

# Assessing State Variation in High-Need Adult Populations and Their Care Experiences

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## ABSTRACT

**ISSUE:** Patients with complex needs use more health care and incur greater costs of care than other patients, on average, but little is known about how these patient populations and their care experiences vary from state to state.

**GOAL:** Examine the composition of states' adult populations with high needs, defined as two or more chronic diseases and a functional limitation, and compare their care experiences across states.

**METHODS:** Analysis of the 2014 Behavioral Risk Factor Surveillance System (BRFSS).

**FINDINGS AND CONCLUSIONS:** The size of high-need populations differed across states, accounting for 8 percent or less of adults in Alaska, Colorado, Hawaii, Minnesota, and Utah, but 20 percent of adults in West Virginia. In all states, high-need adults were more likely to have health insurance and a usual source of care than other adults. Nonetheless, high-need adults faced significant barriers accessing needed care in many states. In Alabama, Georgia, Idaho, North Carolina, and South Carolina, for example, 40 percent or more of high-need adults reported not seeing a doctor when needed or not filling a prescription because of cost. Wide variation in states' performances suggests there may be opportunities to learn from the states that more comprehensively meet needs for sicker individuals.

## KEY TAKEAWAYS

- ▶ There are wide differences across states in whether high-need individuals — those with multiple chronic conditions and functional limitations — are connected to a regular care provider and in the barriers they face in receiving needed care.
- ▶ In all states, individuals with high needs are more likely than adults overall to face cost-related barriers and to be less satisfied with the care they receive.
- ▶ When high-need adults are insured, they are much more likely to have a usual source of care and much less likely to face cost-related barriers to care or report being dissatisfied with care they receive.



## BACKGROUND

States play important roles in the financing, regulation, and delivery of health care. Increasingly, states are working to improve the care for patients with complex and costly care needs as a way of achieving wider gains in health system performance. This brief is intended to inform state health system leaders and policymakers about the unique challenges faced by their residents with complex needs and provide comparative state benchmarks for improvement.

In two prior briefs, we examined national patterns of health care spending, use of services, and care experiences among adults with high needs. High need is defined as having multiple chronic diseases and a functional limitation in the ability to care for oneself (like bathing or dressing) or perform routine daily tasks (like shopping or preparing food).<sup>1,2</sup> We found that as a group, high-need adults use more health care services, have much higher total health care spending, face higher out-of-pocket costs, and more often report unmet medical needs than do adults overall. (See [High-Need Adults: A National Perspective](#).)

In this brief, we build on that analysis by comparing the makeup and care experiences of high-need adult populations in 50 states and the District of Columbia. Specifically, we examine differences in how states perform in the areas of access to care, barriers to receiving needed care, and satisfaction with received care for high-need individuals. Data come from the 2014 Behavioral Risk Factor Surveillance System (BRFSS).<sup>3</sup>

We find wide differences across states in whether high-need individuals are connected to a regular care provider and in the degree to which they face barriers to receiving needed care. In all states, individuals with high needs are more likely than adults overall to face cost-related barriers and to be less satisfied with the care they receive.

The [Appendices](#) provide detailed performance data for each state, including comparative data on adults with multiple chronic conditions but no functional limitations (not shown in the exhibits). Refer to the section [How This Study Was Conducted](#) for additional detail on cohort and performance measure definition.

## KEY FINDINGS

### More High-Need Adults Have Insurance and a Usual Source of Care Than Adults Overall, But Gaps Remain

Insurance protects people from high health care costs and is a strong predictor of having a usual source of care, which helps ensure people receive comprehensive, coordinated, and patient-centered care.<sup>4</sup> Both having insurance coverage and a usual source of care are especially important for people with high needs who are likely to face higher-than-average medical bills and may need extra help managing care from multiple providers.

### HIGH-NEED PATIENT POPULATIONS DIFFER ACROSS STATES

The size of states' high-need adult populations varied nearly threefold, accounting for 8 percent or less of adults in Alaska, Colorado, Hawaii, Minnesota, and Utah, up to 19 percent and 20 percent in Kentucky and West Virginia, respectively ([Appendix 1a](#)).

High-need adults tended to be older and more likely to be insured than the total adult population in almost every state. High-need individuals also tended to have lower incomes and were more likely to have health insurance through state Medicaid programs than other adults in the same state. Among the 38 states that asked BRFSS respondents about the type of coverage they had, Medicaid covered from 9 percent to 40 percent of high-need adults; this share tended to be higher in states that had expanded their Medicaid programs as of January 1, 2014.

State differences in the composition of chronically ill populations likely partly reflect underlying socioeconomic characteristics, highlighting the burden facing states as they define strategies to help care for adults with complex needs.

In 2014, the first year of the Affordable Care Act’s (ACA) major coverage expansions, uninsured rates were lower among high-need individuals than the total adult population (9% vs. 14%) nationally, and in all but three states and the District of Columbia (Appendix 1b).<sup>5</sup> Yet, there were big differences across states. In Texas and Wyoming, 18 percent of high-need individuals lacked coverage compared to 4 percent in Colorado, Hawaii, Iowa, Maryland, Massachusetts, and Vermont. Uninsured rates among high-need individuals were lower on average in states that expanded their Medicaid programs by January 1, 2014, under the ACA (Exhibit 1).

We observed similar patterns for having a usual source of care. High-need adults reported having a usual source of care at higher rates than the total adult population in every state. But many still lacked this vital connection: in 19 states and D.C., 10 percent or more of high-need adults

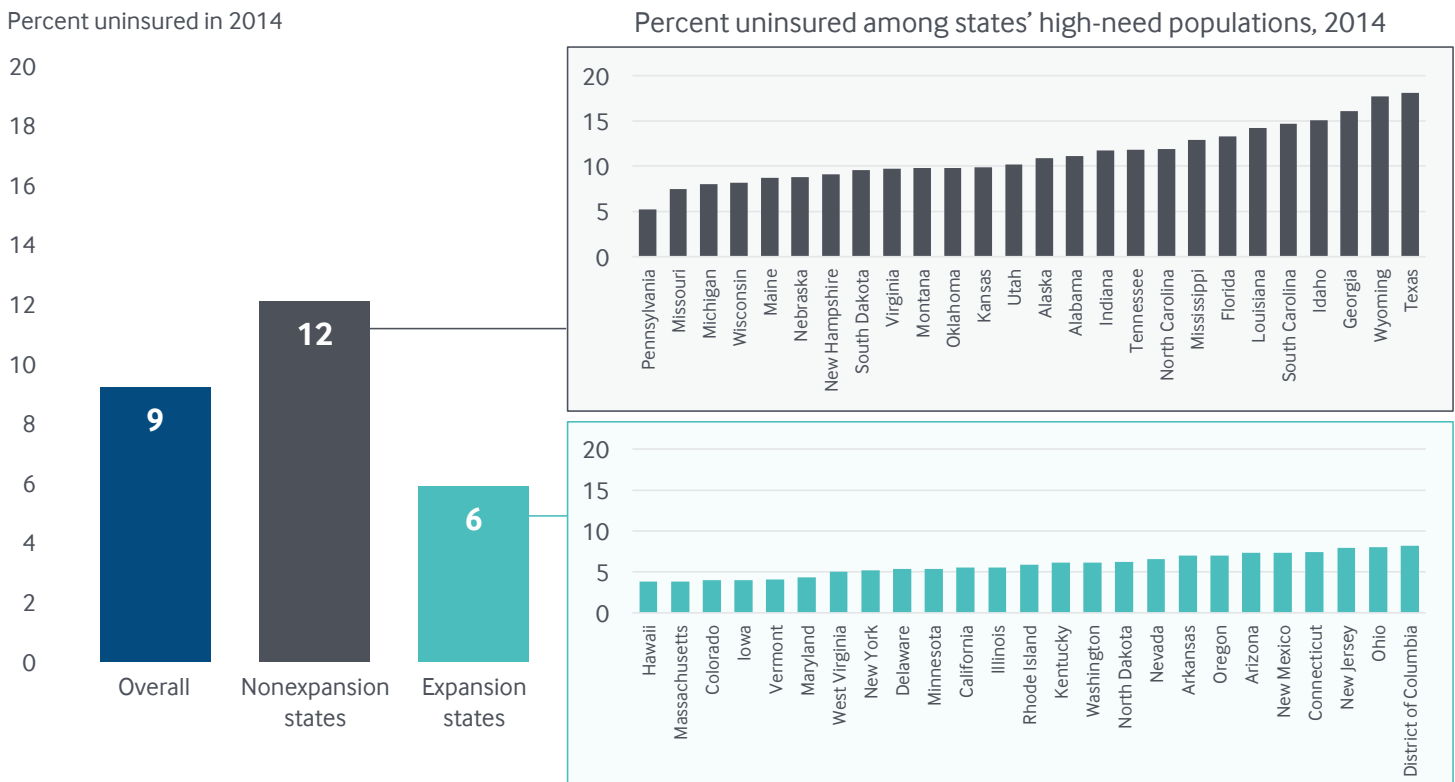
lacked a usual source of care compared to only 4 percent in Massachusetts and New York (Appendix 2a).

