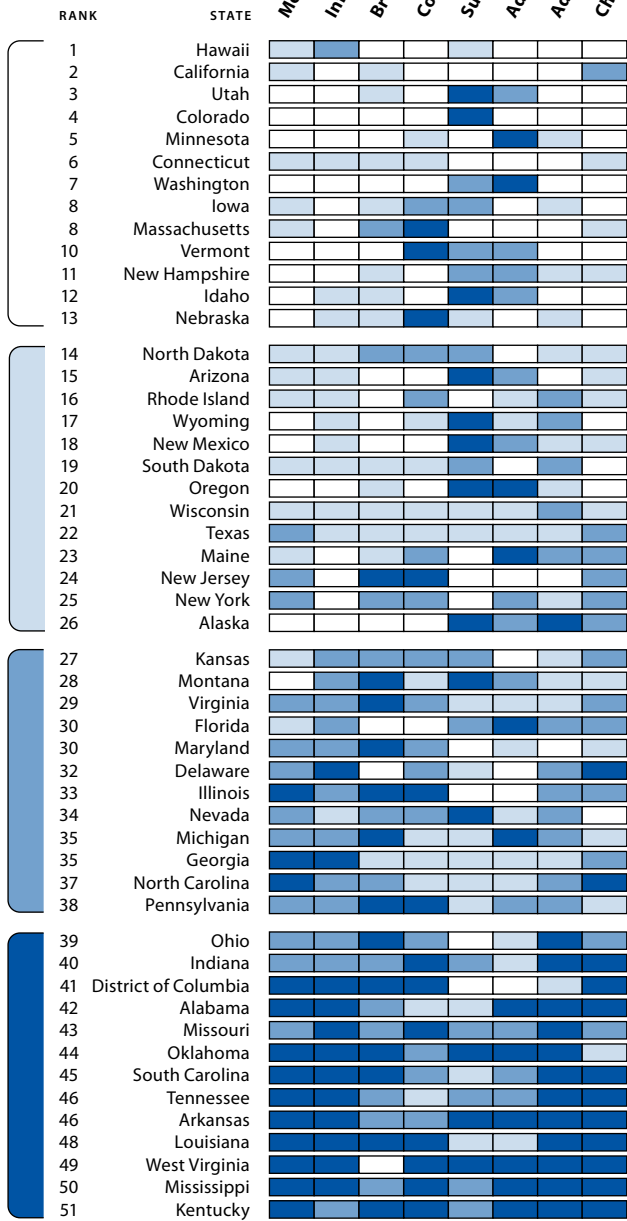
**State Rank**

- Top Quartile
- Second Quartile
- Third Quartile
- Bottom Quartile

**2009 Ranking**



**Revised 2007 Ranking<sup>a</sup>**



<sup>a</sup> Some state rates have been revised to match methodology used in the 2009 edition.  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

## Healthy Lives: Dimension Ranking and Performance on Indicators

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Current Dimension Rank	Past Dimension Rank	Indicator Performance								
			Mortality Amenable to Health Care, Deaths per 100,000 Population			Infant Mortality, Deaths per 1,000 Live Births			Breast Cancer Deaths per 100,000 Female Population		
			Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
United States			95.6	9.5	9.0%	6.9	0.1	1.4%	24.1	1.5	5.9%
Alabama	47	42	116.6	7.9	6.3%	9.5	-0.4	-4.4%	27.4	-1.9	-7.5%
Alaska	27	26	76.8	6.9	8.2%	5.9	-0.3	-5.4%	17.7	2.8	13.7%
Arizona	21	15	87.5	5.3	5.7%	6.8	-0.4	-6.3%	21.1	1.5	6.6%
Arkansas	48	46	121.1	-0.7	-0.6%	7.8	0.6	7.1%	24.3	1.1	4.3%
California	5	2	86.3	6.3	6.8%	5.3	0.1	1.9%	22.6	1.3	5.4%
Colorado	10	4	72.4	5.5	7.1%	6.4	-0.4	-6.7%	22.5	0.2	0.9%
Connecticut	3	6	77.2	14.2	15.5%	5.9	0.6	9.2%	23.4	1.9	7.5%
Delaware	34	32	96.7	13.4	12.2%	9.0	-0.4	-4.7%	23.6	-0.1	-0.4%
District of Columbia	38	41	158.3	15.9	9.1%	13.7	-2.7	-24.5%	29.8	4.3	12.6%
Florida	26	30	90.7	4.8	5.0%	7.2	0.3	4.0%	22.5	1.2	5.1%
Georgia	37	35	114.4	7.5	6.2%	8.1	0.9	10.0%	23.7	1.5	6.0%
Hawaii	2	1	79.8	11.4	12.5%	6.6	0.8	10.8%	19.0	-2.8	-17.3%
Idaho	12	12	74.3	8.6	10.4%	6.0	0.1	1.6%	19.2	6.0	23.8%
Illinois	32	33	101.3	17.4	14.7%	7.4	0.0	0.0%	25.6	1.5	5.5%
Indiana	36	40	101.2	10.4	9.3%	8.0	-0.2	-2.6%	22.8	2.9	11.3%
Iowa	7	8	79.1	14.1	15.1%	5.4	-0.1	-1.9%	21.1	3.7	14.9%
Kansas	31	27	84.9	8.2	8.8%	7.4	-0.2	-2.8%	23.8	2.6	9.8%
Kentucky	45	51	110.1	10.2	8.5%	6.7	0.5	6.9%	23.8	3.6	13.1%
Louisiana	46	48	137.2	1.0	0.7%	9.8	0.2	2.0%	29.3	0.4	1.3%
Maine	23	23	77.8	8.1	9.4%	6.9	-2.6	-60.5%	22.2	1.8	7.5%
Maryland	24	30	107.5	8.4	7.2%	7.3	0.3	3.9%	25.7	3.7	12.6%
Massachusetts	6	8	78.0	9.3	10.7%	5.1	-0.3	-6.3%	23.2	3.0	11.5%
Michigan	35	35	102.1	12.7	11.1%	7.9	0.2	2.5%	23.8	3.0	11.2%
Minnesota	1	5	63.9	11.8	15.6%	5.1	0.2	3.8%	22.4	0.3	1.3%
Mississippi	51	50	142.0	9.4	6.2%	11.5	-1.5	-15.0%	26.0	0.6	2.3%
Missouri	41	43	103.0	9.9	8.8%	7.5	1.0	11.8%	28.0	-1.9	-7.3%
Montana	25	28	73.2	10.3	12.3%	7.3	0.2	2.7%	23.3	4.2	15.3%
Nebraska	14	13	72.5	12.0	14.2%	5.7	1.3	18.6%	23.9	0.3	1.2%
Nevada	39	34	112.5	0.7	0.6%	5.7	0.4	6.6%	24.1	1.8	6.9%
New Hampshire	14	11	72.6	11.2	13.4%	5.3	-0.3	-6.0%	23.2	1.0	4.1%
New Jersey	19	24	89.9	15.9	15.0%	5.2	0.5	8.8%	26.7	1.6	5.7%
New Mexico	29	18	83.1	2.1	2.5%	6.2	-0.1	-1.6%	22.3	-0.4	-1.8%
New York	17	25	93.0	15.3	14.1%	5.8	0.2	3.3%	24.0	2.1	8.0%
North Carolina	40	37	108.0	11.6	9.7%	8.8	-0.7	-8.6%	25.4	1.0	3.8%
North Dakota	10	14	72.9	13.3	15.4%	6.0	0.3	4.8%	22.3	3.7	14.2%
Ohio	42	39	105.6	10.1	8.7%	8.2	-0.3	-3.8%	26.3	1.7	6.1%
Oklahoma	44	44	115.4	4.5	3.8%	8.0	0.2	2.4%	25.1	1.9	7.0%
Oregon	18	20	75.2	6.7	8.2%	6.0	-0.3	-5.3%	21.9	2.9	11.7%
Pennsylvania	33	38	98.8	11.5	10.4%	7.3	0.3	3.9%	24.8	3.1	11.1%
Rhode Island	20	16	85.9	6.9	7.4%	6.5	0.6	8.5%	24.5	-1.1	-4.7%
South Carolina	43	45	115.5	13.2	10.3%	9.5	-0.2	-2.2%	26.2	0.7	2.6%
South Dakota	30	19	80.8	12.8	13.7%	7.0	-0.3	-4.5%	23.7	0.2	0.8%
Tennessee	49	46	118.1	6.8	5.4%	8.8	0.5	5.4%	26.7	-0.9	-3.5%
Texas	21	22	100.4	3.2	3.1%	6.5	-0.2	-3.2%	23.1	1.2	4.9%
Utah	4	3	64.1	7.5	10.5%	4.5	1.1	19.6%	24.1	-0.2	-0.8%
Vermont	8	10	68.0	12.7	15.7%	6.5	-2.1	-47.7%	20.4	1.0	4.7%
Virginia	28	29	96.1	9.5	9.0%	7.5	-0.1	-1.4%	25.8	1.1	4.1%
Washington	13	7	74.2	7.8	9.5%	5.1	0.7	12.1%	23.1	0.7	2.9%
West Virginia	50	49	111.7	10.7	8.7%	8.2	0.7	7.9%	27.1	-4.3	-18.9%
Wisconsin	8	21	77.7	14.2	15.5%	6.5	0.3	4.4%	22.6	2.0	8.1%
Wyoming	16	17	74.8	6.9	8.4%	6.6	0.1	1.5%	21.0	-1.6	-8.2%
				Any change	5% change or more		Any change	5% change or more		Any change	5% change or more
Number of states with trends:				51	51		51	51		51	51
Rate improved (+)				50	45		28	14		41	27
Rate worsened (-)				1	0		22	11		10	5
Little/no change in rate				0	6		1	26		0	19

