Executive Summary

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 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.

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RESULTS FROM A STATE SCORECARD ON HEALTH SYSTEM PERFORMANCE, 2009

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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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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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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

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

Revised 2007 Ranking*

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

* 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

6role. 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 S*tate 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

		All States Median		Range of State Performance (Bottom State Rate–Top State Rate)		Best State
	Access	**Revised 2007 Scorecard[a]**	**2009 Scorecard**	**Revised 2007 Scorecard[a]**	**2009 Scorecard**	**2009 Scorecard**
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
	Prevention & Treatment					
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[b]	—[b]	71.0	—[b]	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[b]	—[b]	60.7	—[b]	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
	Avoidable Hospital Use & Costs					
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[c]	16.3	—[c]	29.7–10.8	—[c]	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
	Healthy Lives					
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

[a] 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.
[b] Previous year data not shown; data are not comparable over two time periods because of changes in survey design.
[c] 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.

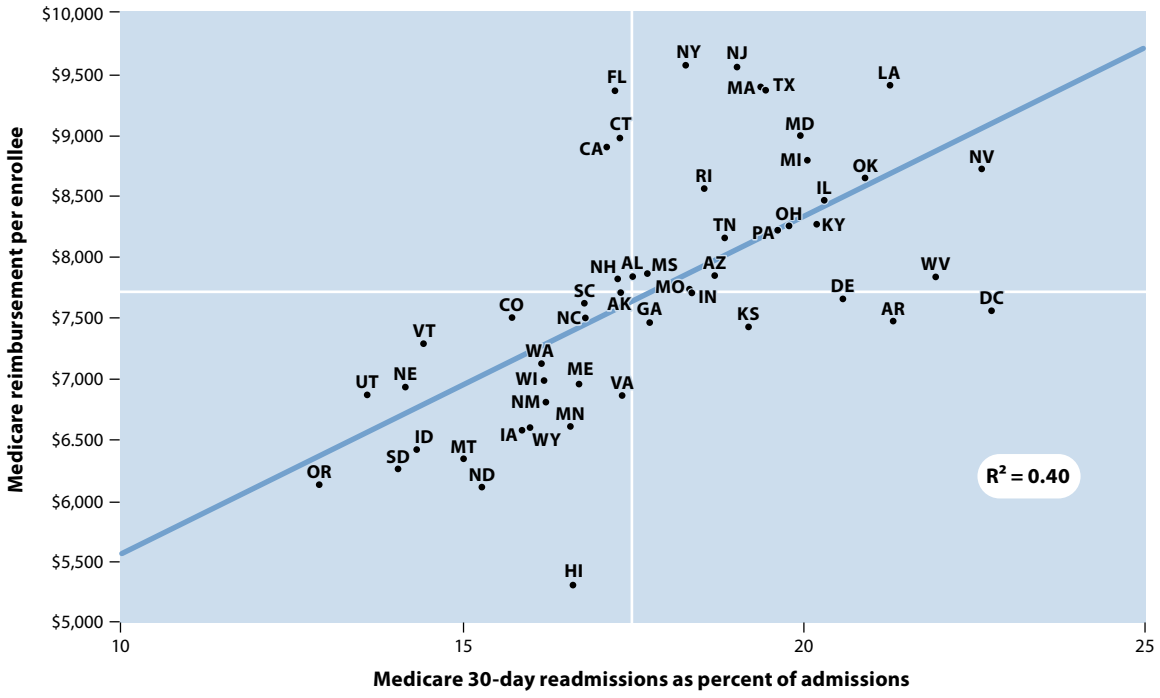
States with higher medical costs tend to have higher rates of potentially preventable hospital use, including high rates of readmission within 30 days of discharge (Exhibit 4) and high rates of admission for complications of diabetes, asthma, and other chronic conditions. Reducing the use of expensive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

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

Access	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
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
Prevention & Treatment							
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
Avoidable Hospital Use & Costs							
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
Healthy Lives							
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.

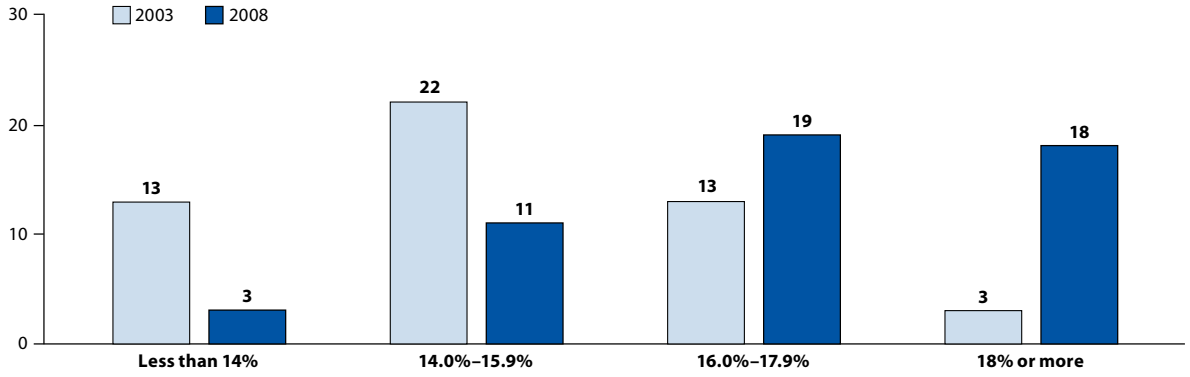
This upward pressure on the cost of health coverage has led to erosion in the generosity of insurance benefits, which in turn has increased the number of "underinsured" individuals and caused others to lose their coverage entirely. Reversing these trends will require a dual focus on "bending the cost 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).

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.)
- 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.

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.

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.[2]

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.

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Dina Belloff, M.A., is a senior research analyst at the Rutgers Center for State Health Policy. Her research areas focus on health care access and affordability, and health system performance. She has studied ways to optimize the performance of New Jersey's small group and nongroup health insurance markets, and researched the sources of urban and nonurban disparities in health insurance coverage. In addition to her coauthorship on the 2007 and 2009 *State Scorecards*, Ms. Belloff is currently examining the impact of a policy in New Jersey that expands dependent coverage up to age 30. Prior to coming to the Center, she was a research assistant at Mathematica Policy Research. She received her bachelor's degree with highest honors from Rutgers College and a master's degree in health policy studies from the Johns Hopkins University.