High-need adults visited a health care provider more often than adults overall in each of the 38 states where data was available (Appendix 2a).<sup>6</sup> While this is consistent with our findings at the national level, in that analysis and in this one, we were not able to assess the degree to which a higher number of visits reflected greater need for care and/or better access to care among high-need adults compared to other adults.

### High-Need Adults More Likely Than Others to Face Barriers Getting Needed Care

Although high-need adults are more likely to be insured, have a usual source of care, and visit health care providers than adults overall, they also more often reported going without or delaying needed care.

**Exhibit 1. Uninsured Rates for High-Need Adults Lower in Medicaid Expansion States Than in Nonexpansion States**



Notes: Medicaid expansion as of January 1, 2014.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

**Forgoing needed care because of cost.** The share of adults with high needs that reported they were unable to visit a doctor because of the cost varied more than twofold: from 15 percent in Iowa to more than 30 percent in Georgia, Idaho, Mississippi, and South Carolina (Exhibit 2). High-need adults also reported not filling a prescription for medication because of cost more often than other adults in every state where data are available,<sup>7</sup> again with an almost twofold difference in rates across states (Appendix 2b).

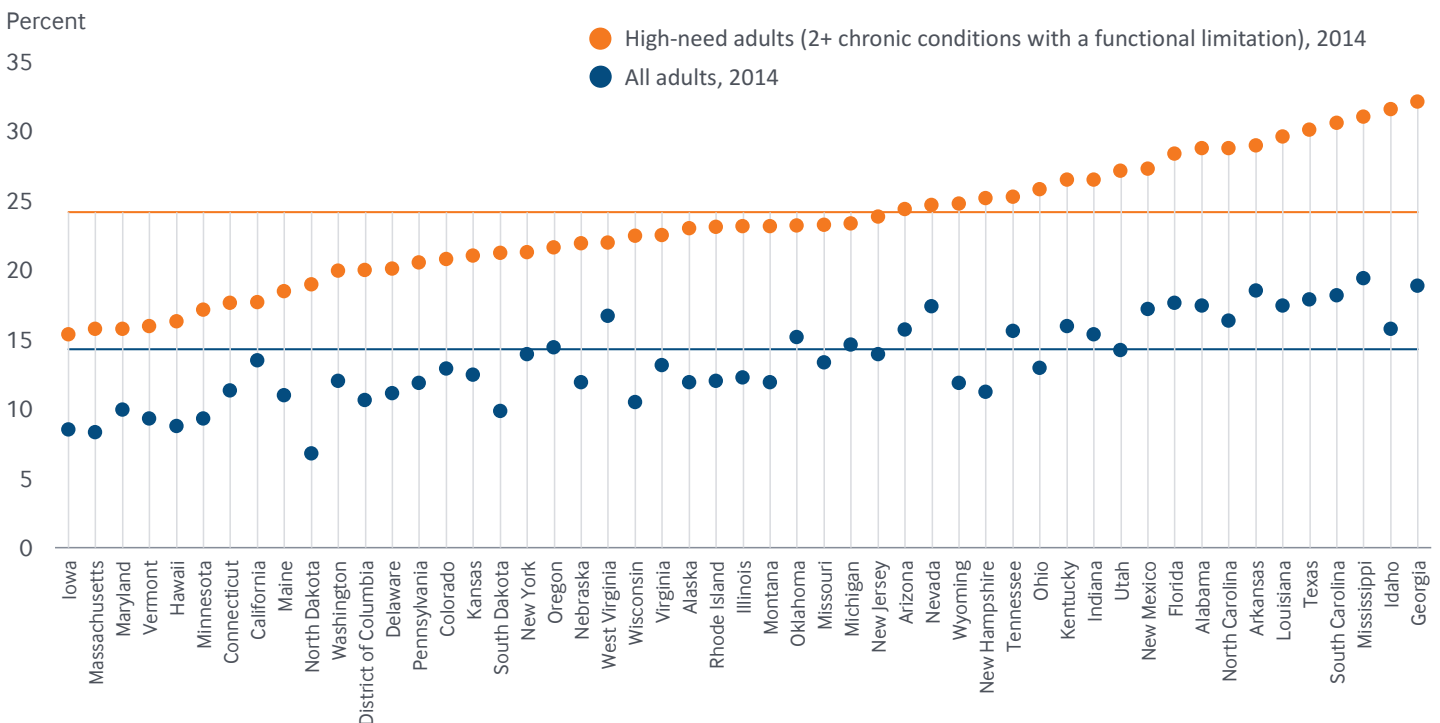
State-to-state differences were even starker when we looked at the share of high-need adults who reported forgoing physician care *and* prescription medicines because of cost. In Iowa, about 6 percent of high-need adults reported both types of unmet need compared to 17 percent in Idaho, Mississippi, and South Carolina — an almost threefold difference (Exhibit 3). High-need adults were less likely to face cost-related barriers to care in

states that expanded their Medicaid programs under the Affordable Care Act (Exhibit 4).<sup>8</sup>

**Delaying needed care.** Even when cost does not prohibit individuals from getting needed care, they may face other barriers that delay care. High-need adults reported delaying needed care for issues unrelated to cost at higher rates than did adults overall in every state (Exhibit 5). Approximately one-quarter of high-need adults reported delaying care in Minnesota and Nebraska, while 40 percent or more did so in Wisconsin, New Mexico, D.C., and Nevada.

