

# West Virginia State Profile



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## Overview

This state profile for West Virginia was prepared to assist the state with identifying key issues and opportunities under the Center for Medicare and Medicaid Improvement's (CMMI's) State Innovation Models program. Pulling together information from a wide range of data sources, the profile provides a state-level overview of key health care indicators, with comparisons to national averages.

The profile consists of nine sections as follows:

1. Health Care Spending
2. System Factors Supporting Innovation
3. Opportunities for Improved System Performance
4. Delivery System Capacity and Workforce
5. Health Insurance Markets
6. Insurance Coverage and Comprehensiveness
7. Population Health and Risk Factors
8. Population Demographics
9. Rankings on Select Measures

States participating in the SIM initiative can use this information in a variety of ways. First, it may be useful in identifying **key opportunities or policy levers** that the state can use in its planning process for how to achieve health system transformation. Second, it can serve as a **jumping off point for discussion** about state data needs – what is known now, what else the state would like to know, whether data are currently available to fill these gaps, and potential strategies for filling the gaps in available data. Technical assistance is available to states participating in the SIM initiative to identify additional data sources and indicators. Finally, the indicators in the profiles represent a potential means of **monitoring progress or impacts** of state delivery system reform efforts over time.

For states that are interested in comparisons beyond those included in this profile – for example, comparisons to other states – the SIM technical assistance team will be available to provide additional detailed information for the indicators included in the state profiles. Technical documentation about the indicators and data sources is included in the appendix.

# State Profile for West Virginia

## Table 1: Health Care Spending

Measure	West Virginia	United States
<b>Private Health Insurance Market</b>		
<b>Average premium for employer sponsored health insurance, 2013<sup>1</sup></b>		
Single	\$5,940	\$5,571
Family	\$17,105	\$16,029
<b>Average premium for nongroup health insurance, 2013<sup>2</sup></b>		
	\$3,353	\$2,842
<b>Average state employee health plan premiums, 2013<sup>3</sup></b>		
	\$473	\$570
<b>Public Health Insurance Programs</b>		
<b>Medicare spending per enrollee, FY 2012<sup>4</sup></b>		
Statewide	\$8,374	\$8,973
<b>Hospital Referral Regions</b>		
Charleston	\$8,465	
Huntington	\$8,966	
Morgantown	\$8,306	

### Data Sources and Notes:

<sup>1</sup> Medical Expenditure Panel Survey-Insurance Component, numbers reflect total premiums (employer and employee shares). These data reflect information collected from a sample of all employers, and are not comparable to premiums reported from state and federal insurance Marketplaces.

<sup>2</sup> SHADAC analysis of 2013 Supplemental Health Care Exhibit data from the National Association of Insurance Commissioners.

<sup>3</sup> The Pew Charitable Trusts and the John D. and Catherine T. MacArthur Foundation, "State Employee Health Plan Spending," August 2014, based on data from the Milliman Atlas of Public Employer Health Plans. Numbers reflect total premiums (employer and employee shares).

<sup>4</sup> Centers for Medicare & Medicaid Services (CMS) Geographic Variation Public Use File. Estimates were standardized to remove geographic differences in Medicare payment rates. In general, total standardized per capita costs are less than actual per capita costs because extra payments Medicare made to hospitals, such as payments for medical education (both direct and indirect) and payments to hospitals that serve a disproportionate share of low-income patients are removed.

**Table 1: Health Care Spending, continued**

Measure	West Virginia	United States
<b>Public Health Insurance Programs, continued</b>		
<b>Medicaid spending per enrollee, FY 2012<sup>5</sup></b>		
Total	\$7,566	\$7,236
Aged	\$17,533	\$16,236
Disabled	\$12,119	\$19,031
Adults	\$6,228	\$4,368
Children	\$2,662	\$2,854
<b>Per Capita Health Care Spending (State Total, All Coverage Types)</b>		
<b>Health care spending per person by type of service, 2009<sup>6</sup></b>		
All services	\$7,667	\$6,815
Hospital	\$3,073	\$2,475
Physician and Clinical Services	\$1,587	\$1,650
Other Professional Services	\$178	\$218
Other Services	\$2,234	\$2,211

**Data Sources and Notes:**

<sup>5</sup> Medicaid and CHIP Payment and Access Commission (MACPAC), "MACStats: Medicaid and CHIP Program Statistics," June 2014, based on Medicaid Statistical Information System (MSIS) data.

<sup>6</sup> CMS Office of the Actuary, Health Expenditures by State of Residence. Other Services includes the following: Dental Services; Home Health Care; Prescription Drugs; Durable Medical Products; Nursing Home Care; Other Health, Residential, and Personal Care. Other health professionals include non-physician providers such as nurse practitioners and physician assistants. See appendix for more detail on these measures.

**Table 2: System Factors Supporting Innovation**

Measure	West Virginia	United States
<b>Information Technology</b>		
<b>% of physicians who have adopted electronic health records, 2013<sup>1</sup></b>		
	46.0%	48.1%
<b>% of eligible physicians, physician assistants, and nurse practitioners that have received a Medicare or Medicaid EHR incentive payment, 2014<sup>2</sup></b>		
	52.0%	56.0%
<b>% of hospitals that have adopted electronic health records, 2013<sup>3</sup></b>		
	47.3%	59.4%
<b>% of hospitals that have received a Medicare or Medicaid EHR incentive payment, 2014<sup>2</sup></b>		
	88.0%	93.0%
<b>% of new and renewal prescriptions processed electronically, 2013<sup>4</sup></b>		
	51.0%	57.0%
<b>State all-payer claims database (APCD) in place, 2013<sup>5</sup></b>		
	Yes	18 States
<b>Initiatives to Support Population Health</b>		
<b>CDC Population Health Initiatives<sup>6</sup></b>		
State and Local Public Health Actions to Prevent Obesity, Diabetes, and Heart Disease	No	18 States
Partnerships to Improve Community Health	No	21 States

**Data Sources and Notes:**

<sup>1</sup> National Center for Health Statistics (NCHS) analysis of National Ambulatory Medical Care Survey (NAMCS) Electronic Medical Records Supplement.