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.  
SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

### Healthy Lives: Dimension Ranking and Performance on Indicators (continued)

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Indicator Performance														
	Colorectal Cancer Deaths per 100,000 Population			Suicide Deaths per 100,000 Population			Percent Nonelderly Adults (Ages 18–64) Limited in Activities Because of Physical, Mental, or Emotional Problems			Percent Adults Who Smoke			Percent Children Ages 10–17 Who Are Overweight or Obese		
	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Current Rate	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>
United States	17.5	2.2	11.2%	10.9	-0.1	-0.9%	16.9	-1.1	-7.0%	19.4	2.0	9.4%	31.7	-1.2	-3.9%
Alabama	18.8	-0.1	-0.5%	11.5	-0.1	-0.9%	21.6	-2.6	-13.7%	22.7	2.4	9.6%	36.1	-1.5	-4.3%
Alaska	15.0	2.9	16.2%	20.2	0.2	1.0%	18.9	-2.0	-11.8%	22.9	2.5	9.8%	33.9	-3.2	-10.4%
Arizona	15.5	1.1	6.6%	16.2	-0.7	-4.5%	15.6	0.3	1.9%	18.9	0.7	3.6%	30.5	-0.8	-2.7%
Arkansas	18.9	1.7	8.3%	14.2	-0.6	-4.4%	20.5	-1.6	-8.4%	23.0	2.1	8.4%	37.5	-4.7	-14.3%
California	15.8	1.3	7.6%	9.1	0.7	7.1%	15.5	-2.2	-16.6%	14.6	1.2	7.6%	30.5	-0.5	-1.7%
Colorado	16.6	1.5	8.3%	17.3	-1.2	-7.5%	15.1	-0.6	-4.1%	18.2	1.0	5.2%	27.2	-5.3	-24.2%
Connecticut	15.1	4.2	21.8%	8.1	-0.6	-8.0%	14.7	-0.7	-5.0%	16.1	2.2	12.0%	25.7	1.6	5.9%
Delaware	17.9	2.5	12.3%	9.6	1.8	15.8%	18.9	-4.5	-31.1%	20.3	2.9	12.5%	33.1	2.4	6.8%
District of Columbia	21.1	3.5	14.2%	5.5	0.7	11.3%	14.1	-1.3	-10.1%	17.4	4.0	18.7%	35.3	4.2	10.6%
Florida	16.4	1.8	9.9%	12.6	0.3	2.3%	16.7	0.8	4.6%	20.1	1.9	8.7%	33.2	-0.8	-2.5%
Georgia	17.8	1.6	8.2%	10.5	1.1	9.5%	17.3	-1.7	-10.8%	19.5	1.7	8.0%	37.3	-5.6	-17.7%
Hawaii	14.5	2.8	16.2%	8.3	1.8	17.8%	12.9	-2.7	-26.4%	17.2	0.0	0.0%	28.5	-1.7	-6.3%
Idaho	15.5	-0.1	-0.6%	16.2	0.0	0.0%	17.7	-0.3	-1.7%	18.0	0.2	1.1%	27.5	-1.9	-7.4%
Illinois	18.5	3.5	15.9%	8.5	-0.5	-6.3%	14.6	-2.1	-16.8%	20.3	2.5	11.0%	34.9	-3.7	-11.9%
Indiana	19.4	2.0	9.3%	11.9	0.1	0.8%	16.4	-1.0	-6.5%	24.0	1.4	5.5%	29.9	3.0	9.1%
Iowa	18.2	1.8	9.0%	10.9	0.8	6.8%	14.1	-1.1	-8.4%	20.6	0.6	2.8%	26.5	-1.0	-3.9%
Kansas	18.6	1.6	7.9%	13.1	-0.4	-3.1%	15.8	-2.1	-15.3%	18.9	1.2	6.0%	31.1	-1.0	-3.3%
Kentucky	21.0	2.9	12.1%	13.3	0.2	1.5%	23.2	-1.8	-8.4%	28.3	0.7	2.4%	37.2	1.0	2.6%
Louisiana	20.1	3.2	13.7%	11.1	-0.7	-6.7%	17.0	-1.7	-11.2%	23.0	2.0	8.0%	35.9	-0.3	-0.8%
Maine	17.2	3.7	17.7%	12.3	-2.4	-24.2%	19.6	-0.9	-4.8%	20.5	1.8	8.1%	28.2	1.8	6.0%
Maryland	18.7	2.1	10.1%	8.4	0.5	5.6%	15.4	-0.1	-0.7%	17.3	2.5	12.6%	28.8	1.1	3.7%
Massachusetts	17.6	3.7	17.4%	7.2	-0.7	-10.8%	16.1	-1.6	-11.0%	17.0	1.7	9.1%	30.1	-1.2	-4.2%
Michigan	18.0	1.3	6.7%	10.8	-0.7	-6.9%	18.9	-0.9	-5.0%	21.7	3.0	12.2%	30.6	-1.9	-6.6%
Minnesota	14.8	3.7	20.0%	10.3	-0.6	-6.2%	15.0	3.4	18.4%	17.4	3.5	16.8%	23.1	0.8	3.3%
Mississippi	20.2	2.3	10.2%	12.6	-0.7	-5.9%	20.0	0.2	1.0%	24.4	0.5	2.0%	44.5	-7.9	-21.6%
Missouri	18.3	3.0	14.1%	12.4	-0.6	-5.1%	20.3	-2.9	-16.7%	23.8	1.8	7.0%	30.9	0.1	0.3%
Montana	17.7	0.6	3.3%	21.5	-2.2	-11.4%	18.8	-2.0	-12.0%	19.2	1.0	5.0%	25.6	1.7	6.2%
Nebraska	18.5	3.2	14.7%	10.8	-0.7	-6.9%	14.6	-0.6	-4.3%	19.3	1.5	7.2%	31.4	-5.1	-19.4%
Nevada	18.5	2.7	12.7%	20.1	0.0	0.0%	17.2	-1.9	-12.4%	21.8	2.4	9.9%	34.2	-7.6	-28.6%
New Hampshire	17.6	-0.1	-0.6%	11.8	0.1	0.8%	17.9	-1.2	-7.2%	19.0	2.4	11.2%	29.5	-2.2	-8.1%
New Jersey	18.6	2.9	13.5%	6.0	0.7	10.4%	14.5	-0.8	-5.8%	17.5	1.5	7.9%	31.0	0.5	1.6%
New Mexico	16.3	1.9	10.4%	17.7	1.0	5.3%	18.0	-1.8	-11.1%	20.4	0.7	3.3%	32.7	-3.8	-13.1%
New York	16.8	3.7	18.0%	6.0	-0.1	-1.7%	15.5	0.6	3.7%	18.5	2.2	10.6%	32.9	-2.0	-6.5%
North Carolina	17.3	2.3	11.7%	11.5	-0.2	-1.8%	17.5	-2.5	-16.6%	22.4	1.5	6.3%	33.5	0.5	1.5%
North Dakota	18.5	1.5	7.5%	13.7	-1.3	-10.5%	12.0	0.1	0.8%	20.2	-0.1	-0.5%	25.7	1.2	4.5%
Ohio	18.8	2.3	10.9%	11.4	-2.1	-22.6%	19.5	-4.3	-28.3%	22.7	2.8	11.0%	33.3	-2.8	-9.2%
Oklahoma	19.5	0.5	2.5%	14.7	-1.1	-8.1%	21.9	-3.4	-18.4%	25.4	0.2	0.8%	29.5	-1.3	-4.6%
Oregon	16.9	1.0	5.6%	14.8	1.4	8.6%	21.4	-1.1	-5.4%	17.6	2.8	13.7%	24.3	2.1	8.0%
Pennsylvania	18.8	2.5	11.7%	11.1	-0.6	-5.7%	16.5	-0.3	-1.9%	21.1	2.9	12.1%	29.6	-0.3	-1.0%
Rhode Island	16.8	4.3	20.4%	6.3	1.3	17.1%	17.1	-2.4	-16.2%	18.1	3.7	17.0%	30.2	-3.2	-11.9%
South Carolina	18.8	1.2	6.0%	11.8	-0.3	-2.6%	18.0	-1.6	-9.7%	22.0	2.9	11.7%	33.8	2.3	6.4%
South Dakota	19.5	-0.5	-2.6%	15.3	-1.8	-13.3%	14.9	-0.4	-2.8%	20.0	1.4	6.5%	28.4	-2.6	-10.1%
Tennessee	19.4	0.5	2.5%	14.0	-1.2	-9.4%	18.0	-1.0	-5.9%	23.4	2.5	9.7%	36.5	-1.2	-3.4%
Texas	16.8	2.0	10.6%	10.9	0.3	2.7%	16.4	-1.3	-8.6%	18.6	2.6	12.3%	32.3	0.1	0.3%
Utah	13.3	2.0	13.1%	15.1	0.5	3.2%	15.3	0.4	2.5%	10.7	0.4	3.6%	23.1	-2.3	-11.1%
Vermont	17.6	4.7	21.1%	12.2	0.7	5.4%	17.2	-0.6	-3.6%	17.7	2.0	10.1%	26.8	-1.2	-4.7%
Virginia	17.2	3.0	14.9%	11.2	-0.3	-2.8%	15.4	0.0	0.0%	18.8	2.5	11.7%	30.9	-0.4	-1.3%
Washington	15.3	1.6	9.5%	12.7	0.2	1.6%	20.8	-1.0	-5.0%	16.9	2.4	12.4%	29.5	-4.4	-17.5%
West Virginia	19.8	3.3	14.3%	13.2	0.9	6.4%	24.0	-0.2	-0.8%	26.3	0.8	3.0%	35.6	0.9	2.5%
Wisconsin	16.3	2.1	11.4%	11.5	0.1	0.9%	14.2	0.6	4.1%	20.1	1.8	8.2%	27.9	1.5	5.1%
Wyoming	13.8	5.4	28.1%	17.2	4.6	21.1%	16.6	-1.1	-7.1%	21.8	1.3	5.6%	25.7	-2.9	-12.7%
		Any change	5% change or more		Any change	5% change or more		Any change	5% change or more		Any change	5% change or more		Any change	5% change or more
Number of states with trends:		51	51		51	51		51	51		51	51		51	51
Rate improved (+)		47	44		23	14		8	1		49	40		18	9
Rate worsened (-)		4	0		26	18		42	33		1	0		33	20
Little/no change in rate		0	7		2	19		1	17		1	11		0	22