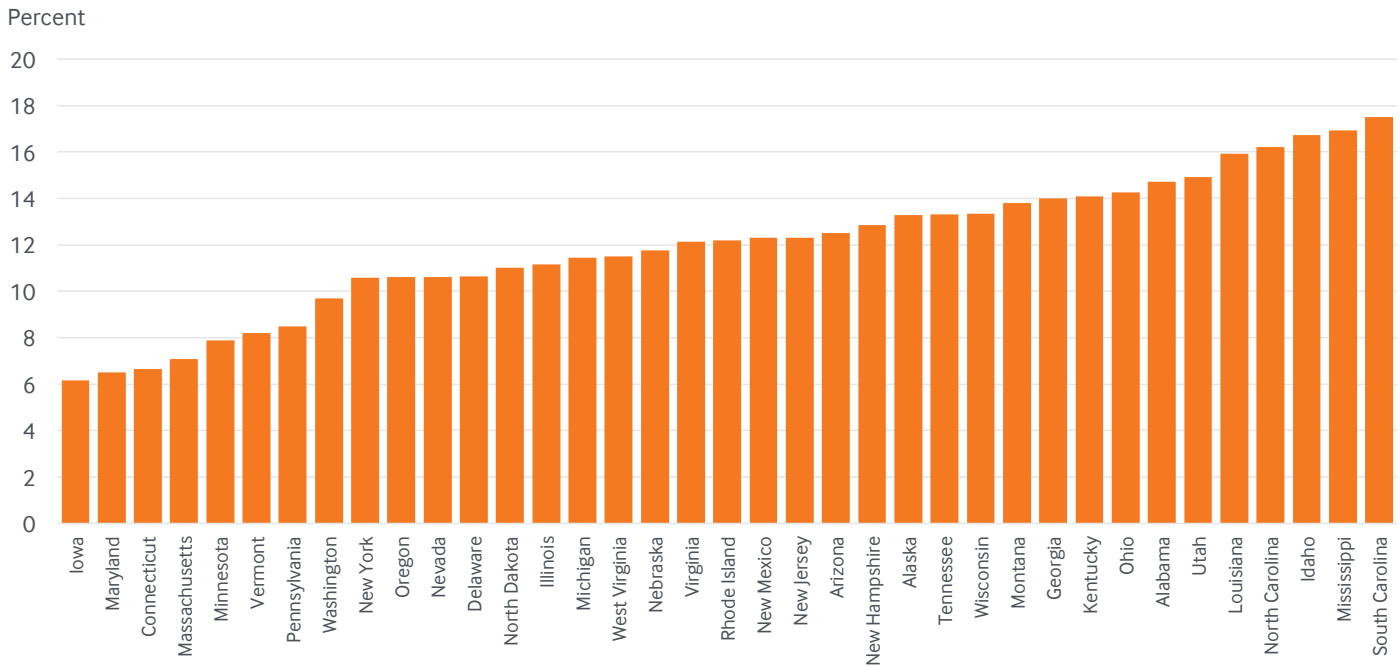
When asked why they delayed getting needed care, high-need adults were most likely to report lack of transportation (37% on average in the 38 states where this question was asked), which may reflect functional limitations as well as lower incomes. This was followed by not being able to get an appointment within a reasonable time frame (23%) (Exhibit 5 and Appendix 2c).

**Exhibit 2. High-Need Adults More Likely Than Adults Overall to Not See a Doctor Because of Costs, But Rates Vary**



Notes: States are arranged in rank order based on the state average for variable of interest (best to worst performing) for the high-need population. Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

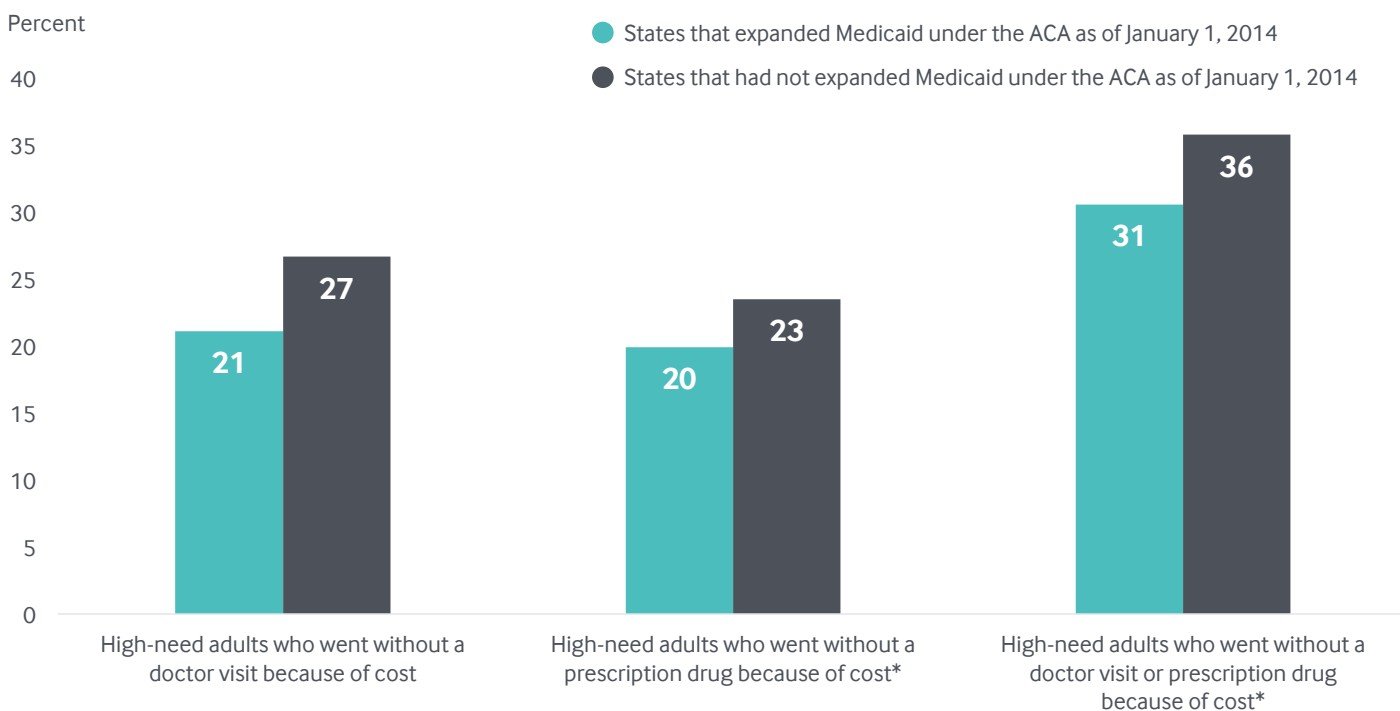
### Exhibit 3. Percent of High-Need Adults Who Went Without Physician Care and Prescription Drugs Because of Costs Varied Widely



Notes: States are arranged in rank order. Data not available for Arkansas, California, Colorado, District of Columbia, Florida, Hawaii, Indiana, Kansas, Maine, Missouri, Oklahoma, South Dakota, Texas, and Wyoming.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

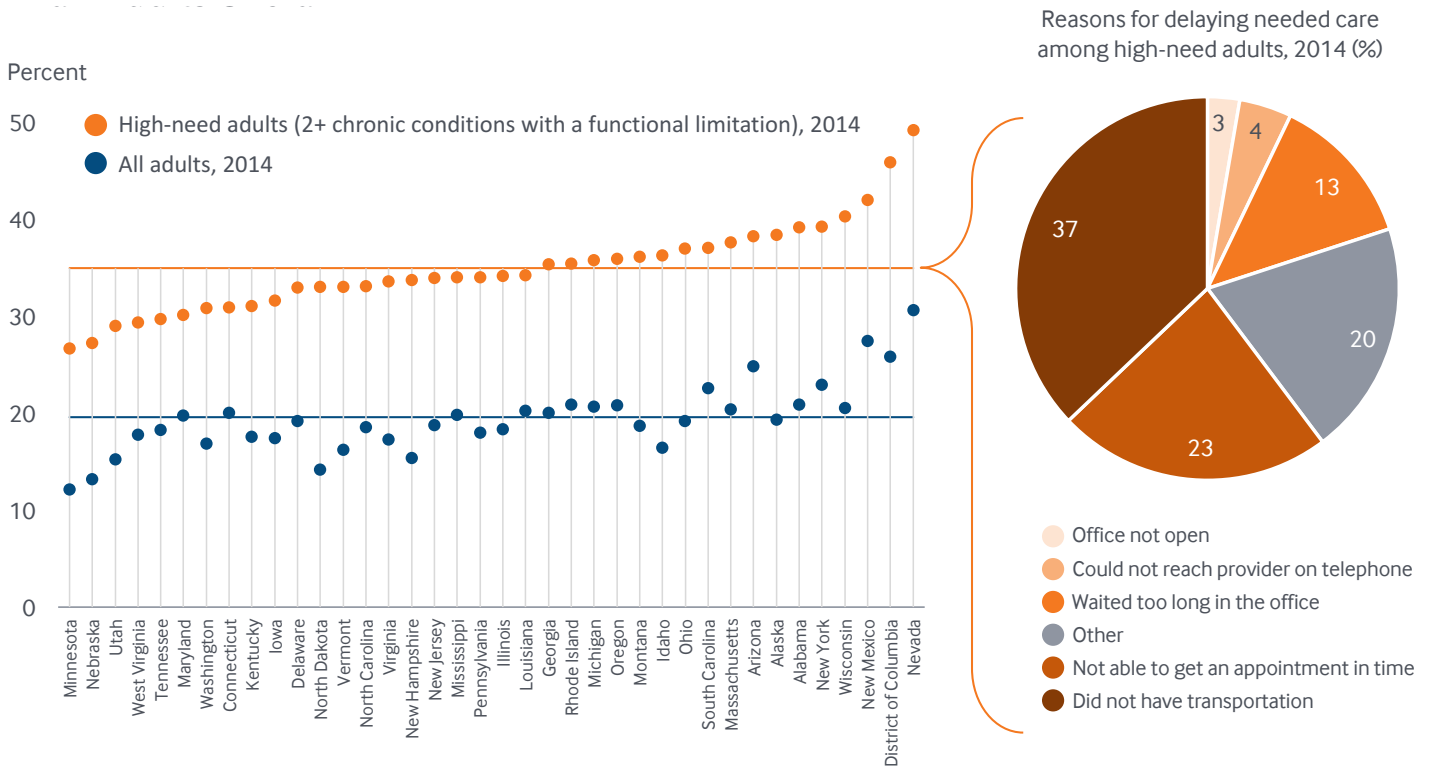
### Exhibit 4. High-Need Adults Less Likely to Have Unmet Medical Needs in States That Expanded Medicaid Under the ACA