<sup>2</sup> Office of the National Coordinator for Health Information Technology (ONC) Dashboard Meaningful Use Scorecard.

<sup>3</sup> Analysis of the 2013 American Hospital Association (AHA) Information Technology (IT) Supplement to the AHA Annual Survey published in Office of the National Coordinator for Health Information Technology (ONC) Data Brief No. 16, May 2014.

<sup>4</sup> Analysis of Surescript transactions published in Office of the National Coordinator for Health Information Technology (ONC) Data Brief No. 18, July 2014.

<sup>5</sup> All-Payer Claims Database (APCD) Council.

<sup>6</sup> Centers for Disease Control and Prevention (CDC).

**Table 2: System Factors Supporting Innovation, continued**

Measure	West Virginia	United States
<b>Initiatives to Support Delivery System Transformation</b>		
<b>CMS Initiatives Involving State Government<sup>7</sup></b>		
Multi-Payer Advanced Primary Care Practice Demonstration	No	8 States
State Demonstration Grants to Integrate Care for Dual Eligible Individuals	No	12 States
Medicaid Incentives Program for the Prevention of Chronic Diseases	No	10 States
<b>CMS Initiatives Involving Providers and Health Plans<sup>7</sup></b>		
Pioneer ACOs	No	11 States
Advance Payment ACOs	No	17 States
Medicare Shared Savings Program	Yes	48 States
Comprehensive Primary Care Initiative	No	8 States
FQHC Advanced Primary Care Practice Demonstration	Yes	47 States
Health Care Innovation Awards	No	28 States
Community-Based Care Transitions Program	No	36 States
<b>State Initiatives<sup>8</sup></b>		
Medicaid/CHIP ACOs	No	19 States
Medical home/care coordination initiatives in Medicaid/CHIP	Yes	45 States
Episode-based payment	No	17 States

**Data Sources and Notes:**

<sup>7</sup> Center for Medicare and Medicaid Innovation and Centers for Medicare and Medicaid Services. See appendix for more detail on these initiatives.

<sup>8</sup> National Association of State Health Policy (NASHP), see appendix for more detail on these initiatives.

**Table 3: Opportunities for Improved System Performance**

Measure	West Virginia	United States
<b>Potential for Improved Coordination</b>		
<b>Percent of people with a usual source of care, 2012<sup>1</sup></b>		
	82.4%	86.9%
<b>Preventable hospitalizations per 100,000 population, 2011<sup>2</sup></b>		
Adults	2,252.8	1,708.2
Children	205.5	152.2
Acute Conditions, Adults	942.8	674.0
Chronic Conditions, Adults	1,372.9	1,035.3
<b>Medication compliance: % of CVS Caremark patients with certain chronic conditions with "optimal" medication compliance, 2013<sup>3</sup></b>		
	74.3%	N/A
<b>Medicare 30-day hospital readmissions per 1,000 beneficiaries, 2012<sup>4</sup></b>		
	64	45
<b>Rate of low birth weight births, 2011<sup>5</sup></b>		
	9.6%	8.1%
<b>Potentially Avoidable Costs and Overuse</b>		
<b>Emergency room visits per 1,000 population, 2011<sup>6</sup></b>		
	660.0	424.0
<b>Rates of births by Caesarean section, 2011<sup>5</sup></b>		
	36.8%	32.8%
<b>Imaging Costs, Medicare Fee for Service, 2010<sup>7</sup></b>		
Per Capita	\$221	\$286
Ratio to National Average	0.77	1.00
<b>Home Health Care Costs, Medicare Fee for Service, 2010<sup>7</sup></b>		
Per Capita	\$422	\$640
Ratio to National Average	0.66	1.00
<b>Inpatient back surgery per 1,000 Medicare enrollees, 2012<sup>8</sup></b>		
	3.4	4.7

**Data Sources and Notes:**

<sup>1</sup> SHADAC analysis of restricted National Health Interview Survey (NHIS) data.

<sup>2</sup> SHADAC analysis of Healthcare Cost and Utilization Project (HCUP) data.

<sup>3</sup> *State of the States: Adherence Report*, CVS Caremark, 2013. Includes members of employer-sponsored plans served by CVS Caremark Pharmacy Benefit Management (PBM) services taking medications for diabetes, high blood pressure, high cholesterol and depression. See appendix for more details on this measure and its potential limitations.

<sup>4</sup> Centers for Medicare & Medicaid Services (CMS) Hospital Compare.

<sup>5</sup> National Vital Statistics Report.

<sup>6</sup> Kaiser State Health Facts analysis of American Hospital Association (AHA) data.

<sup>7</sup> Institute of Medicine analysis of Medicare claims data. Figures are standardized to adjust for differences in Medicare payment rates by region. See appendix for more detail.

<sup>8</sup> Dartmouth Atlas of Health Care.

**Table 4: Delivery System Capacity and Workforce**

Measure	West Virginia	United States
<b>Delivery System</b>		
<b>Certificate of need status<sup>1</sup></b>		
Hospital Beds, 2013	Yes	28 States
Imaging Centers, 2011	Yes	21 States
Ambulatory Surgical Centers, 2011	Yes	27 States
<b>Number of hospitals, 2014<sup>2</sup></b>		
	51	4,836
<b>Available hospital beds per 1,000 people, 2012<sup>3</sup></b>		
	3.9	2.6
<b>Hospital occupancy rate, 2011<sup>3</sup></b>		
	61%	64%
<b>Federally Qualified Health Center (FQHC) Delivery Sites, 2011<sup>4</sup></b>		
Total	203	8,504
Per 100,000 population under 200% FPG	28.0	8.0
<b>Physicians</b>		
<b>Percent of state population living in primary care health professional shortage areas, 2014<sup>5</sup></b>		
	75.6%	60.4%
<b>Physicians <i>not</i> accepting new Medicaid patients, 2011-2012<sup>6</sup></b>		
Primary Care	27.2%	33.2%
Specialty Care	7.7%	27.5%
<b>Physicians per 100,000 population, 2014<sup>7</sup></b>		
Primary Care	136.6	134.4
Specialty Care	135.9	148.3
<b>Non-Physician Providers</b>		
<b>Physician assistants per 100,000 population, 2013<sup>8</sup></b>		
	47.1	30.1
<b>Nurse practitioners per 100,000 population, 2013<sup>9</sup></b>		
	53.2	47.4
<b>Scope of practice for nurse practitioners, 2014</b>		
Physician involvement required in diagnosis/treatment <sup>10</sup>	Yes	31 States
Physician involvement required in prescribing <sup>11</sup>	Yes	31 States