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.  
SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

### Mortality Amenable to Health Care by Race, Deaths per 100,000 population, 2004–05

Note: Change in rate is expressed such that a positive value indicates performance has improved and a negative value indicates performance has worsened.

State	Total				White				Black			
	2004–05	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Rank	2004–05	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Rank	2004–05	Actual Change in Rate <sup>a</sup>	Percent Change in Rate <sup>a</sup>	Rank
<b>United States</b>	<b>95.6</b>	<b>9.5</b>	<b>9.0%</b>		<b>86.1</b>	<b>9.7</b>	<b>10.1%</b>		<b>183.0</b>	<b>11.4</b>	<b>5.9%</b>	
Alabama	116.6	7.9	6.3%	46	96.7	6.6	6.4%	43	189.4	12.3	6.1%	30
Alaska	76.8	6.9	8.2%	13	67.5	9.8	12.7%	4	112.5	58.1	34.1%	5
Arizona	87.5	5.3	5.7%	25	85.2	5.1	5.6%	30	146.0	7.2	4.7%	14
Arkansas	121.1	-0.7	-0.6%	48	108.4	-2.0	-1.9%	48	218.7	12.3	5.3%	41
California	86.3	6.3	6.8%	24	84.0	6.6	7.3%	28	174.7	5.4	3.0%	23
Colorado	72.4	5.5	7.1%	4	71.0	5.3	6.9%	9	127.7	8.7	6.4%	8
Connecticut	77.2	14.2	15.5%	14	72.3	14.5	16.7%	11	136.6	13.6	9.1%	11
Delaware	96.7	13.4	12.2%	30	86.8	9.0	9.4%	32	147.7	42.0	22.1%	15
District of Columbia	158.3	15.9	9.1%	51	56.4	12.7	18.4%	1	219.9	10.2	4.4%	42
Florida	90.7	4.8	5.0%	27	80.9	5.2	6.0%	25	166.6	8.5	4.9%	17
Georgia	114.4	7.5	6.2%	43	91.5	7.9	7.9%	37	190.1	9.1	4.6%	31
Hawaii	79.8	11.4	12.5%	19	72.5	2.4	3.2%	12	67.8	5.4	7.4%	1
Idaho	74.3	8.6	10.4%	10	74.2	8.6	10.4%	15	*	*	*	*
Illinois	101.3	17.4	14.7%	34	86.2	17.0	16.5%	31	208.8	20.7	9.0%	39
Indiana	101.2	10.4	9.3%	33	94.8	11.2	10.6%	41	186.2	5.2	2.7%	27
Iowa	79.1	14.1	15.1%	18	78.1	13.7	14.9%	21	144.3	52.3	26.6%	13
Kansas	84.9	8.2	8.8%	22	80.4	9.5	10.6%	22	170.3	-4.8	-2.9%	20
Kentucky	110.1	10.2	8.5%	40	106.1	9.6	8.3%	46	176.5	24.6	12.2%	25
Louisiana	137.2	1.0	0.7%	49	105.6	3.0	2.8%	45	221.0	-3.3	-1.5%	44
Maine	77.8	8.1	9.4%	16	77.3	8.2	9.6%	20	*	*	*	*
Maryland	107.5	8.4	7.2%	38	86.8	8.5	8.9%	32	172.0	11.8	6.4%	22
Massachusetts	78.0	9.3	10.7%	17	76.6	9.7	11.2%	19	125.3	2.1	1.6%	7
Michigan	102.1	12.7	11.1%	35	87.3	12.7	12.7%	34	207.8	13.9	6.3%	38
Minnesota	63.9	11.8	15.6%	1	61.1	12.9	17.4%	2	128.5	-2.9	-2.3%	9
Mississippi	142.0	9.4	6.2%	50	107.7	11.1	9.3%	47	220.9	8.6	3.7%	43
Missouri	103.0	9.9	8.8%	36	93.7	9.2	8.9%	40	196.0	16.6	7.8%	36
Montana	73.2	10.3	12.3%	8	70.3	9.9	12.3%	8	*	*	*	*
Nebraska	72.5	12.0	14.2%	5	68.9	12.3	15.1%	6	166.6	6.9	4.0%	17
Nevada	112.5	0.7	0.6%	42	109.1	3.3	2.9%	50	190.6	-23.4	-14.0%	32
New Hampshire	72.6	11.2	13.4%	6	72.6	11.6	13.8%	13	85.8	*	*	2
New Jersey	89.9	15.9	15.0%	26	80.8	16.5	17.0%	23	168.8	17.8	9.5%	19
New Mexico	83.1	2.1	2.5%	21	82.0	2.4	2.8%	26	107.9	38.4	26.2%	4
New York	93.0	15.3	14.1%	28	84.8	16.3	16.1%	29	148.8	15.3	9.3%	16
North Carolina	108.0	11.6	9.7%	39	89.2	10.2	10.3%	35	186.4	22.8	10.9%	28
North Dakota	72.9	13.3	15.4%	7	69.6	14.2	16.9%	7	*	*	*	*
Ohio	105.6	10.1	8.7%	37	95.5	11.1	10.4%	42	197.3	2.8	1.4%	37
Oklahoma	115.4	4.5	3.8%	44	108.9	7.4	6.4%	49	195.8	2.1	1.1%	35
Oregon	75.2	6.7	8.2%	12	74.7	6.6	8.1%	17	135.2	24.7	15.4%	10
Pennsylvania	98.8	11.5	10.4%	31	90.2	11.6	11.4%	36	193.0	13.2	6.4%	33
Rhode Island	85.9	6.9	7.4%	23	83.7	7.6	8.3%	27	141.0	-7.0	-5.2%	12
South Carolina	115.5	13.2	10.3%	45	91.8	11.4	11.0%	39	187.6	18.8	9.1%	29
South Dakota	80.8	12.8	13.7%	20	74.4	12.8	14.7%	16	*	*	*	*
Tennessee	118.1	6.8	5.4%	47	103.7	5.7	5.2%	44	212.9	17.5	7.6%	40
Texas	100.4	3.2	3.1%	32	91.7	4.0	4.2%	38	193.7	-2.5	-1.3%	34
Utah	64.1	7.5	10.5%	2	63.9	7.1	10.0%	3	86.3	24.9	22.4%	3
Vermont	68.0	12.7	15.7%	3	68.6	12.6	15.5%	5	*	*	*	*
Virginia	96.1	9.5	9.0%	29	80.8	9.3	10.3%	23	175.6	12.6	6.7%	24
Washington	74.2	7.8	9.5%	9	73.4	7.9	9.7%	14	118.6	27.1	18.6%	6
West Virginia	111.7	10.7	8.7%	41	110.6	10.5	8.7%	51	171.1	13.1	7.1%	21
Wisconsin	77.7	14.2	15.5%	15	72.0	15.8	18.0%	10	180.3	-2.2	-1.2%	26
Wyoming	74.8	6.9	8.4%	11	74.7	5.1	6.4%	17	*	*	*	*