\* Data not available for Arkansas, California, Colorado, District of Columbia, Florida, Hawaii, Indiana, Kansas, Maine, Missouri, Oklahoma, South Dakota, Texas, and Wyoming.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

### Exhibit 5. High-Need Adults Delayed Needed Care for Reasons Other Than Cost at Higher Rates Than Adults Overall



Notes: States are arranged in rank order based on the state average for variable of interest (best to worst performing) for the high-need population. Data not available for Arkansas, California, Colorado, Florida, Hawaii, Indiana, Kansas, Maine, Missouri, Oklahoma, South Dakota, Texas, and Wyoming.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

#### High-Need Adults Less Satisfied Than Others with Their Care

High-need adults use more health care services than other adults yet they also tend to perceive the care they receive less favorably.<sup>9</sup> In 2014, more than two of five high-need adults (43%) reported being only “somewhat” or “not at all” satisfied with the care they received in the past 12 months, compared to 35 percent of adults overall. This pattern of greater dissatisfaction among high-need adults was true in every state (Exhibit 6), although the share of high-need individuals who reported being dissatisfied varied. In Iowa, one-third of high-need adults (33%) were less than satisfied with their care, while in Nevada and Alaska more than half were (52% and 56%, respectively).

Overall, we found younger and middle-aged adults were more likely than older adults to report being less than satisfied with their care, a finding that is consistent

with other research.<sup>10</sup> This held true for the high-need population, where over half of adults ages 18 to 49 (56%) reported being not satisfied or only somewhat satisfied with their care in the past year. Only one-third of high-need adults age 65 and older expressed these sentiments (Exhibit 6).

#### Functional Limitations Place Additional Burdens on Adults Dealing with Chronic Illnesses

In our previous national analysis, we found that having a functional limitation in addition to multiple chronic conditions sets high-need adults apart from other adults when it comes to health care experiences. (See [High-Need Adults: A National Perspective](#) for more details.)

We find similar patterns at the state level. Notably, in all states, people with multiple chronic conditions and

no functional limitation were less likely than high-need adults to forgo a physician's care when needed because of cost ([Appendix 2b](#)). Adults with multiple chronic conditions also differed in how often they delayed care for reasons other than cost depending on whether they had functional limitations. Those without functional limitations delayed care less often than did those with functional limitations (20% vs. 35%). When adults with chronic conditions alone did delay care, they more often cited problems getting timely appointments than transportation barriers as the cause of the delay ([Appendix 2c](#)). These findings highlight the added burden that functional limitations place on people already managing chronic illnesses and reinforce the importance of tailoring interventions to meet the specific needs of particular populations.

## IMPLICATIONS

Adults with high needs — that is, those with multiple chronic conditions and functional limitations — face undue burdens accessing care. As a result, the sickest individuals — those most in need of continuous engagement with the delivery system — may fall through the cracks in our fragmented health system. Many factors contribute to these barriers to access: the availability and adequacy of insurance coverage and health care services and the way care is coordinated among providers, among other issues.

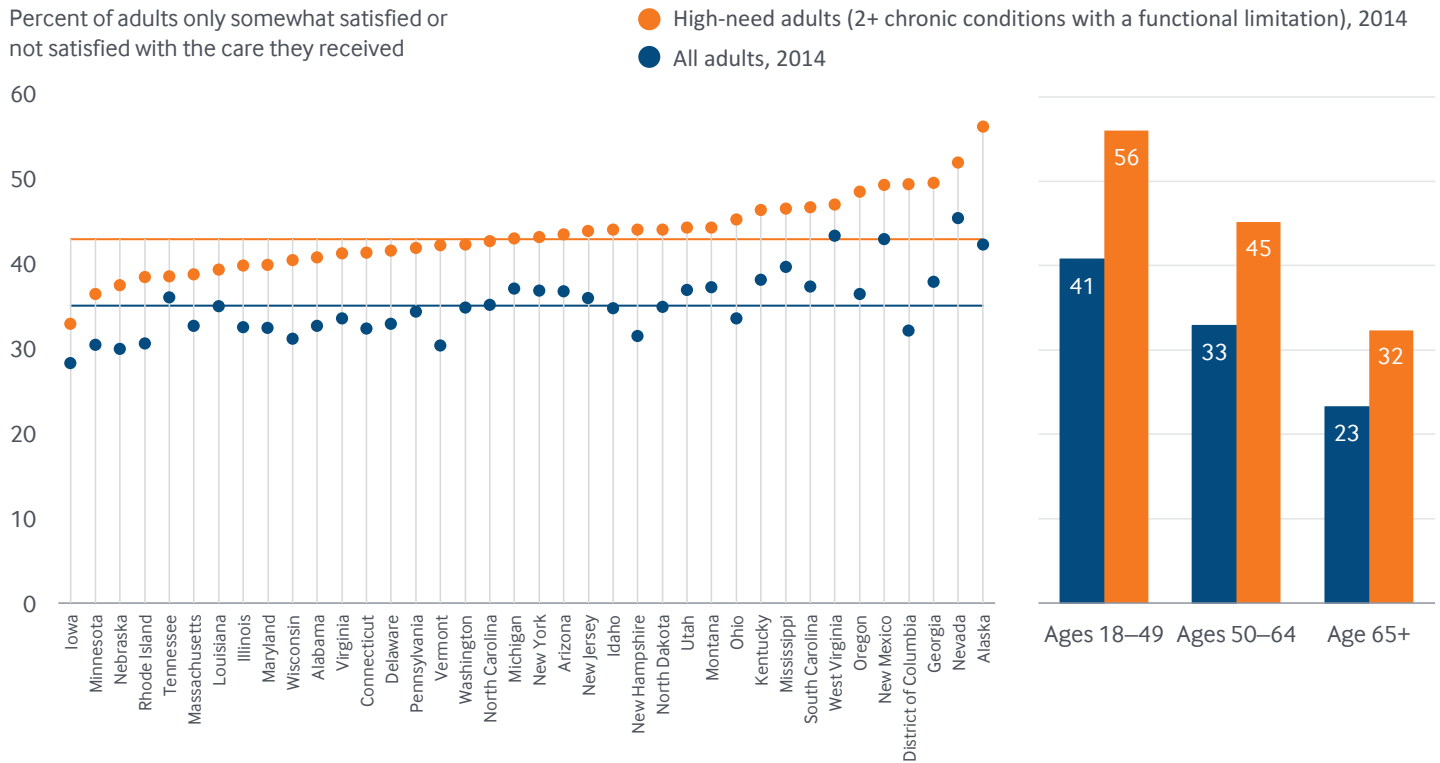
## HIGH-NEED ADULTS: A NATIONAL PERSPECTIVE

In two previous analyses, we examined adults with high needs from a national perspective. We defined high-need adults as those living at home who have multiple chronic diseases and a functional limitation in their ability to care for themselves or perform routine daily tasks. Using data from the 2009–2011 Medical Expenditure Panel Survey, we compared high-need adults' sociodemographic characteristics, health care spending, use of services, and experiences with care to those of adults with three or more chronic diseases but no functional limitations, and also to those of all adults living in the community. Adults with three or more diseases but no functional limitations served as an especially useful comparison because it allowed us to gauge the additive burden of a functional limitation to multiple chronic conditions.