**Data Sources and Notes:**

<sup>1</sup> National Conference of State Legislatures.

<sup>2</sup> Office of the National Coordinator for Health Information Technology (ONC) Dashboard Meaningful Use Scorecard.

<sup>3</sup> American Hospital Association (AHA) data.

<sup>4</sup> National Association of Community Health Centers, Key Health Center Data by State, 2011. Population data from the American Community Survey (ACS).

<sup>5</sup> Health professional shortage area information from Health Resources and Services Administration (HRSA). Population data from ACS. See appendix for more details on health professional shortage areas.

<sup>6</sup> NCHS analysis of NAMCS Electronic Medical Records Supplement from Decker, S. "Two-thirds of primary care physicians accepted new Medicaid patients in 2011-2012." *Health Affairs*, 32, no. 7, 2013.

<sup>7</sup> Kaiser State Health Facts measure based on state licensing information from Redi-Data, Inc.

<sup>8</sup> 2013 Statistical Profile of Certified Physician Assistants, National Commission on Certification of Physician Assistants.

<sup>9</sup> Area Health Resources Files (AHRF).

<sup>10</sup> American Association of Nurse Practitioners.

<sup>11</sup> Law Atlas, "Nurse Practitioner Prescribing Laws," July 2014.

**Table 5: Health Insurance Markets**

Measure	West Virginia	United States
<b>Number of credible insurance carriers, 2013<sup>1</sup></b>		
Small group	3	5
Large group	4	6
Individual market	3	6
<b>Market share of largest carrier, 2013<sup>1</sup></b>		
Small group	71.8%	54.8%
Large group	84.9%	55.8%
Individual market	69.2%	56.0%
<b>Largest carrier by market, 2013<sup>1</sup></b>		
Small group	Highmark BCBS of West Virginia	
Large group	Highmark BCBS of West Virginia	
Individual market	Highmark BCBS of West Virginia	
<b>Managed care penetration in public programs</b>		
Medicaid, 2011 <sup>2</sup>	47.6%	71.6%
Medicare, 2014 <sup>3</sup>	24.0%	30.0%
<b>Managed care and other plan types, among private sector employers offering coverage, 2013<sup>4</sup></b>		
Two or more plans	41.4%	43.3%
Conventional indemnity	12.3%	11.3%
Any managed care	88.3%	91.0%
Exclusive provider	12.4%	27.9%
Mixed provider	78.7%	73.2%
<b>Self-Insurance</b>		
<b>% of employers self-insuring, 2013<sup>4</sup></b>		
Total	39.8%	37.6%
Firms with less than 50 employees	9.9%	13.2%
Firms with 50 or more employees	66.8%	64.6%
<b>% of workers in self-insured plans, 2013<sup>4</sup></b>		
Total	69.1%	58.2%
Firms with less than 50 employees	5.4%	11.5%
Firms with 50 or more employees	80.3%	67.7%

**Data Sources and Notes:**

<sup>1</sup> SHADAC analysis of 2013 Supplemental Health Care Exhibit data from the National Association of Insurance Commissioners. Credible insurance carriers include active insurers that have at least 1,000 member years and positive premium earnings. Plans with the same parent company are collapsed into one insurer. United States figures represent the national median. See appendix (Table A1) for information on the number of member years for each credible insurance carrier in your state.

<sup>2</sup> CMS Managed Care Enrollment Reports.

<sup>3</sup> CMS MA State/County Market Penetration file.

<sup>4</sup> Medical Expenditure Panel Survey - Insurance Component, see appendix for plan type definitions. These data only include firms that offer health insurance.

**Table 6: Insurance Coverage and Comprehensiveness**

Measure	West Virginia	United States
<b>Coverage</b>		
<b>Insurance coverage by type (percent of population), 2013<sup>1</sup></b>		
Employer/Military	48.2%	51.0%
Individual	2.5%	5.4%
Medicaid/CHIP	14.4%	13.4%
Medicare	21.5%	15.8%
<b>Uninsured</b>	<b><u>13.4%</u></b>	<b><u>14.5%</u></b>
	100.0%	100.0%
<b>Number of private employers, 2013<sup>2</sup></b>		
Total	34,382	7,009,707
Firms with less than 50 employees	23,821	5,271,798
Firms with 50 or more employees	10,561	1,737,909
<b>% of private-sector employers offering health insurance, 2013<sup>2</sup></b>		
Total	54.7%	49.9%
Less than 50 employees	37.5%	34.8%
50 or more employees	93.6%	95.7%
<b>Number of private-sector workers, 2013<sup>2</sup></b>		
Total	562,230	113,947,523
Firms with less than 50 employees	152,585	31,279,323
Firms with 50 or more employees	409,645	82,668,200
<b>% of private-sector workers employed in firms offering coverage, 2013<sup>2</sup></b>		
Total	83.5%	84.9%
Firms with less than 50 employees	47.2%	53.1%
Firms with 50 or more employees	96.9%	96.9%
<b>Comprehensiveness</b>		
<b>Average out of pocket spending, 2011-2012<sup>3</sup></b>		
	\$2,901	\$3,034
<b>Share with high burden spending, 2011-2012<sup>3</sup></b>		
	18.7%	18.6%
<b>% who delayed care due to cost, 2012<sup>4</sup></b>		
	10.3%	9.6%

**Data Sources and Notes:**

<sup>1</sup> SHADAC analysis of American Community Survey (ACS).