<sup>a</sup> A positive or negative value indicates that current performance is better or worse.

\* Data is missing because there were fewer than 20 deaths.

DATA: Analysis of 2001–02 and 2004–05 CDC Multiple Cause-of-Death data files using Nolte and McKee methodology, *BMJ* 2003.

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009



## State Demographics: Income and Health Status

	Mortality Amenable to Health Care, Deaths per 100,000 Population		Percent of Population with Incomes Less than 200% of Federal Poverty Level		Median Household Income	
	2004-05	Rank	2006-07	Rank	2005-07	Rank
<b>United States</b>	<b>95.6</b>		<b>35.8</b>		<b>\$49,901</b>	
Alabama	116.6	46	39.2	38	40,232	45
Alaska	76.8	13	28.2	6	60,124	6
Arizona	87.5	25	40.2	42	47,750	29
Arkansas	121.1	48	43.8	50	39,279	49
California	86.3	24	39.1	37	55,864	13
Colorado	72.4	4	29.0	7	57,333	10
Connecticut	77.2	14	26.6	2	62,893	5
Delaware	96.7	30	31.5	17	54,310	14
District of Columbia	158.3	51	39.2	38	NA	NA
Florida	90.7	27	36.2	35	46,142	35
Georgia	114.4	43	36.1	34	49,387	23
Hawaii	79.8	19	33.4	24	63,164	4
Idaho	74.3	10	34.8	30	47,876	28
Illinois	101.3	34	33.4	24	51,320	18
Indiana	101.2	33	32.7	22	46,407	33
Iowa	79.1	18	29.4	10	49,262	24
Kansas	84.9	22	32.9	23	46,659	32
Kentucky	110.1	40	41.0	45	39,678	47
Louisiana	137.2	49	43.0	49	39,461	48
Maine	77.8	16	32.0	19	47,160	31
Maryland	107.5	38	27.1	3	65,124	2
Massachusetts	78.0	17	31.1	14	58,286	7
Michigan	102.1	35	33.6	27	49,394	22
Minnesota	63.9	1	27.7	4	57,815	8
Mississippi	142.0	50	48.1	51	35,971	50
Missouri	103.0	36	35.2	31	45,834	36
Montana	73.2	8	35.7	33	41,852	42
Nebraska	72.5	5	29.5	11	49,861	20
Nevada	112.5	42	33.9	29	53,008	16
New Hampshire	72.6	6	22.2	1	63,942	3
New Jersey	89.9	26	28.1	5	65,933	1
New Mexico	83.1	21	41.7	46	42,295	41
New York	93.0	28	37.5	36	49,546	21
North Carolina	108.0	39	39.4	40	43,035	39
North Dakota	72.9	7	31.9	18	44,743	38
Ohio	105.6	37	33.7	28	47,750	29
Oklahoma	115.4	44	41.7	46	41,046	44
Oregon	75.2	12	35.3	32	48,521	26
Pennsylvania	98.8	31	32.5	21	49,155	25
Rhode Island	85.9	23	31.2	15	54,009	15
South Carolina	115.5	45	39.4	40	42,561	40
South Dakota	80.8	20	31.3	16	46,321	34
Tennessee	118.1	47	40.4	43	41,632	43
Texas	100.4	32	42.3	48	44,861	37
Utah	64.1	2	33.5	26	55,974	12
Vermont	68.0	3	29.2	9	51,566	17
Virginia	96.1	29	30.3	13	57,679	9
Washington	74.2	9	29.0	7	56,049	11
West Virginia	111.7	41	40.5	44	40,103	46
Wisconsin	77.7	15	29.9	12	50,619	19
Wyoming	74.8	11	32.2	20	48,205	27

NA = data not available.

DATA: Mortality amenable—2004-05 CDC Multiple Cause-of-Death data using Nolte and McKee methodology (Nolte and McKee, *BMJ* 2003); Income less than 200% of poverty—Kaiser statehealthfacts.org (2007-08 CPS ASEC Supplement); Median Income—Kaiser statehealthfacts.org (2006-08 CPS ASEC Supplement); Cancer—Kaiser statehealthfacts.org (National Cancer Institute); Adults Overweight/Obesity, Asthma, Diabetes—Kaiser statehealthfacts.org (BRFSS)