We found that high-need adults differed notably from other adults. They were more likely to be older, female, white, and less educated, and have low income and be publicly insured. They had average annual health care expenditures that were nearly three times the average for adults with multiple chronic diseases and no functional limitations, and more than four times that of all U.S. adults. High-need adults also were more likely than other adults to remain high spenders over two years.

As reflected in their greater level of health care spending, high-need adults use health care services at higher rates than other adults. Rates of hospital use for high-need adults were more than twice those for adults with multiple chronic conditions only and three times the rate of the total adult population; they also visited the doctor about 50 percent more on average than adults with multiple chronic diseases only and nearly three times as often as adults overall, and they used more paid home health care. But despite this much higher level of spending and greater receipt of services, high-need adults were more likely than their counterparts without a functional limitation and adults in the total population to report having an unmet medical need and less likely to report having good patient–provider communication.

### Exhibit 6. High-Need Adults Less Satisfied with Care Than Are Other Adults



Notes: States are arranged in rank order based on the state average for variable of interest (best to worst performing) for the high-need population. Data not available for Arkansas, California, Colorado, Florida, Hawaii, Indiana, Kansas, Maine, Missouri, Oklahoma, South Dakota, Texas, and Wyoming.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

These findings underscore what’s at stake for high-need adults in the current political debate about the future of health care coverage. When high-need adults are insured, they are much more likely to have a usual source of care and much less likely to face cost-related barriers to care or report being dissatisfied with the care they receive (Exhibit 7). Because Medicaid is an important safety net for high-need individuals, covering one in six high-need individuals across the country, cuts to the program could be particularly detrimental to assuring adequate care for those with the greatest need.

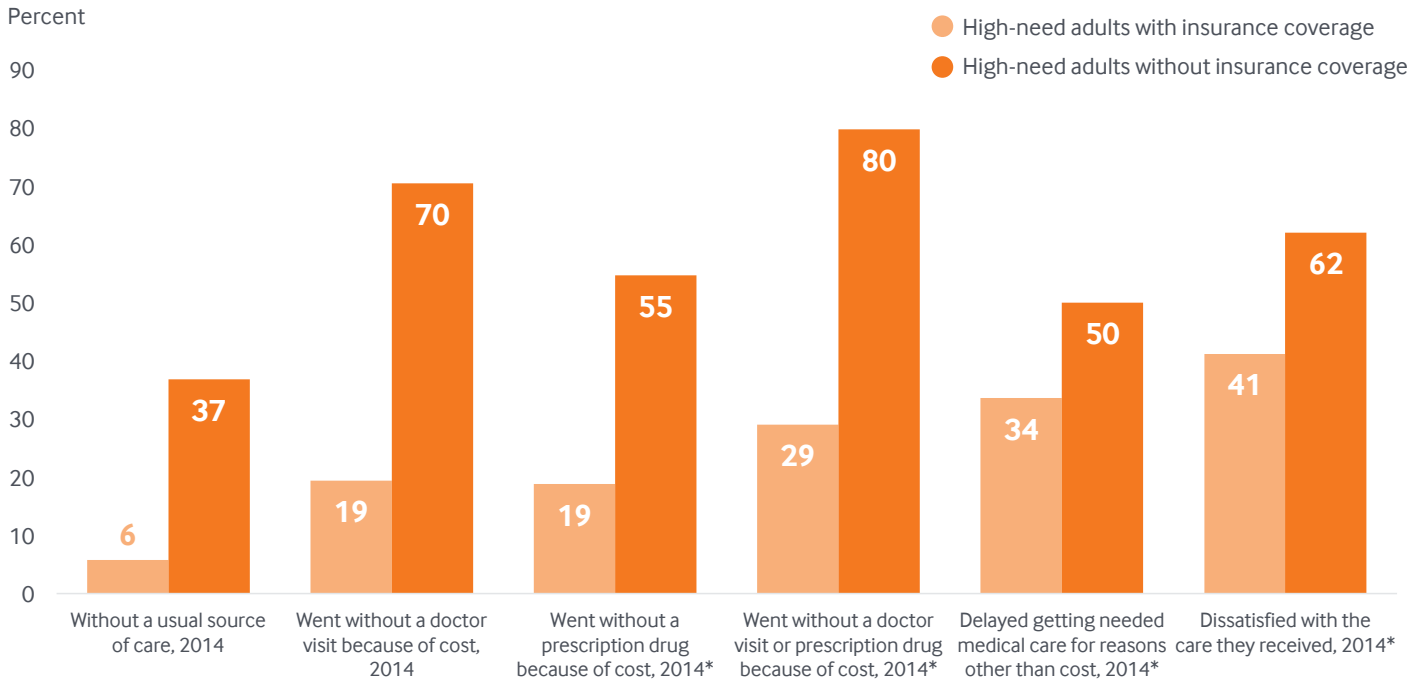
Our data also show opportunities to better serve these clinically complex patients. In fact, several states are developing and implementing innovative programs in an effort to improve care for high-need patients.<sup>11</sup> For example, Colorado, Oregon, and Minnesota have

supported the creation of Medicaid accountable care organizations that are fostering collaboration among medical and behavioral health providers and community organizations to meet social and health care needs more holistically.<sup>12</sup>

These findings reinforce previous research that shows that having a functional limitation in combination with multiple chronic diseases imposes a greater burden on patients, as well as greater health care use and higher spending, than does having multiple chronic diseases alone.<sup>15</sup> State policymakers and health system leaders can use these data to consider the unique challenges facing their states’ high-need patients and to design and implement care models aimed at delivering more efficient, patient-centered care for the sickest and costliest who may benefit the most from such improvements.



### Exhibit 7. High-Need Adults with Insurance Coverage Are Much More Likely to Have a Usual Source of Care Than Those Uninsured



\* National estimates do not include survey respondents from Arkansas, California, Colorado, District of Columbia, Florida, Hawaii, Indiana, Kansas, Maine, Missouri, Oklahoma, South Dakota, Texas, or Wyoming, as these questions were not asked in all states.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

## HOW THIS STUDY WAS CONDUCTED

We conducted a retrospective cohort analysis of data from the 2014 Behavioral Risk Factor Surveillance System (BRFSS) survey. BRFSS is representative of the noninstitutionalized civilian adult population in each state.<sup>14</sup>

Following the general approach used in our previous analysis and prior research,<sup>15</sup> BRFSS respondents were classified into three mutually exclusive cohorts: those with multiple chronic conditions and no functional limitations; those with multiple chronic conditions and a functional limitation — referred to as “high-need” adults; and the total adult population. In previous analysis, we defined “multiple chronic conditions” to mean three or more chronic conditions including high blood pressure and high cholesterol. Since the 2014 BRFSS survey did not ask respondents about high blood pressure and high cholesterol, we defined multiple chronic conditions to mean two or more chronic conditions for the purposes of this analysis.

The presence of chronic conditions was based on respondent self-report. Respondents were asked if a doctor ever told them they had the following common chronic illnesses or related events: coronary heart disease; acute myocardial infarction; stroke; diabetes; asthma (we only included those who reported currently having asthma and excluded those reporting “ever told” they had asthma); chronic obstructive pulmonary disease; skin or other forms of cancer; arthritis (which could include: osteoarthritis, rheumatoid arthritis, gout, lupus, or fibromyalgia); kidney disease (excluding kidney stones, bladder infection, or incontinence); or depression. Respondents also were asked about height and weight; given the illness burden associated with obesity, we included respondents with a body mass index (BMI) greater than or equal to 35 as having a chronic condition.<sup>16</sup>

Functional limitations also were assigned based on respondent self-report. Respondents were considered to have a functional limitation if they reported difficulty walking or climbing stairs; dressing or bathing; or doing errands (such as shopping or visiting a doctor’s office) alone.