<sup>2</sup> Medical Expenditure Panel Survey - Insurance Component (MEPS-IC).

<sup>3</sup> SHADAC analysis of Current Population Survey (CPS). Out of pocket spending includes spending for premiums and other costs such as co-pays. High burden spending defined as those spending more than 10% of income on these costs.

<sup>4</sup> SHADAC analysis of restricted National Health Interview Survey (NHIS) data.

**Table 7: Population Health Status and Risk Factors**

Measure	West Virginia	United States
<b>Health Status and Disease Burden</b>		
<b>Self-reported health status, % in fair or poor health, 2013<sup>1</sup></b>		
	25.7%	16.7%
<b>% with diabetes, cardiovascular disease, and/or asthma, 2011-2012<sup>1</sup></b>		
	28.1%	21.0%
<b>Risk Factors</b>		
<b>Rate of obesity, 2013<sup>1,2</sup></b>		
Adults	35.1%	29.4%
Youth	15.6%	13.7%
<b>Rate of tobacco use, 2013<sup>1,2</sup></b>		
Adults	27.3%	19.0%
Youth	29.7%	22.4%
<b>% <i>not</i> meeting physical activity recommendations, 2013<sup>1,2</sup></b>		
Adults	87.3%	79.5%
Youth	51.5%	52.7%

**Data Sources and Notes:**

<sup>1</sup> SHADAC analysis of Behavioral Risk Factor Surveillance System (BRFSS). Disease prevalence measure includes people who report having more than one of these diseases. See appendix for more information about physical activity recommendations.

<sup>2</sup> Youth Risk Behavior Surveillance System (YRBSS).

**Table 8: Population Demographics**

Measure	West Virginia	United States
<b>Age, 2013<sup>1</sup></b>		
0-18	22.2%	25.0%
19-25	9.1%	10.0%
26-44	23.0%	24.9%
45-54	13.7%	13.8%
55-64	14.8%	12.5%
65+	<u>17.0%</u>	<u>13.9%</u>
	100.0%	100.0%
<b>Income as % of Federal Poverty Guidelines (FPG), 2013<sup>1</sup></b>		
0-138%	33.8%	31.3%
139-200%	12.4%	11.1%
201-400%	29.9%	26.8%
401% +	<u>24.0%</u>	<u>30.9%</u>
	100.0%	100.0%
<b>Race/ethnicity, 2013<sup>1</sup></b>		
White	93.0%	62.6%
African-American/Black	3.1%	12.1%
Hispanic/Latino	1.3%	17.1%
Asian/Pacific Islander	0.6%	5.2%
American Indian/Alaskan Native	0.1%	0.7%
Other/Multiple Races	<u>1.9%</u>	<u>2.4%</u>
	100.0%	100.0%
<b>% of population living in urban areas, 2010<sup>2</sup></b>		
	48.7%	80.7%

**Data Sources and Notes:**

<sup>1</sup> SHADAC analysis of American Community Survey.

<sup>2</sup> 2010 Census, urban areas defined based on population density.

## State Rankings

Table 9 on the next page shows how your state compares to others for select measures from the state profile. The table shows your state's value on the indicator, the national average, and your state's "rank" compared to the other 49 states and the District of Columbia. Arrows also indicate whether a higher or lower value results in a higher rank (e.g., the downward pointing arrow for "ESI premium for single coverage" indicates that a lower value on that indicator results in a higher rank).

We limited the ranking table to indicators where there is clear directionality of what constitutes positive or negative results. For example, for certain indicators such as C-section rates or the number of hospital beds per capita, it is not clear that a lower or higher number is necessarily "better." As a result, the rankings are limited to those indicators for which we believe there is relative consensus about what constitutes a "good" result.

The state profiles rely on data sources that are comparable and available across states. In some cases, individual states may collect data that are more timely and accurate than the comparable national or multi-state data source. For example, states may conduct their own surveys to obtain information about insurance coverage, access to care, or workforce issues. Such state-specific data are extremely valuable resources for informing state policy and reform. For this purpose, however, it was important to draw on data that could support comparisons across states.

**Table 9: State Rankings on Select Measures**

Measure	West Virginia	U.S. Average	Rank
<b>Cost</b>			
<b>Average premium for employer sponsored health insurance, 2013<sup>1</sup> ▼</b>			
Single	\$5,940	\$5,571	41
<b>Medicare spending per enrollee, FY 2012<sup>2</sup> ▼</b>			
Statewide	\$8,374	\$8,973	22
<b>Medicaid spending per enrollee, FY 2012<sup>3</sup> ▼</b>			
Children	\$2,662	\$2,854	19
<b>System Factors Supporting Innovation</b>			
<b>% of eligible physicians, physician assistants, and nurse practitioners that have received a Medicare or Medicaid EHR incentive payment, 2014<sup>4</sup> ▲</b>			
	52.0%	56.0%	33
<b>% of hospitals that have received a Medicare or Medicaid EHR incentive payment, 2014<sup>4</sup> ▲</b>			
	88.0%	93.0%	39
<b>% of new and renewal prescriptions processed electronically, 2013<sup>5</sup> ▲</b>			
	51.0%	57.0%	41
<b>System Performance</b>			
<b>Percent of people with a usual source of care, 2012<sup>6</sup> ▲</b>			
	82.4%	86.9%	46
<b>Preventable hospitalizations per 100,000 population, 2011<sup>7</sup> ▼</b>			
Adults	2,252.8	1,708.2	29
Children	205.5	152.2	26
<b>Medicare 30-day hospital readmissions per 1,000 beneficiaries, 2012<sup>8</sup> ▼</b>			
	64	45	50
<b>Rate of low birth weight births, 2011<sup>9</sup> ▼</b>			
	9.6%	8.1%	46

**Data Sources and Notes:**

▼ Lower figures are better

▲ Higher figures are better

<sup>1</sup> Medical Expenditure Panel Survey-Insurance Component, numbers reflect total premiums (employer and employee shares). These data reflect information collected from a sample of all employers, and are not comparable to premiums reported from state and federal insurance Marketplaces.