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

## State Demographics: Income and Health Status (continued)

	Age-Adjusted Cancer Incidence Rate per 100,000 Population		Percent of Adults Who are Overweight or Obese		Adult Self-Reported Current Asthma Prevalence Rate		Percent of Adults Who Have Ever Been Told by a Doctor that They Have Diabetes	
	2004	Rank	2008	Rank	2007	Rank	2008	Rank
<b>United States</b>	<b>458.2</b>		<b>63.0</b>		<b>8.2</b>		<b>8.2</b>	
Alabama	450.5	20	67.9	49	8.8	34	11.2	49
Alaska	454.6	24	65.4	38	7.8	13	6.6	7
Arizona	383.3	1	61.1	12	8.7	29	7.7	19
Arkansas	446.6	15	65.6	41	7.0	5	9.5	38
California	435.0	6	61.3	13	7.5	8	8.5	31
Colorado	432.1	5	55.3	2	7.8	13	6.0	2
Connecticut	477.3	36	59.7	7	9.3	40	6.8	8
Delaware	487.5	41	63.6	30	7.8	13	8.2	25
District of Columbia	455.0	25	55.0	1	9.4	44	7.9	22
Florida	448.1	17	60.1	10	6.2	1	9.5	38
Georgia	461.9	29	64.6	35	7.6	10	9.8	42
Hawaii	423.6	4	57.3	3	8.0	17	8.2	25
Idaho	451.1	22	62.1	20	8.7	29	7.0	11
Illinois	473.0	34	63.2	25	8.3	23	8.3	28
Indiana	446.2	14	63.5	28	8.8	34	9.5	38
Iowa	467.0	31	64.2	33	7.0	5	7.0	11
Kansas	467.9	32	65.5	40	8.4	26	8.1	24
Kentucky	500.2	47	66.6	46	9.0	37	9.8	42
Louisiana	489.1	42	63.6	30	6.3	2	10.6	48
Maine	526.1	50	61.7	17	10.3	51	8.2	25
Maryland	NA	NA	63.3	26	8.3	23	8.6	33
Massachusetts	501.7	48	58.0	4	9.9	48	7.1	13
Michigan	478.2	38	64.6	35	9.5	45	9.0	35
Minnesota	490.5	43	62.7	23	7.7	11	5.9	1
Mississippi	448.0	16	67.4	48	6.6	3	11.3	50
Missouri	448.8	18	65.4	38	8.5	27	9.1	36
Montana	444.8	12	61.6	16	9.3	40	6.4	4
Nebraska	462.1	30	64.1	32	8.1	19	7.7	19
Nevada	451.2	23	62.6	22	6.9	4	8.5	31
New Hampshire	498.0	46	63.0	24	10.2	50	7.2	14
New Jersey	496.4	45	62.0	19	8.3	23	8.4	29
New Mexico	409.0	2	59.9	8	8.7	29	7.8	21
New York	478.6	39	60.2	11	8.7	29	8.4	29
North Carolina	450.5	20	65.7	42	7.8	13	9.3	37
North Dakota	445.2	13	67.3	47	7.7	11	7.5	18
Ohio	449.0	19	63.3	26	8.9	36	9.9	44
Oklahoma	457.1	27	66.4	45	8.6	28	10.1	45
Oregon	473.8	35	61.5	14	9.7	47	6.9	9
Pennsylvania	487.3	40	64.2	33	9.3	40	8.8	34
Rhode Island	506.9	49	59.9	8	9.9	48	7.4	17
South Carolina	456.9	26	65.8	43	7.5	8	10.1	45
South Dakota	457.7	28	64.9	37	7.1	7	6.5	6
Tennessee	435.6	7	67.9	49	8.7	29	10.3	47
Texas	442.2	9	66.1	44	8.2	22	9.7	41
Utah	411.2	3	58.1	5	8.1	19	6.1	3
Vermont	477.3	36	58.4	6	9.6	46	6.4	4
Virginia	436.2	8	61.5	14	8.0	17	7.9	22
Washington	492.5	44	61.8	18	9.3	40	6.9	9
West Virginia	471.1	33	68.7	51	9.0	37	11.9	51
Wisconsin	443.1	10	63.5	28	9.2	39	7.2	14
Wyoming	444.6	11	62.1	20	8.1	19	7.3	16

NA = data not available.

DATA: Mortality amenable—2004–05 CDC Multiple Cause-of-Death data using Nolte and McKee methodology (Nolte and McKee, *BMJ* 2003); Income less than 200% of poverty—Kaiser statehealthfacts.org (2007–08 CPS ASEC Supplement); Median Income—Kaiser statehealthfacts.org (2006–08 CPS ASEC Supplement); Cancer—Kaiser statehealthfacts.org (National Cancer Institute); Adults Overweight/Obesity, Asthma, Diabetes—Kaiser statehealthfacts.org (BRFSS)

SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

**State Demographics: Race and Ethnic Groups, U.S. (2007) and States (2006–07)**

	<b>White</b>	<b>Black</b>	<b>Hispanic</b>	<b>Other</b>
<b>United States</b>	<b>66.0</b>	<b>12.2</b>	<b>15.4</b>	<b>6.7</b>
Alabama	67.6	26.2	3.2	3.0
Alaska	70.9	3.3	4.0	21.8
Arizona	58.2	3.5	31.4	6.9
Arkansas	75.7	15.8	5.3	3.2
California	43.1	6.2	36.6	14.1
Colorado	72.8	3.8	19.5	3.9
Connecticut	75.1	9.1	11.7	4.1
Delaware	68.0	19.9	7.2	5.0
District of Columbia	32.9	54.6	8.7	3.7
Florida	60.7	14.7	21.5	3.2
Georgia	58.6	29.4	7.7	4.3
Hawaii	17.8	2.0	6.9	73.3
Idaho	86.9	0.4	9.5	3.2
Illinois	65.4	15.0	13.5	6.1
Indiana	84.9	8.4	4.8	1.8
Iowa	89.0	2.3	5.2	3.4
Kansas	81.4	5.5	8.0	5.1
Kentucky	88.4	7.3	2.2	2.1
Louisiana	64.5	31.3	2.7	1.5
Maine	95.2	0.9	0.8	3.1
Maryland	57.7	28.7	7.4	6.3
Massachusetts	80.1	6.4	6.8	6.7
Michigan	78.0	13.9	3.7	4.4
Minnesota	85.5	4.2	4.5	5.9
Mississippi	57.6	37.1	2.4	2.9
Missouri	82.0	11.2	3.0	3.8
Montana	89.0	0.5	2.3	8.2
Nebraska	83.8	4.3	7.8	4.1
Nevada	58.6	7.4	23.7	10.3
New Hampshire	93.3	1.0	2.5	3.2
New Jersey	60.3	13.3	16.5	10.0
New Mexico	44.0	2.2	40.7	13.0
New York	59.9	14.5	17.0	8.6
North Carolina	67.4	21.1	6.6	4.9
North Dakota	86.4	0.8	2.1	10.7
Ohio	82.7	11.5	2.9	2.9
Oklahoma	69.4	7.6	5.9	17.1
Oregon	80.9	1.8	9.5	7.8
Pennsylvania	83.2	10.0	4.1	2.7
Rhode Island	79.5	5.3	10.6	4.6
South Carolina	65.2	28.6	3.6	2.6
South Dakota	89.9	0.7	2.6	6.8
Tennessee	77.0	16.6	3.8	2.7
Texas	46.6	11.3	37.5	4.6
Utah	81.8	0.9	12.2	5.1
Vermont	94.8	0.7	0.9	3.5
Virginia	66.8	19.1	6.9	7.2
Washington	76.5	3.3	8.6	11.6
West Virginia	94.7	3.2	0.4	1.7
Wisconsin	84.9	5.6	5.6	3.9
Wyoming	88.3	0.9	7.7	3.1

DATA: Kaiser statehealthfacts.org (2007–08 CPS ASEC Supplement)  
 SOURCE: Commonwealth Fund State Scorecard on Health System Performance, 2009

## Appendix B.1. State Scorecard Data Years and Databases

	Past Year	Current Year	Database
<b>ACCESS</b>			
1 Nonelderly adults (ages 18–64) insured	2004–2005	2007–2008 (2006–2007 by income and race/ethnicity)	CPS ASEC
2 Children (ages 0–17) insured	2004–2005	2007–2008 (2006–2007 by income and race/ethnicity)	CPS ASEC
3 At-risk adults visited a doctor for routine checkup in the past two years	1999–2000	2006–2007	BRFSS
4 Adults without a time in the past year when they needed to see a doctor but could not because of cost	2003–2004	2006–2007	BRFSS
	Past Year	Current Year	Database
<b>PREVENTION &amp; TREATMENT</b>			
5 Adults age 50 and older received recommended screening and preventive care	2004	2006	BRFSS
6 Adult diabetics received recommended preventive care	2003–2004	2006–2007	BRFSS
7 Children ages 19–35 months received all recommended doses of five key vaccines	2005	2007	NIS
8 Children with both a medical and dental preventive care visit in the past year	2003	2007	NSCH
9 Children who received needed mental health care in the past year	2003	2007	NSCH
10 Hospitalized patients received recommended care for heart attack, heart failure, and pneumonia	2004	2007	CMS Hospital Compare
11 Surgical patients received appropriate care to prevent complications	2004	2007	CMS Hospital Compare
12 Home health patients who get better at walking or moving around	2005	2007	OASIS
13 Adults with a usual source of care	2003–2004	2006–2007	BRFSS
14 Children with a medical home	2003	2007	NSCH
15 Heart failure patients given written instructions at discharge	2004	2007	CMS Hospital Compare
16 Medicare patients whose health care provider always listens, explains, shows respect, and spends enough time with them	2003	2007	CAHPS
17 Medicare patients giving a best rating for health care received in the past year	2003	2007	CAHPS
18 High-risk nursing home residents with pressure sores	2004	2007	MDS
19 Long-stay nursing home residents who were physically restrained	2004	2007	MDS
20 Long-stay nursing home residents who have moderate to severe pain	2004	2007	MDS
	Past Year	Current Year	Database
<b>POTENTIALLY AVOIDABLE USE OF HOSPITALS &amp; COSTS OF CARE</b>			
21 Hospital admissions for pediatric asthma per 100,000 children	2003	2005	HCUP
22 Adult asthmatics with an emergency room or urgent care visit in the past year	2001–2004	Not Updated	BRFSS
23 Medicare hospital admissions for ambulatory care sensitive conditions per 100,000 beneficiaries	2003–2004	2006–2007	Medicare SAF 5% Data from CCW
24 Medicare 30-day hospital readmissions as a percent of admissions	2003–2004	2006–2007	Medicare SAF 5% Data from CCW
25 Long-stay nursing home residents with a hospital admission	2000	2006	MEDPAR, MDS
26 Short-stay nursing home residents with a hospital readmission within 30 days	2000	2006	MEDPAR, MDS
27 Home health patients with a hospital admission	2004	2007	OASIS
28 Hospital Care Intensity Index, based on inpatient days and inpatient visits among chronically ill Medicare beneficiaries in last two years of life	2003	2005	Dartmouth Atlas
29 Total single premium per enrolled employee at private-sector establishments that offer health insurance	2004	2008	MEPS
30 Total Medicare (Parts A & B) reimbursements per enrollee	2003	2006	Dartmouth Atlas