We defined adults with two or more chronic diseases and a functional limitation as “high need,” and compared this cohort to adults with two or more chronic diseases and no functional limitations and the total adult population on sociodemographic characteristics (e.g., age distribution, race/ethnicity, income, insurance coverage status); health care utilization (e.g., self-reported number of doctor visits during the year).

**Limitations.** All of the data reported in the BRFSS are based on respondent self-report and therefore subject to recall bias. Additionally, those who face financial or other barriers to care, or who are less likely to seek care when medically needed, may be underrepresented in counts of chronic diseases because they have not had the opportunity to be medically evaluated and diagnosed. Chronic conditions may be undercounted in this analysis in comparison to our previous analysis of the Medical Expenditure Panel Survey, which considered a larger number of chronic conditions based on diagnosis codes.

All authors contributed to project conception and data interpretation. Data analysis was conducted by David Radley, senior study director at Westat, under a grant from the Commonwealth Fund. This brief builds on a prior analysis of Medical Expenditure Panel Survey (MEPS) data, conducted by Claudia A. Salzberg under a grant to the Johns Hopkins Bloomberg School of Public Health.

## NOTES

- <sup>1</sup> S. L. Hayes, C. A. Salzberg, D. McCarthy, D. C. Radley, M. K. Abrams, T. Shah, and G. F. Anderson, *High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care — A Population-Based Comparison of Demographics, Health Care Use, and Expenditures* (The Commonwealth Fund, Aug. 2016).
- <sup>2</sup> C. A. Salzberg, S. L. Hayes, D. McCarthy, D. C. Radley, M. K. Abrams, T. Shah, and G. F. Anderson, *Health System Performance for the High-Need Patient: A Look at Access to Care and Patient Care Experiences* (The Commonwealth Fund, Aug. 2016).
- <sup>3</sup> This analysis is based primarily on the data in the Behavioral Risk Factor Surveillance System (BRFSS), while the first two briefs in the series were based on data from the Medical Expenditure Panel Survey (MEPS). BRFSS and MEPS differ in the breadth with which they capture the presence of chronic illness and functional limitations among respondents. Relative to our previous analyses using MEPS, this BRFSS-based analyses identifies fewer individuals with two or more chronic illnesses and more individuals with functional limitations. The BRFSS does not capture any information regarding health care costs or spending.
- <sup>4</sup> B. Starfield, L. Shi, and J. Macinko, “Contribution of Primary Care to Health Systems and Health,” *Milbank Quarterly*, Sept. 2005 83(3):457–502.
- <sup>5</sup> The share of high-need individuals without health insurance was higher in this analysis of BRFSS data (9%) than in our previous analyses of this population based on MEPS data (5%). It is unclear exactly why but several factors may contribute. The gap could reflect differences in the composition of the high-need cohorts because of survey design. Our BRFSS-based high-need cohort differs from our MEPS-based cohort in that fewer individuals have multiple chronic illnesses and more have functional limitations; the BRFSS high-need cohort is also younger than the MEPS high-need cohort. These differences suggest that the BRFSS cohort may be less likely to receive Medicare benefits and may also represent a broader segment of the population, giving us more opportunities to observe uninsurance.
- <sup>6</sup> Data available in 38 states only; not available for Arkansas, California, Colorado, Florida, Hawaii, Indiana, Kansas, Maine, Missouri, Oklahoma, South Dakota, Texas, and Wyoming.
- <sup>7</sup> Ibid.
- <sup>8</sup> We also looked at the frequency with which high-need individuals faced cost barriers across states for the 2013 data year, before the ACA’s coverage expansions, and found similar patterns of state variation as in 2014. The fact that high-need individuals tended to face fewer cost barriers in Medicaid expansion states, even before expansion took place, could reflect pre-existing differences in the scope of states’ Medicaid programs — see “Medicaid Policies by State” (Exhibit 27) in: C. Schoen, D. C. Radley, P. Riley, J. A. Lippa, J. Berenson, C. Dermody, and A. Shih, *Health Care in the Two Americas: Findings from the Scorecard on State Health System Performance for Low-Income Populations, 2013* (The Commonwealth Fund, Sept. 2013).
- <sup>9</sup> C. A. Salzberg, S. L. Hayes, D. McCarthy, D. C. Radley, M. K. Abrams, T. Shah, and G. F. Anderson, *Health System Performance for the High-Need Patient: A Look at Access to Care and Patient Care Experiences* (The Commonwealth Fund, Aug. 2016).
- <sup>10</sup> C. K. Jaipaul and G. E. Rosenthal, “Are Older Patients More Satisfied with Hospital Care Than Younger Patients?” *Journal of General Internal Medicine*, Jan. 2003 18(1):23–30.
- <sup>11</sup> See, for example: S. Klein, M. Hostetter, and D. McCarthy, *The “One Care” Program at Commonwealth Care Alliance: Partnering with Medicare and Medicaid to Improve Care for Nonelderly Dual Eligibles* (The Commonwealth Fund, Dec. 2016).
- <sup>12</sup> M. Hostetter, S. Klein, and D. McCarthy, *Hennepin Health: A Care Delivery Paradigm for New Medicaid Beneficiaries* (The Commonwealth Fund, Oct. 2016); and S. Klein, D. McCarthy, and A. Cohen, *Health Share of Oregon: A Community-Oriented Approach to Accountable Care for Medicaid Beneficiaries* (The Commonwealth Fund, Oct. 2014).

- <sup>13</sup> S. L. Hayes, C. A. Salzberg, D. McCarthy, D. C. Radley, M. K. Abrams, T. Shah, and G. F. Anderson, *High-Need, High-Cost Patients: Who Are They and How Do They Use Health Care — A Population-Based Comparison of Demographics, Health Care Use, and Expenditures* (The Commonwealth Fund, Aug. 2016); see also: S. M. Koroukian, N. Schiltz, D. F. Warner et al., “Combinations of Chronic Conditions, Functional Limitations, and Geriatric Syndromes That Predict Health Outcomes,” *Journal of General Internal Medicine*, June 2016 31(6):630–37.
- <sup>14</sup> Centers for Disease Control and Prevention, *Overview: BRFSS 2013* (CDC, Aug. 15, 2014).
- <sup>15</sup> G. F. Anderson and J. R. Knickman, “Changing the Chronic Care System to Meet People’s Needs,” *Health Affairs*, Nov./Dec. 2001 20(6):146–60.
- <sup>16</sup> A. Talwalkar and F. McCarty, *Characteristics of Physician Office Visits for Obesity by Adults Aged 20 and Over: United States, 2012* (National Center for Health Statistics, March 2016); and National Heart, Lung, and Blood Institute, *Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults* (National Institutes of Health, 1998).

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**David C. Radley, Ph.D., M.P.H.**, is senior scientist for the Commonwealth Fund's Tracking Health System Performance initiative, working on the Scorecard project. Dr. Radley and his team develop national, state, and substate regional analyses on health care system performance and related insurance and care system market structure analyses. David is also a senior study director at Westat, a research firm that supports the Scorecard project. Previously, he was associate in domestic health policy for Abt Associates, with responsibility for a number of projects related to measuring long-term care quality and evaluating health information technology initiatives. Dr. Radley received his Ph.D. in health policy from the Dartmouth Institute for Health Policy and Clinical Practice, and holds a B.A. from Syracuse University and an M.P.H. from Yale University.

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*Editorial support was provided by Deborah Lorber.*

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### About the Commonwealth Fund

The mission of the Commonwealth Fund is to promote a high performance health care system. The Fund carries out this mandate by supporting independent research on health care issues and making grants to improve health care practice and policy. Support for this research was provided by the Commonwealth Fund. The views presented here are those of the authors and not necessarily those of the Commonwealth Fund or its directors, officers, or staff.