<sup>2</sup> Centers for Medicare & Medicaid Services (CMS) Geographic Variation Public Use File. Estimates were standardized to remove geographic differences in Medicare payment rates. In general, total standardized per capita costs are less than actual per capita costs because extra payments Medicare made to hospitals, such as payments for medical education (both direct and indirect) and payments to hospitals that serve a disproportionate share of low-income patients are removed.

<sup>3</sup> Medicaid and CHIP Payment and Access Commission (MACPAC), "MACStats: Medicaid and CHIP Program Statistics," June 2014, based on Medicaid Statistical Information System (MSIS) data.

<sup>4</sup> Office of the National Coordinator for Health Information Technology (ONC) Dashboard Meaningful Use Scorecard.

<sup>5</sup> Analysis of Surescript transactions published in Office of the National Coordinator for Health Information Technology (ONC) Data Brief No. 18, July 2014.

<sup>6</sup> SHADAC analysis of restricted National Health Interview Survey (NHIS) data.

<sup>7</sup> SHADAC analysis of Healthcare Cost and Utilization Project (HCUP) data.

<sup>8</sup> Centers for Medicare & Medicaid Services (CMS) Hospital Compare.

<sup>9</sup> National Vital Statistics Report.

**Table 9: State Rankings on Select Measures, continued**

Measure	West Virginia	U.S. Average	Rank
<b>Delivery System Capacity and Workforce</b>			
<b>Percent of state population living in primary care health professional shortage areas, 2014<sup>10</sup> ▼</b>			
	75.6%	60.4%	47
<b>Physicians <i>not</i> accepting new Medicaid patients, 2011-2012<sup>11</sup> ▼</b>			
Primary Care	27.2%	33.2%	22
Specialty Care	7.7%	27.5%	5
<b>Primary care providers per 100,000 population, 2014<sup>12, 13, 14</sup> ▲</b>			
	236.9	223.9	16
<b>Insurance Coverage and Comprehensiveness</b>			
<b>Percent of population uninsured, 2013<sup>15</sup> ▼</b>			
	13.4%	14.5%	28
<b>Percent of population with high burden spending, 2011-2012<sup>16</sup> ▼</b>			
	18.7%	18.6%	19
<b>Percent of population that delayed care due to cost, 2012<sup>17</sup> ▼</b>			
	10.3%	9.6%	25
<b>Population Health Status and Risk Factors</b>			
<b>Self-reported health status, % in fair or poor health, 2013<sup>18</sup> ▼</b>			
	25.7%	16.7%	51
<b>% with diabetes, cardiovascular disease, and/or asthma, 2011-2012<sup>18</sup> ▼</b>			
	28.1%	21.0%	51
<b>Rate of obesity, 2013<sup>18,19</sup> ▼</b>			
Adults	35.1%	29.4%	50
Youth	15.6%	13.7%	37
<b>Rate of tobacco use, 2013<sup>18,19</sup> ▼</b>			
Adults	27.3%	19.0%	51
Youth	29.7%	22.4%	35
<b>% <i>not</i> meeting physical activity recommendations, 2013<sup>18,19</sup> ▼</b>			
Adults	87.3%	79.5%	50
Youth	51.5%	52.7%	14

**Data Sources and Notes:**

▼ Lower figures are better

▲ Higher figures are better

<sup>10</sup> Health professional shortage area information from Health Resources and Services Administration (HRSA). Population data from ACS. See appendix for more details on health professional shortage areas.

<sup>11</sup> NCHS analysis of NAMCS Electronic Medical Records Supplement from Decker, S. "Two-thirds of primary care physicians accepted new Medicaid patients in 2011-2012." Health Affairs, 32, no. 7, 2013.

<sup>12</sup> Kaiser State Health Facts measure based on state licensing information from Redi-Data, Inc.

<sup>13</sup> 2013 Statistical Profile of Certified Physician Assistants, National Commission on Certification of Physician Assistants.

<sup>14</sup> Area Health Resources Files (AHRF).

<sup>15</sup> SHADAC analysis of American Community Survey (ACS).

<sup>16</sup> SHADAC analysis of Current Population Survey (CPS). Out of pocket spending includes spending for premiums and other costs such as co-pays. High burden spending defined as those spending more than 10% of income on these costs.

<sup>17</sup> SHADAC analysis of restricted National Health Interview Survey (NHIS) data.

<sup>18</sup> SHADAC analysis of Behavioral Risk Factor Surveillance System (BRFSS). Disease prevalence measure includes people who report having more than one of these diseases. See appendix for more information about physical activity recommendations.

<sup>19</sup> Youth Risk Behavior Surveillance System (YRBSS).

## Appendix 1: Table Notes

### TABLE 1: HEALTH CARE SPENDING

**Health care spending per person and type of service:** These measures are from the Centers for Medicare & Medicaid Services State Health Expenditure Accounts (SHEA). The SHEA measure spending for all privately and publicly funded personal health care services and products (hospital care, physician services, nursing home care, prescription drugs, etc.) by state of residence. More information about the sources and methods for the SHEA is available at <http://www.cms.gov/NationalHealthExpendData/downloads/dsm-09.pdf>.

### TABLE 2: SYSTEM FACTORS SUPPORTING INNOVATION

#### Initiatives to Support Delivery System Transformation

There are many initiatives under way across the public and private sectors to support health care delivery system transformation through payment reform. This part of Table 2 presents information about states' participation in federal initiatives, including initiatives involving state government and initiatives that directly involve providers and health plans; in addition, the table describes state-level reform activities.