**Appendix B.1. State Scorecard Data Years and Databases** (continued)

	Past Year	Current Year	Database
<b>HEALTHY LIVES</b>			
31 Mortality amenable to health care, deaths per 100,000 population	2001–2002	2004–2005	CDC Mortality Data
32 Infant mortality, deaths per 1,000 live births	2002 (2000–2002 by race/ethnicity)	2005 (2002–2004 by race/ethnicity)	NVSS-I
33 Breast cancer deaths per 100,000 female population	2002	2005	NVSS-M
34 Colorectal cancer deaths per 100,000 population	2002	2005	NVSS-M
35 Suicide deaths per 100,000 population	2003	2005	NVSS-M
36 Nonelderly adults (ages 18–64) limited in any activities because of physical, mental, or emotional problems	2003–2004	2006–2007	BRFSS
37 Adults who smoke	2003–2004	2006–2007	BRFSS
38 Children ages 10–17 who are overweight or obese	2003	2007	NSCH

**Definition of Databases**

- BRFSS = Behavioral Risk Factor Surveillance System
- CAHPS = Consumer Assessment of Healthcare Providers and Systems
- CCW = Chronic Condition Warehouse
- CDC = Centers for Disease Control and Prevention
- CPS ASEC = Annual Social and Economic Supplement to the Current Population Survey
- HCUP = Healthcare Cost and Utilization Project
- MDS = Nursing Home Minimum Data Set
- MEDPAR = Medicare Provider Analysis and Review
- MEPS = Medical Expenditure Panel Survey
- NIS = National Immunization Survey
- NSCH = National Survey of Children’s Health
- OASIS = Outcome and Assessment Information Set
- NVSS-I = National Vital Statistics System, Linked Birth and Infant Death Data
- NVSS-M = National Vital Statistics System, Mortality Data
- SAF = Standard Analytical Files

## Appendix B.2. State Scorecard Indicator Descriptions

- 1 Nonelderly adults (ages 18–64) insured:** 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/hhes/www/cpstc/cps\\_table\\_creator.html](http://www.census.gov/hhes/www/cpstc/cps_table_creator.html) (U.S. Census Bureau, 2008, 2009) and Employee Benefit Research Institute analysis of CPS ASEC (U.S. Census Bureau, 2005, 2006, 2007, 2008).
- 2 Children (ages 0–17) insured:** Authors' analysis of CPS ASEC using the CPS Table Creator online at [http://www.census.gov/hhes/www/cpstc/cps\\_table\\_creator.html](http://www.census.gov/hhes/www/cpstc/cps_table_creator.html) (U.S. Census Bureau, 2008, 2009) and Employee Benefit Research Institute analysis of CPS ASEC (U.S. Census Bureau, 2005, 2006, 2007, 2008).
- 3 At-risk adults visited a doctor for routine checkup in the past two years:** Percent of adults age 50 and older, or in fair or poor health, or ever told they have diabetes or pre-diabetes, acute myocardial infarction, heart disease, stroke, or asthma who visited a doctor in the past two years. Rutgers Center for State Health Policy (CSHP) analysis of Behavioral Risk Factor Surveillance System (BRFSS) (NCCDPHP, BRFSS 1999, 2000, 2006, 2007).
- 4 Adults without a time in the past year when they needed to see a doctor but could not because of cost:** Rutgers CSHP analysis of BRFSS (NCCDPHP, BRFSS 2003, 2004, 2006, 2007).
- 5 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). Rutgers CSHP analysis of BRFSS (NCCDPHP, BRFSS 2002, 2004, 2006). 2002 data were imputed for one state.
- 6 Adult diabetics received recommended preventive care:** Percent of adults age 18 and older who were told by a doctor that they had diabetes and have received: hemoglobin A1c test, dilated eye exam, and foot exam in the past year. Rutgers CSHP analysis of BRFSS (NCCDPHP, BRFSS 2003, 2004, 2006, 2007).
- 7 Children ages 19–35 months received all recommended doses of five key vaccines:** Percent of children ages 19 to 35 months who have received at least 4 doses of diphtheria-tetanus-acellular pertussis (DTaP), at least 3 doses of polio, at least 1 dose of measles-mumps-rubella (MMR), at least 3 doses of Haemophilus influenzae B (Hib), and at least 3 doses of hepatitis B antigens. Data from the National Immunization Survey (NCHS, NIS 2005, 2007).
- 8 Children with both a medical and dental preventive care visit in the past year:** Percent of children ages 0–17 with one or more medical and dental preventive care visits during the past 12 months. Data for 2003 and 2007 are not comparable because of changes in survey design. The 2003 survey asked whether the child saw a dentist for any routine preventive dental care including checkups, screenings, and sealants. For 2007, the survey asked how many times the child saw a dentist for preventive dental care such as checkups and dental cleanings. Both surveys asked how many times the child saw a doctor, nurse, or other health care provider for preventive medical care such as a physical exam or well-child checkup. For more information, see [www.nschdata.org](http://www.nschdata.org). Data from National Survey of Children's Health (NSCH), assembled by Child and Adolescent Health Measurement Initiative (CAHMI) (CAHMI 2005, 2009).
- 9 Children who received needed mental health care in the past year:** Percent of children with an emotional, behavioral, or developmental problem who needed treatment or counseling and who received some type of mental health care during the past 12 months. There were slight modifications in survey design. The 2003 survey measured children ages 1–17 and asked whether they received mental health care or counseling. For 2007, the survey measured children ages 2–17 and asked whether they received treatment or counseling from a mental health professional (as defined). For more information, see [www.nschdata.org](http://www.nschdata.org). Data from National Survey of Children's Health, assembled by CAHMI (CAHMI 2005, 2009).
- 10 Hospitalized patients received recommended care for heart attack, heart failure, and pneumonia:** Proportion of cases where a hospital provided the recommended process of care for patients with acute myocardial infarction (heart attack), heart failure, and pneumonia. Data for 2004 is a composite of 10 clinical services: five clinical services for heart attack (aspirin at arrival and at discharge; beta-blocker at arrival and at discharge; and angiotensin-converting enzyme (ACE) inhibitor for left ventricular systolic dysfunction), two for heart failure (assessment of left ventricular function and the use of an ACE inhibitor for left ventricular dysfunction), and three for pneumonia (initial antibiotic received within four hours of hospital arrival; pneumococcal vaccination; and assessment of oxygenation). Data for 2007 is a composite of 19 clinical services, including the original 10 from 2004 and nine additional services: three for heart attack (smoking cessation advice/counseling; thrombolytic agent received within 30 minutes of hospital arrival; and PCI within 90 minutes of hospital arrival); two for heart failure (smoking cessation advice/counseling, discharge instructions); and four for pneumonia (smoking cessation advice/counseling; blood cultures performed in the emergency department prior to initial antibiotic received in hospital; appropriate initial antibiotic selection; and influenza vaccination). IPRO analysis of CMS Hospital Compare data (DHHS n.d.).
- 11 Surgical patients received appropriate care to prevent complications:** Proportion of cases where a hospital provided recommended processes of care for surgical patients to prevent complications. Data for 2004 is a composite of two clinical services: prophylactic antibiotics within 1 hour prior to surgery and discontinued within 24 hours after surgery. Data for 2007 is a composite of five clinical services, original two from 2004 and three additional services: prophylactic antibiotic selection for surgical patients; surgery patients with recommended venous thromboembolism prophylaxis ordered and received within 24 hours prior to surgery to 24 hours after surgery. IPRO analysis of CMS Hospital Compare data (DHHS n.d.).
- 12 Home health patients who get better at walking or moving around:** This indicator is new to the 2009 edition. Data from Outcome and Assessment Information Set (CMS, OASIS n.d.), reported in the *National Healthcare Quality Report* (AHRQ 2006, 2008).
- 13 Adults with a usual source of care:** Percent of adults age 18 and older who have one (or more) person they think of as their personal doctor or health care provider. Rutgers CSHP analysis of BRFSS (NCCDPHP, BRFSS 2003, 2004, 2006, 2007).
- 14 Children with a medical home:** Percent of children ages 0–17 who received health care that meets criteria of having a medical home. Data for 2003 and 2007 are not comparable because of changes in survey design. For 2003, the indicator measured whether the child had at least one preventive medical care visit in the past year; had a personal doctor/nurse who: provided family-centered care, telephone advice and urgent care when needed, and follow-up after specialty care when needed; and had no problems getting specialty care when needed. For 2007, the indicator measured whether the child had a personal doctor or nurse, had a usual source for sick and well care, received family-centered care from all health care providers, did not have problems getting needed referrals, and received effective care coordination when needed. For more information, see [www.nschdata.org](http://www.nschdata.org). Data from National Survey of Children's Health, assembled by CAHMI (CAHMI 2005, 2009).
- 15 Heart failure patients given written instructions at discharge:** Percent of heart failure patients with documentation that they or their caregivers were given written instructions or other educational materials at discharge. IPRO analysis of CMS Hospital Compare data (DHHS n.d.).