## Appendix 1a. Socioeconomic Characteristics by Population Segment and State: Age

	Share of total population		Ages 18–49			Ages 50–64			Age 65+		
	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need
<b>United States</b>	<b>17%</b>	<b>12%</b>	<b>54%</b>	<b>32%</b>	<b>23%</b>	<b>26%</b>	<b>32%</b>	<b>38%</b>	<b>19%</b>	<b>36%</b>	<b>39%</b>
Alabama	19%	18%	53%	35%	26%	27%	29%	41%	20%	36%	33%
Alaska	15%	8%	58%	36%	31%	29%	38%	40%	13%	25%	29%
Arizona	18%	12%	55%	33%	24%	24%	29%	37%	21%	39%	38%
Arkansas	17%	18%	54%	33%	28%	26%	31%	39%	21%	36%	33%
California	14%	9%	57%	31%	19%	25%	32%	40%	18%	37%	40%
Colorado	15%	8%	57%	30%	21%	26%	35%	39%	17%	35%	40%
Connecticut	18%	10%	52%	27%	25%	28%	33%	36%	21%	40%	39%
Delaware	19%	12%	51%	29%	21%	27%	32%	39%	21%	40%	40%
District of Columbia	14%	10%	63%	39%	31%	21%	30%	39%	15%	31%	30%
Florida	17%	13%	49%	24%	21%	27%	30%	37%	24%	45%	41%
Georgia	16%	13%	57%	36%	24%	26%	30%	41%	17%	34%	35%
Hawaii	17%	7%	53%	31%	26%	26%	35%	34%	21%	34%	40%
Idaho	18%	9%	55%	34%	31%	26%	29%	29%	20%	37%	39%
Illinois	17%	9%	54%	28%	22%	27%	37%	37%	19%	34%	41%
Indiana	19%	13%	54%	36%	29%	27%	32%	37%	19%	33%	34%
Iowa	18%	10%	52%	30%	22%	27%	31%	34%	21%	39%	44%
Kansas	17%	11%	55%	34%	20%	26%	32%	38%	19%	34%	42%
Kentucky	19%	19%	54%	38%	32%	26%	30%	37%	20%	32%	31%
Louisiana	16%	15%	55%	36%	25%	26%	30%	39%	19%	33%	36%
Maine	23%	11%	47%	30%	24%	30%	32%	39%	23%	38%	36%
Maryland	17%	9%	54%	31%	24%	27%	34%	36%	18%	34%	40%
Massachusetts	18%	11%	53%	30%	25%	27%	34%	37%	20%	36%	38%
Michigan	20%	13%	52%	31%	23%	28%	33%	38%	20%	36%	39%
Minnesota	16%	8%	53%	31%	20%	28%	33%	37%	19%	35%	43%
Mississippi	17%	16%	53%	35%	25%	27%	32%	41%	20%	33%	34%
Missouri	19%	13%	53%	35%	22%	27%	29%	40%	20%	36%	38%
Montana	18%	12%	50%	33%	24%	28%	30%	36%	22%	38%	41%
Nebraska	17%	9%	54%	30%	21%	26%	34%	33%	20%	36%	46%
Nevada	16%	10%	55%	32%	24%	26%	28%	33%	19%	39%	43%
New Hampshire	18%	10%	50%	29%	28%	30%	35%	33%	20%	36%	39%
New Jersey	15%	9%	53%	29%	20%	28%	32%	36%	20%	39%	44%
New Mexico	17%	13%	53%	35%	24%	27%	32%	36%	20%	33%	40%
New York	15%	11%	55%	32%	21%	26%	32%	36%	20%	36%	43%
North Carolina	16%	13%	55%	32%	22%	25%	31%	39%	20%	37%	39%
North Dakota	17%	9%	55%	33%	18%	26%	30%	36%	20%	37%	46%
Ohio	19%	13%	52%	31%	26%	28%	32%	37%	21%	37%	36%
Oklahoma	17%	16%	54%	37%	24%	26%	31%	38%	20%	32%	39%
Oregon	20%	12%	53%	35%	27%	27%	29%	34%	21%	36%	40%
Pennsylvania	20%	11%	51%	31%	23%	28%	32%	38%	22%	37%	39%
Rhode Island	18%	11%	53%	29%	23%	27%	33%	36%	20%	38%	41%
South Carolina	18%	14%	53%	31%	23%	26%	30%	40%	21%	39%	37%
South Dakota	19%	9%	52%	31%	19%	28%	30%	36%	21%	38%	45%
Tennessee	17%	17%	54%	34%	28%	26%	31%	39%	20%	35%	33%
Texas	12%	11%	59%	33%	21%	25%	34%	41%	16%	33%	39%
Utah	16%	8%	64%	40%	28%	21%	30%	33%	15%	30%	39%
Vermont	20%	10%	49%	27%	29%	30%	35%	33%	21%	37%	38%
Virginia	17%	10%	55%	32%	23%	26%	33%	39%	18%	35%	39%
Washington	18%	11%	55%	33%	27%	27%	32%	35%	19%	36%	38%
West Virginia	22%	20%	50%	37%	25%	28%	29%	39%	23%	34%	36%
Wisconsin	17%	10%	53%	30%	25%	27%	33%	38%	20%	37%	37%
Wyoming	18%	10%	53%	32%	28%	28%	34%	31%	19%	34%	41%

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

## Appendix 1b. Socioeconomic Characteristics by Population Segment and State: Gender, Income, and Insurance Coverage

	Share of total population		Gender			Income			Insurance coverage		
	Multiple chronic	High need	Female			< 200% FPL			Uninsured		
			Total	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need
<b>United States</b>	<b>17%</b>	<b>12%</b>	<b>51%</b>	<b>55%</b>	<b>61%</b>	<b>22%</b>	<b>22%</b>	<b>39%</b>	<b>14%</b>	<b>9%</b>	<b>9%</b>
Alabama	19%	18%	52%	54%	63%	26%	25%	44%	14%	10%	11%
Alaska	15%	8%	48%	57%	61%	17%	17%	39%	15%	10%	11%
Arizona	18%	12%	51%	56%	61%	26%	24%	36%	14%	8%	7%
Arkansas	17%	18%	51%	54%	57%	26%	25%	42%	16%	10%	7%
California	14%	9%	50%	57%	63%	25%	23%	33%	14%	8%	6%
Colorado	15%	8%	50%	55%	62%	16%	16%	29%	13%	7%	4%
Connecticut	18%	10%	51%	58%	65%	18%	15%	35%	9%	4%	7%
Delaware	19%	12%	52%	58%	59%	23%	23%	37%	9%	3%	5%
District of Columbia	14%	10%	53%	58%	59%	18%	18%	47%	8%	7%	8%
Florida	17%	13%	52%	55%	61%	24%	26%	38%	18%	11%	13%
Georgia	16%	13%	52%	53%	63%	24%	24%	43%	21%	16%	16%
Hawaii	17%	7%	50%	51%	60%	17%	15%	25%	8%	5%	4%
Idaho	18%	9%	51%	57%	64%	20%	22%	37%	17%	15%	15%
Illinois	17%	9%	52%	61%	65%	20%	18%	34%	11%	6%	5%
Indiana	19%	13%	51%	55%	64%	23%	23%	42%	15%	11%	12%
Iowa	18%	10%	51%	55%	61%	15%	15%	32%	8%	6%	4%
Kansas	17%	11%	51%	55%	62%	18%	18%	33%	14%	11%	10%
Kentucky	19%	19%	51%	55%	56%	28%	31%	49%	10%	8%	6%
Louisiana	16%	15%	52%	54%	61%	25%	28%	39%	19%	16%	14%
Maine	23%	11%	52%	53%	61%	22%	24%	46%	11%	10%	9%
Maryland	17%	9%	52%	53%	66%	19%	20%	38%	9%	4%	4%
Massachusetts	18%	11%	52%	57%	60%	19%	20%	46%	5%	3%	4%
Michigan	20%	13%	51%	55%	58%	19%	21%	33%	10%	6%	8%
Minnesota	16%	8%	51%	55%	58%	14%	15%	31%	7%	5%	5%
Mississippi	17%	16%	52%	53%	64%	26%	30%	39%	19%	14%	13%
Missouri	19%	13%	52%	54%	65%	20%	21%	39%	12%	8%	8%
Montana	18%	12%	50%	56%	61%	20%	22%	34%	13%	11%	10%
Nebraska	17%	9%	51%	54%	59%	19%	18%	35%	12%	9%	9%
Nevada	16%	10%	50%	54%	57%	25%	23%	34%	17%	9%	7%
New Hampshire	18%	10%	51%	55%	62%	17%	16%	41%	11%	8%	9%
New Jersey	15%	9%	52%	53%	58%	20%	20%	35%	12%	6%	8%
New Mexico	17%	13%	51%	56%	60%	31%	29%	43%	15%	9%	7%
New York	15%	11%	52%	55%	60%	26%	24%	48%	12%	7%	5%
North Carolina	16%	13%	52%	57%	61%	23%	22%	41%	16%	12%	12%
North Dakota	17%	9%	49%	52%	59%	16%	19%	36%	9%	5%	6%
Ohio	19%	13%	52%	56%	63%	21%	25%	43%	10%	8%	8%
Oklahoma	17%	16%	51%	55%	60%	24%	23%	38%	14%	9%	10%
Oregon	20%	12%	51%	56%	64%	23%	23%	42%	11%	6%	7%
Pennsylvania	20%	11%	52%	55%	61%	21%	21%	43%	10%	8%	5%
Rhode Island	18%	11%	52%	56%	60%	21%	20%	38%	8%	5%	6%
South Carolina	18%	14%	52%	55%	63%	24%	25%	40%	17%	11%	15%
South Dakota	19%	9%	50%	50%	58%	18%	18%	30%	10%	9%	10%
Tennessee	17%	17%	52%	57%	60%	26%	25%	43%	14%	11%	12%
Texas	12%	11%	51%	56%	61%	25%	20%	38%	25%	17%	18%
Utah	16%	8%	50%	56%	66%	16%	17%	25%	14%	9%	10%
Vermont	20%	10%	51%	56%	61%	16%	19%	37%	7%	5%	4%
Virginia	17%	10%	52%	55%	61%	19%	18%	39%	13%	12%	10%
Washington	18%	11%	51%	56%	61%	18%	18%	34%	10%	6%	6%
West Virginia	22%	20%	51%	55%	58%	29%	30%	51%	10%	8%	5%
Wisconsin	17%	10%	51%	53%	60%	17%	18%	32%	8%	5%	8%
Wyoming	18%	10%	49%	48%	59%	18%	19%	36%	15%	13%	18%