**CMS Initiatives Involving State Government:** Among the many CMS initiatives that directly support state reform efforts, three are highlighted in Table 2. These include:

- The **Multi-payer Advanced Primary Care Practice (MAPCP)** demonstration project, under which Medicare is participating in state health reform initiatives to make advanced primary care practices more broadly available. Eight states were selected to participate in the demonstration, which also includes Medicaid and private health insurers.
- **State Demonstrations to Integrate Care for Dual Eligible Individuals**, which are providing funding for 15 states to design strategies for improving care for people who are dually eligible for Medicaid and Medicare.
- The **Medicaid Incentives Program for the Prevention of Chronic Diseases**, which has provided grants to 10 states to provide incentives for Medicaid beneficiaries to participate in prevention programs and reduce risk factors for chronic disease.

**CMS Initiatives Involving Providers and Health Plans:** Many ongoing CMS initiatives are targeted directly at health care providers and/or health plans. Table 2 indicates the number of states where health care organizations are participating in the following initiatives:

- Two types of accountable care organization initiatives, including the **Pioneer Model** and the **Advance Payment Model**. The Pioneer Model initiative includes health care organizations and providers that are experienced in coordinating care for patients across multiple settings, with the goal of moving from a shared savings model of payment to a population-based model. The Advance Payment ACO model provides support for building infrastructure to support care coordination; participating organizations receive an advance on the shared savings they expect to earn in order to make the upfront investments needed to support the infrastructure needed.
- The **Medicare Shared Savings Program**, which contracts with health care organizations to promote accountability and coordinated care for the Medicare fee for service population.
- The **Comprehensive Primary Care Initiative**, which is a multi-payer initiative to better coordinate primary care services, currently operating in eight states.
- The **FQHC Advanced Primary Care Practice Demonstration** provides monthly care management fees to

participating FQHCs to help Medicare patients manage chronic conditions and coordinate care. FQHCs must agree to adopt care coordination practices recognized by the National Committee for Quality Assurance (NCQA).

- **Health Care Innovation Awards**, which provide funding to test new care delivery and payment models to improve health care, improve health, and reduce cost.
- The **Community-Based Care Transitions Program**, which is testing models for improving care transitions from the hospital to other settings, with the goals of reducing readmissions for high-risk Medicare beneficiaries and reducing costs.

**State Initiatives** include state activities related to payment reform in Medicaid and CHIP along the following key dimensions:

- States that are implementing **ACO models** in their Medicaid/CHIP programs;
- States that are pursuing **medical home/care coordination initiatives**; and
- States that are implementing **episode-based payment** in Medicaid/CHIP.

In some cases, states are pursuing these initiatives in cooperation with or in alignment with other payers, while in other cases the initiatives are limited to Medicaid and/or CHIP.

### **TABLE 3: OPPORTUNITIES FOR IMPROVED SYSTEM PERFORMANCE**

**Preventable hospitalizations per 100,000 population:** Potentially preventable hospitalizations are hospital visits that evidence suggests could have been avoided with better access to high-quality outpatient care, such as care provided in doctor’s offices, clinics or other settings outside the hospital.

**Adults:** Hospitalizations for the following conditions are included in this measure:

- Diabetes (short and long term complications)
- Congestive Heart Failure
- Hypertension
- Angina
- Chronic Obstructive Pulmonary Disease
- Asthma
- Urinary Infections
- Bacterial Pneumonia
- Dehydration
- Perforated Appendix

**Children:** Hospitalizations for children age 6-17 with the following types of conditions are included in this measure:

- Diabetes
- Asthma
- Urinary Infections
- Gastroenteritis

Results were calculated for adults and children with the Agency for Healthcare Research and Quality (AHRQ) Patient Quality and Pediatric Quality indicators (PQI and PDI). Results were adjusted for age and sex.

**Avoidable emergency room visits as a share of all ER visits:** This measure shows the percent of emergency room visits that might have been avoided with better access to high-quality outpatient care or that could have been safely delivered in another setting, such as a clinic or doctor’s office. Results were calculated using the State Emergency Department Databases (SEDD) which are made available through the Healthcare Cost and Utilization Project (HCUP). Visits were grouped as avoidable based on the NYU Center for Health and Public Service Research emergency visit classification algorithm (<http://wagner.nyu.edu/faculty/billings/nyued-background.php>). Visits that fell into one of the following categories were considered “avoidable”:

- Non-emergent - The patient's initial complaint, presenting symptoms, vital signs, medical history, and age indicated that immediate medical care was not required within 12 hours.
- Emergent/Primary Care Treatable - Based on information in the record, treatment was required within 12 hours, but care could have been provided effectively and safely in a primary care setting.
- Emergent – ED Care Needed, Preventable/Avoidable - Emergency department care was required based on the complaint or procedures performed/resources used, but the emergent nature of the condition was potentially preventable/avoidable if timely and effective ambulatory care had been received during the episode of illness.

**Medication Compliance:** This measure is based on research done by CVS Caremark using claims for members of their pharmacy benefit management program who access their prescription coverage as an employee benefit through individual employers. Medication possession ratios (or MPRs, the ratio of total days someone had a prescribed medication available to them to the number of days they *could* have had the drug on hand) were calculated for CVS Caremark members who filled prescriptions for four common conditions: diabetes, high blood pressure, high cholesterol, and depression. These results were then used to calculate the share of members who had an “optimal” (80% or higher) MPR; i.e., the share who had the prescribed drug on hand for 80% or more of the time they *could* have had the medication available to them. Results were adjusted for age, sex, and eligibility months. The authors note that this is a helpful way to consider medication adherence and potential cost benefits of improving it for a subset of patients enrolled in the CVS Caremark pharmacy benefit group, but that the report “should not be considered the definitive look at state adherence rates.” The report is available at <http://investors.cvscaremark.com/~media/Files/C/ CVS-IR/reports/sos-adherence-report-2013.pdf>.