## Appendix B.2. State Scorecard Indicator Descriptions (continued)

- 16 Medicare 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. Time trends should be interpreted with caution due to change in survey methodology. Data from National Consumer Assessment of Healthcare Providers and Systems (CAHPS) Benchmarking Database (AHRQ, CAHPS n.d.), reported in *National Healthcare Quality Report* (AHRQ 2005, 2008).
- 17 Medicare patients giving a best rating for health care received in the past year:** Percent of Medicare fee-for-service patients who had a doctor's office or clinic visit in the last 12 months who gave a best rating for health care they received. Time trends should be interpreted with caution due to change in survey methodology. Data from National CAHPS Benchmarking Database (AHRQ, CAHPS n.d.), reported in *National Healthcare Quality Report* (AHRQ 2005, 2008).
- 18 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. Data from CMS Minimum Data Set (CMS, MDS n.d.), reported in *National Healthcare Quality Report* (AHRQ 2005, 2008).
- 19 Long-stay nursing home residents who were physically restrained:** Percent of long-stay nursing home residents who were physically restrained daily on target assessment. Data from CMS Minimum Data Set (CMS, MDS n.d.), reported in *National Healthcare Quality Report* (AHRQ 2005, 2008).
- 20 Long-stay nursing home residents who have moderate to severe pain:** This indicator is new to the 2009 edition. Percent of long-stay nursing home residents with moderate pain at least daily or horrible or excruciating pain at any frequency on the target assessment. Data from CMS Minimum Data Set (CMS, MDS n.d.), reported in *National Healthcare Quality Report* (AHRQ 2005, 2008).
- 21 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. Data from 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-SID 2003, 2005). Reported in *National Healthcare Quality Report* (AHRQ 2007, 2008).
- 22 Adult asthmatics with an emergency room or urgent care visit in the past year:** Percent of adults age 18 and older who were told by a doctor that they had asthma and had an emergency room or urgent care visit in the past 12 months. Updated data for this indicator were unavailable, so data from the same year are used for both past and current ranking. Data represent the average for up to four years of data to improve state sample sizes; most states did not have data for this measure for all four years. Data differ from 2007 edition where only the most current year of data for each state was used. Rutgers CSHP analysis of BRFSS (NCCDPHP, BRFSS 2001, 2002, 2003, 2004).
- 23 Medicare hospital admissions for ambulatory care sensitive conditions per 100,000 beneficiaries:** Hospital admissions of fee-for-service Medicare beneficiaries age 65 and older for one of 11 ambulatory care sensitive conditions (AHRQ Indicators): short-term diabetes complications, long-term diabetes complications, lower extremity amputation among patients with diabetes, asthma, chronic obstructive pulmonary disease, hypertension, congestive heart failure, angina (without a procedure), dehydration, bacterial pneumonia, and urinary tract infection. Results calculated using AHRQ Prevention Quality Indicators, Version 3.0. Analysis of Medicare Standard Analytical Files (SAF) 5% Data from Chronic Condition Warehouse (CCW) by G. Anderson and R. Herbert at Johns Hopkins Bloomberg School of Public Health (CMS, SAF 2003, 2004, 2006, 2007).
- 24 Medicare 30-day hospital readmissions as a percent of admissions:** Fee-for-service Medicare beneficiaries age 65 and older with initial admissions due to one of 31 select conditions (see list) who are readmitted within 30 days following discharge for the initial admission. Analysis of Medicare Standard Analytical Files (SAF) 5% Data from Chronic Condition Warehouse (CCW) by G. Anderson and R. Herbert at Johns Hopkins Bloomberg School of Public Health (CMS, SAF 2003, 2004, 2006, 2007).
1. Abnormal heartbeat
  2. Chronic obstructive pulmonary disease (COPD)
  3. Congestive heart failure
  4. Diabetes with amputation
  5. Diabetes - medical management
  6. Kidney failure
  7. Kidney and urinary tract infections
  8. Pneumonia - aspiration
  9. Pneumonia - infectious
  10. Respiratory failure with mechanical ventilation
  11. Respiratory failure without mechanical ventilation
  12. Stomach and intestinal bleeding
  13. Stroke - hemorrhagic
  14. Stroke - non-hemorrhagic
  15. Abdominal aortic aneurysm repair
  16. Gallbladder removal - laparoscopic
  17. Gallbladder removal - open
  18. Hip fracture - surgical repair
  19. Hysterectomy - vaginal
  20. Removal of blockage of neck vessels
  21. Bronchitis & asthma, complicated DRG096
  22. Bronchitis & asthma, uncomplicated DRG097
  23. Hypotension & fainting, complicated DRG141
  24. Chest pain DRG143
  25. Cirrhosis & alcoholic hepatitis DRG202
  26. Noncancerous pancreatic disorders DRG204
  27. Liver disease except cancer, cirrhosis, alcoholic hepatitis, complicated DRG205
  28. Medical back problems DRG243
  29. Surgery for infectious or parasitic disease DRG415
  30. Infection after surgery or trauma DRG418
  31. Vascular operations except heart, complicated DRG478
- 25 Long-stay nursing home residents with a hospital admission:** Percent of long-stay residents (residing in a nursing home for at least 90 consecutive days) who were ever hospitalized within six months of baseline assessment. Analysis of Medicare enrollment data and MEDPAR File by V. Mor, Brown University, under a grant funded by the National Institute of Aging (#PO1AG027296, Shaping Long-Term Care in America).
- 26 Short-stay nursing home residents with a hospital readmission within 30 days:** Percent of newly admitted nursing home residents (never been in a facility before) who are rehospitalized within 30 days of being discharged to nursing home. Analysis of Medicare enrollment data and MEDPAR File by V. Mor, Brown University, under a grant funded by the National Institute of Aging (#PO1AG027296, Shaping Long-Term Care in America).
- 27 Home health patients with a hospital admission:** Percent of acute care hospitalization for home health episodes. Data from Outcome and Assessment Information Set (CMS, OASIS n.d.), reported in *National Healthcare Quality Report* (AHRQ 2005, 2008).