**Imaging and Home Health Care costs:** These figures are based on analysis of the Chronic Conditions Warehouse, which contains all claims for Medicare fee for service enrollees. The analysis was conducted by the Institute of Medicine. Spending measures were developed based on the amount Medicare pays for services and do not include beneficiary cost sharing. Measures were standardized to remove geographic differences in payment rates for individual services as a source of variation. In general, those factors are adjustments that Medicare makes to account for local wages or input prices, and extra payments that Medicare makes to advance other program goals, such as compensating certain hospitals for the cost of training doctors. The figures represent what Medicare would have paid for each claim without those adjustments. More information is available at <http://www.iom.edu/Activities/HealthServices/GeographicVariation/Data-Resources.aspx>.

#### **TABLE 4: DELIVERY SYSTEM CAPACITY AND WORKFORCE**

**% of state population living in health professional shortage areas:** This measure is based on data from the Health Resources and Services Administration (HRSA) about the number of full time equivalent primary care

physicians in each state. An area is considered to have a “shortage” of primary care physicians if one of the following is true:

- There is less than 1 primary care physician per 3500 population.
- There is less than 1 primary care physician per 3000 people and the area has unusually high needs for primary care or there is insufficient capacity on other measures.
- Primary care professionals are overutilized or inaccessible (e.g., very distant) to a given population

More detailed information about HPSAs and the methods to define them is available at <http://bhpr.hrsa.gov/shortage/hpsas/designationcriteria/primarycarehpsacriteria.html>.

## TABLE 5: HEALTH INSURANCE MARKETS

**Managed care and other plan types, among employers offering coverage:** This measure is based on the Medical Expenditure Panel Survey, Insurance Component and shows information about available plan types among private sector employers that offer coverage to at least some of their employees. The categories are not exclusive, i.e., they will not add to 100% because some of the groups overlap. For example, “**two or more plans**” means that employees have more than one health plan available to them. “**Any managed care**” can refer to **exclusive provider** or **mixed provider** arrangements, along with other types of managed care not included separately in the table, such as point of service plans. **Conventional indemnity** plans are more commonly referred to as “fee for service”, where the insurer reimburses for each service provided on a case by case basis.

## TABLE 7: POPULATION HEALTH STATUS AND RISK FACTORS

### % not meeting physical activity recommendations

**Adults:** This measure is based on the Behavioral Risk Factor Surveillance System (BRFSS), and shows the percentage of adults who do not meet recommended physical activity guidelines. Recommended physical activity is defined as “moderate-intensity activities in a usual week (i.e., brisk walking, bicycling, vacuuming, gardening, or anything else that causes small increases in breathing or heart rate) for greater than or equal to 30 minutes per day, greater than or equal to 5 days per week; or vigorous-intensity activities in a usual week (i.e., running, aerobics, heavy yard work, or anything else that causes large increases in breathing or heart rate) for greater than or equal to 20 minutes per day, greater than or equal to 3 days per week or both.”

**Youth:** This measure is based on the Youth Risk Behavioral Surveillance System (YRBSS) and shows the share of high school students who did not meet the recommended physical activity levels each of the 5 days prior to the survey. The recommended physical activity level is 60 minutes each day.

**Appendix Table A1: Member Years Among Credible Insurance Carriers**

Measure	West Virginia
<b>Member years in the Small Group, Large Group, and Individual Markets, 2013<sup>1</sup></b>	
<b><u>Small group</u></b>	
Highmark BCBS of West Virginia	50,248
Aetna	17,578
Mountain Health Trust	2,168
<b><u>Large group</u></b>	
Highmark BCBS of West Virginia	112,348
Mountain Health Trust	10,000
Aetna	8,511
United Healthcare	1,452
<b><u>Individual market</u></b>	
Highmark BCBS of West Virginia	15,223
United Healthcare	5,492
Assurant	1,282

**Data Sources and Notes:**

<sup>1</sup> SHADAC analysis of 2013 Supplemental Health Care Exhibit data from the National Association of Insurance Commissioners. Credible insurance carriers include active insurers that have at least 1,000 member years and positive premium earnings. Plans with the same parent company are collapsed into one insurer.

## Appendix 2: Data Sources

The **National Ambulatory Medical Care Survey (NAMCS)**, sponsored by the National Center for Health Statistics, provides information on the provision and use of ambulatory medical care services in the United States. Available data is based on a sample of visits to non-federal employed office-based physicians who are primarily engaged in direct patient care. Physicians in the specialties of anesthesiology, pathology, and radiology are excluded from the survey. The survey is conducted annually. The **Electronic Medical Records Supplement (EMR Supplement)** to the NAMCS is a mail-based survey that has been conducted annually since 2009.

The **Healthcare Cost and Utilization Project (HCUP)** is a family of health care databases and products sponsored by the Agency for Healthcare Research and Quality (AHRQ). The **State Inpatient Databases (SID)** contain information on approximately 90% of all U.S. community hospital discharges. Federal, state, and industry partners assist to collect clinical and nonclinical data, including diagnoses, procedures, admission and discharge status, patient demographics, expected payment source, total charges, and length of stay. The SID files are available through the HCUP Central Distributor as far back as 1990 for some states. Currently, forty four states participate in the SID.

Another element of the HCUP is the **State Emergency Department Databases (SEDD)**. The SEDD contain information on emergency department visits to hospital-affiliated emergency departments that do not result in admissions. The SEDD contain more than 100 clinical and non-clinical variables from emergency department abstracts, including all listed diagnoses and procedures, patient demographics, expected payment source, total charges, and hospital identifiers that permit linkage to the SID and AHA Annual Survey files. Composition and completeness of files may vary from state to state. Twenty-eight states currently participate in the SEDD, but only 16 states release their data for purchase through the Central Distributor.

**Hospital Compare**, published by CMS, provides information on how well hospitals provide recommended care to their patients at the state and hospital level. Data are reported by over 4,000 Medicare-certified hospitals across the country. Participation in Hospital Compare is voluntary but beginning in 2003 there were financial incentives for hospitals to participate. In 2007, the participation rate was nearly 95%.