**Appendix B.2. State Scorecard Indicator Descriptions** (continued)

**28 Hospital Care Intensity Index, based on inpatient days and inpatient physician visits among chronically ill Medicare beneficiaries in last two years of life:** This indicator is new to the 2009 edition. The Hospital Care Intensity Index is an age-sex-race-illness standardized ratio of patient days and visits for chronically ill Medicare patients. It is calculated as the simple average of two ratios: the number of days spent in the hospital to the national average and the number of inpatient physician visits to the national average. The national average was set to 1.0 for the base year 2001 (not shown) so that ratios in subsequent years reflect the national trend in this composite measure of inpatient utilization. Data from *Dartmouth Atlas of Health Care* (Dartmouth Atlas Project 2003, 2005).

**29 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 2004, 2008).

**30 Total Medicare (Parts A & B) reimbursements per enrollee:** Total Medicare fee-for-service reimbursements include payments for both Part A and Part B (exclude capitated payments). Reimbursement rates were indirectly adjusted for sex, race, and age. Data from *Dartmouth Atlas of Health Care* (Dartmouth Atlas Project 2003, 2006).

**31 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). Analysis conducted by K. Hempstead at Rutgers CSHP using mortality data from CDC Multiple Cause-of-Death file and U.S. Census Bureau population data (NCHS, MCD n.d.).

<b>Causes of death</b>	<b>Age</b>
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

**32 Infant mortality, deaths per 1,000 live births:** Data from National Vital Statistics System (NVSS)–Linked Birth and Infant Death Data (NCHS, NVSS n.d.), reported in *National Healthcare Quality Report* (NCHS 2005, 2007) and *Health, United States* (NCHS 2005, 2007).

**33 Breast cancer deaths per 100,000 female population:** Data from NVSS–Mortality Data (NCHS, NVSS n.d.), reported in *National Healthcare Quality Report* (AHRQ 2005, 2008).

**34 Colorectal cancer deaths per 100,000 population:** Data from NVSS–Mortality Data (NCHS, NVSS n.d.), reported in *National Healthcare Quality Report* (AHRQ 2005, 2008).

**35 Suicide deaths per 100,000 population:** This indicator is new to the 2009 edition. Data from NVSS–Mortality Data (NCHS, NVSS n.d.), reported in *National Healthcare Quality Report* (AHRQ 2005, 2008).

**36 Nonelderly adults (ages 18–64) limited in any activities because of physical, mental, or emotional problems:** Rutgers CSHP analysis of BRFSS (NCCDHP, BRFSS 2003, 2004, 2006, 2007).

**37 Adults who smoke:** This indicator is new to the 2009 edition. Percent of adults age 18 and older who ever smoked 100+ cigarettes (five packs) and currently smoke every day or some days. Rutgers CSHP analysis of BRFSS (NCCDHP, BRFSS 2003, 2004, 2006, 2007).

**38 Children ages 10–17 who are overweight or obese:** This indicator is new to the 2009 edition. 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](http://www.nschdata.org). Data from National Survey of Children's Health, assembled by CAHMI (CAHMI 2005, 2009).



### Appendix B.3. Complete References for Data Sources

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## Further Reading

**Publications listed below can be found on The Commonwealth Fund's Web site at [www.commonwealthfund.org](http://www.commonwealthfund.org).**

*Out of Options: Why So Many Workers in Small Businesses Lack Affordable Health Insurance and How Health Care Reform Can Help* (Sept. 2009) Michelle M. Doty, Sara R. Collins, Sheila D. Rustgi, and Jennifer L. Nicholson.

*Paying the Price: How Health Insurance Premiums Are Eating Up Middle-Class Incomes—State Health Insurance Premium Trends and the Potential of National Reform* (Aug. 2009) Cathy Schoen, Jennifer L. Nicholson, and Sheila D. Rustgi.

*Rite of Passage: Why Young Adults Become Uninsured and How New Policies Can Help, 2009 Update* (Aug. 2009). Jennifer L. Nicholson, Sara R. Collins, Bisundev Mahato, Elise Gould, Cathy Schoen, and Sheila D. Rustgi.

*Failure to Protect: Why the Individual Insurance Market Is Not a Viable Option for Most U.S. Families* (July 2009). Michelle M. Doty, Sara R. Collins, Jennifer L. Nicholson, and Sheila D. Rustgi.

*How Health Care Reform Can Lower the Costs of Insurance Administration* (July 2009). Sara R. Collins, Rachel Nuzum, Sheila Rustgi, Stephanie Mika, Cathy Schoen, and Karen Davis.

*Fork in the Road: Alternative Paths to a High Performance U.S. Health System* (June 2009). Cathy Schoen, Karen Davis, Stuart Guterman, and Kristof Stremikis.

*Front and Center: Insuring That Health Reform Puts People First* (June 2009). Karen Davis, Kristof Stremikis, Cathy Schoen, Sara R. Collins, Michelle M. Doty, Sheila D. Rustgi, and Jennifer L. Nicholson.

*The Path to a High Performance U.S. Health System: A 2020 Vision and the Policies to Pave the Way* (Feb. 2009). The Commonwealth Fund Commission on a High Performance Health System.

“In Chronic Condition: Experiences of Patients with Complex Health Care Needs, in Eight Countries, 2008.” Cathy Schoen, Robin Osborn, Sabrina K. H. How, Michelle M. Doty, and Jordon Peugh. *Health Affairs* Web Exclusive, Nov. 13, 2008, w1–w16.

*Losing Ground: How the Loss of Adequate Health Insurance Is Burdening Working Families—Findings from the Commonwealth Fund Biennial Health Insurance Surveys, 2001–2007* (Aug. 2008). Sara R. Collins, Jennifer L. Kriss, Michelle M. Doty, and Sheila D. Rustgi.

*Organizing the U.S. Health Care Delivery System for High Performance* (Aug. 2008). Anthony Shih, Karen Davis, Stephen Schoenbaum, Anne Gauthier, Rachel Nuzum, and Douglas McCarthy.

*Public Views on U.S. Health System Organization: A Call for New Directions* (Aug. 2008). Sabrina K. H. How, Anthony Shih, Jennifer Lau, and Cathy Schoen.

*Why Not the Best? Results from the National Scorecard on U.S. Health System Performance, 2008* (July 2008). The Commonwealth Fund Commission on a High Performance Health System.

“How Many Are Underinsured? Trends Among U.S. Adults, 2003 and 2007.” Cathy Schoen, Sara R. Collins, Jennifer L. Kriss, and Michelle M. Doty. *Health Affairs* Web Exclusive, June 10, 2008, w298–w309.

*The Building Blocks of Health Reform: Achieving Universal Coverage and Health System Savings* (May 2008). Karen Davis, Cathy Schoen, and Sara R. Collins.

*U.S. Variations in Child Health System Performance: A State Scorecard* (May 2008). Katherine K. Shea, Karen Davis, and Edward L. Schor.

*Bending the Curve: Options for Achieving Savings and Improving Value in U.S. Health Spending* (Dec. 2007). Cathy Schoen, Stuart Guterman, Anthony Shih, Jennifer Lau, Sophie Kasimow, Anne Gauthier, and Karen Davis.

*Aiming Higher: Results from a State Scorecard on Health System Performance* (June 2007). Joel C. Cantor, Cathy Schoen, Dina Belloff, Sabrina K. H. How, and Douglas McCarthy.

*Mirror, Mirror on the Wall: An International Update on the Comparative Performance of American Health Care* (May 2007). Karen Davis, Cathy Schoen, Stephen C. Schoenbaum, Michelle M. Doty, Alyssa L. Holmgren, Jennifer L. Kriss, and Katherine K. Shea.

*Slowing the Growth of U.S. Health Care Expenditures: What Are the Options?* (Jan. 2007). Karen Davis, Cathy Schoen, Stuart Guterman, Tony Shih, Stephen C. Schoenbaum, and Ilana Weinbaum.

*Why Not the Best? Results from the National Scorecard on U.S. Health System Performance* (Sept. 2006). The Commonwealth Fund Commission on a High Performance Health System.





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