**American Hospital Association (AHA) Annual Survey.** The AHA has collected data from member and non-member hospitals on hospitals' capacity, services, utilization, personnel, and finances since 1946. The total sample includes 6,500 hospitals nationally.

The **American Community Survey (ACS)** is a general household survey of the entire population (including persons living in group quarters) that replaced the decennial census long-form. The ACS asks about demographic and socioeconomic characteristics, and a question on current health insurance coverage was added in 2008. This mandatory survey (persons are required to respond under law) samples from the National Master Address File and is conducted monthly by mail, telephone, and in person. The ACS has a response rate of 98%. The Census Bureau releases summary reports and public use data files with state identifiers in the early fall of each year, about eight to nine months after the end of the survey calendar year.

The **National Association of Insurance Commissioners (NAIC)** maintains annual and quarterly financial statement data on more than 6,000 insurance companies. These statements include information about total premium dollars and enrollees, along with a range of other information.

The **Medical Expenditure Panel Survey—Insurance Component (MEPS-IC)**, sponsored by the AHRQ, samples private and public sector employers from the Business Register, a list of business establishments maintained by the Census Bureau. In 2009, the MEPS-IC had a response rate of 82% nationally and included a total sample of about 41,000 establishments. Summary reports with detailed state-level tables for private sector employers are released in July of each year following the survey year.

The **Current Population Survey (CPS)** is a monthly survey of the civilian non-institutionalized population conducted by the U.S. Census Bureau. The primary purpose of the monthly survey is to collect data on labor force participation and unemployment. Data on income and health insurance are collected through the CPS Annual Social and Economic Supplement (ASEC) in February through April of each year. The CPS-ASEC asks about health insurance coverage for the prior calendar year and is combined with information from the main CPS survey on determinants of health insurance coverage such as firm size and other demographic and socioeconomic characteristics. The CPS began asking questions about out-of-pocket spending in 2010. The CPS-ASEC achieved a response rate of 86% in 2010. Summary reports and public use data files with state identifiers, usually released in early fall, are available about five to six months after data are collected.

The **National Health Interview Survey (NHIS)** is an in-person survey of the health of the civilian non-institutionalized population and is sponsored by the Centers for Disease Control & Prevention (CDC) National Center for Health Statistics (NCHS). The NHIS, which has been conducted annually for over 50 years, asks about health insurance coverage, health care utilization and access, health conditions and behaviors, and general health status, as well as many demographic and socioeconomic characteristics. With a national response rate of over 80%, the survey sample is drawn from an address-based Census sample frame. Summary reports, with state estimates for the 30 largest states, are released six months after data collection, as are public use data files (without state identifiers). Data files with state-level and other geographic identifiers can be accessed through one of ten U.S. Census Bureau Research Data Centers (RDC) across the country or through a CDC RDC. Recently, additional state estimates were made available on the Assistant Secretary for Planning and Evaluation’s Health System Measurement Project at <https://healthmeasures.aspe.hhs.gov/>.

The **Behavioral Risk Factor Surveillance System (BRFSS)** is a state-based survey of the adult civilian non-institutionalized population sponsored by the CDC that has been conducted annually since 1984. The BRFSS inquires about health conditions, risk behaviors, preventive health practices, access to health care, and health insurance coverage. More than 350,000 adults are interviewed each year. States use BRFSS data to identify emerging health problems, establish and track health objectives, and develop and evaluate public health policies and programs.

The **Youth Risk Behavior Surveillance System (YRBSS)** monitors priority health-risk behaviors and the prevalence of obesity and asthma among youth and young adults. The YRBSS includes a national school-based survey conducted CDC and state, territorial, tribal, and district surveys conducted by state, territorial, and local education and health agencies and tribal governments.

The **Geographic Variation Public Use File** provides per-capita costs for Medicaid fee-for-service beneficiaries that are standardized to remove regional variation in reimbursement rates. The data are available at the state and county levels, as well as for Hospital Referral Regions. The dataset was developed by the Centers for Medicare & Medicaid Services’ Office of Information Products and Data Analysis.

The June 2014 “**MACStats: Medicaid and CHIP Program Statistics**” from the Medicaid and CHIP Payment and Access Commission (MACPAC) provides data on Medicaid spending per enrollee for multiple categories of beneficiaries. It uses data from the **Medicaid Statistical Information System (MSIS)**, a database that includes

administrative data from all states on eligibility, enrollment, utilization and expenditures for Medicaid and the Children’s Health Insurance Program (CHIP).

“**State Employee Health Plan Spending**” is a report by the Pew Charitable Trusts and the John D. and Catherine T. MacArthur Foundation that compares state employee health insurance plans for 50 states across a variety of aspects, including premium costs, employee contributions and plan design. The report uses data from the **Milliman Atlas of Public Employer Health Plans**, a database of health insurance data from state and local governments, including information on premiums and benefit design. The database is built and maintained by the actuarial firm Milliman Inc.

The **Meaningful Use Scorecard** from the Office of the National Coordinator for Health Information Technology (ONC) includes 12 measures on health care providers and hospitals that meet criteria to receive Centers for Medicare & Medicaid Services (CMS) Electronic Health Care Record (EHR) Program incentive payments. It provides data by state, including the percent of physicians, physician assistants, and nurse practitioners who received an incentive payment, and the percent of hospitals received an incentive payment. The scorecard is based on data from the CMS EHR Program.

The **Area Health Resources Files (AHRF)**, a group of data resources published by the Health Resources and Services Administration. It includes state-level data on the number of nurse practitioners, which comes from the Centers for Medicare & Medicaid Services’ National Provider Identification File.

The **MA State/County Penetration** file, published by the Centers for Medicare & Medicaid Innovation, provides monthly state- and county-level data on the number of beneficiaries eligible and enrolled in Medicare Advantage, as well as a penetration rate.