Note: FPL = federal poverty level.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

## Appendix 1c. Socioeconomic Characteristics by Population Segment and State: Insurance Coverage Type

	Share of total population		Medicare			Medicaid			Employer-sponsored			Individual market		
	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need
<b>United States</b>	<b>17%</b>	<b>12%</b>	<b>20%</b>	<b>29%</b>	<b>44%</b>	<b>8%</b>	<b>8%</b>	<b>16%</b>	<b>54%</b>	<b>46%</b>	<b>22%</b>	<b>11%</b>	<b>10%</b>	<b>9%</b>
Alabama	19%	18%	18%	26%	38%	7%	6%	15%	52%	46%	24%	15%	15%	13%
Alaska	15%	8%	11%	17%	27%	6%	6%	17%	56%	53%	24%	6%	—	—
Arizona	18%	12%	21%	34%	44%	9%	8%	15%	47%	37%	17%	10%	8%	8%
Arkansas	17%	18%	—	—	—	—	—	—	—	—	—	—	—	—
California	14%	9%	—	—	—	—	—	—	—	—	—	—	—	—
Colorado	15%	8%	—	—	—	—	—	—	—	—	—	—	—	—
Connecticut	18%	10%	18%	32%	39%	10%	10%	19%	56%	46%	28%	10%	7%	9%
Delaware	19%	12%	24%	35%	51%	9%	10%	13%	54%	43%	23%	8%	5%	7%
District of Columbia	14%	10%	16%	24%	38%	18%	20%	40%	51%	43%	10%	8%	4%	—
Florida	17%	13%	—	—	—	—	—	—	—	—	—	—	—	—
Georgia	16%	13%	22%	33%	54%	5%	—	9%	54%	46%	21%	12%	9%	7%
Hawaii	17%	7%	—	—	—	—	—	—	—	—	—	—	—	—
Idaho	18%	9%	18%	32%	43%	4%	5%	11%	53%	42%	23%	18%	13%	12%
Illinois	17%	9%	20%	29%	42%	8%	9%	18%	57%	50%	21%	10%	6%	9%
Indiana	19%	13%	—	—	—	—	—	—	—	—	—	—	—	—
Iowa	18%	10%	21%	33%	49%	7%	7%	16%	57%	46%	22%	13%	10%	9%
Kansas	17%	11%	—	—	—	—	—	—	—	—	—	—	—	—
Kentucky	19%	19%	25%	31%	48%	11%	11%	19%	47%	41%	19%	10%	9%	7%
Louisiana	16%	15%	22%	30%	48%	8%	8%	14%	51%	44%	20%	12%	12%	8%
Maine	23%	11%	—	—	—	—	—	—	—	—	—	—	—	—
Maryland	17%	9%	15%	23%	35%	5%	4%	9%	66%	61%	46%	9%	8%	5%
Massachusetts	18%	11%	29%	41%	65%	11%	11%	17%	50%	41%	12%	5%	3%	2%
Michigan	20%	13%	18%	26%	41%	9%	9%	16%	56%	47%	28%	12%	11%	8%
Minnesota	16%	8%	16%	24%	40%	7%	8%	17%	58%	48%	23%	14%	14%	11%
Mississippi	17%	16%	27%	36%	51%	8%	9%	15%	48%	40%	21%	9%	7%	6%
Missouri	19%	13%	—	—	—	—	—	—	—	—	—	—	—	—
Montana	18%	12%	21%	32%	49%	5%	4%	12%	47%	38%	15%	15%	13%	9%
Nebraska	17%	9%	19%	31%	51%	4%	3%	9%	57%	49%	22%	13%	11%	10%
Nevada	16%	10%	18%	33%	42%	9%	7%	17%	54%	38%	20%	9%	6%	8%
New Hampshire	18%	10%	19%	31%	48%	5%	5%	16%	59%	48%	23%	10%	8%	5%
New Jersey	15%	9%	21%	31%	51%	5%	4%	11%	60%	52%	23%	10%	9%	8%
New Mexico	17%	13%	20%	26%	41%	14%	13%	22%	42%	39%	17%	10%	9%	6%
New York	15%	11%	19%	24%	39%	14%	15%	22%	53%	48%	23%	10%	8%	9%
North Carolina	16%	13%	23%	36%	49%	6%	4%	13%	49%	41%	17%	14%	13%	12%
North Dakota	17%	9%	16%	26%	42%	4%	6%	9%	57%	47%	21%	14%	13%	11%
Ohio	19%	13%	21%	29%	45%	7%	9%	14%	56%	46%	24%	10%	10%	7%
Oklahoma	17%	16%	—	—	—	—	—	—	—	—	—	—	—	—
Oregon	20%	12%	17%	26%	33%	15%	15%	23%	47%	39%	19%	11%	9%	10%
Pennsylvania	20%	11%	17%	26%	39%	6%	6%	18%	57%	46%	21%	14%	15%	14%
Rhode Island	18%	11%	18%	28%	46%	8%	8%	13%	53%	45%	20%	12%	10%	10%
South Carolina	18%	14%	24%	38%	52%	9%	7%	13%	50%	39%	19%	9%	8%	6%
South Dakota	19%	9%	—	—	—	—	—	—	—	—	—	—	—	—
Tennessee	17%	17%	22%	31%	41%	8%	6%	16%	49%	43%	19%	13%	11%	9%
Texas	12%	11%	—	—	—	—	—	—	—	—	—	—	—	—
Utah	16%	8%	13%	24%	41%	4%	4%	12%	64%	55%	32%	13%	11%	8%
Vermont	20%	10%	21%	32%	47%	13%	11%	24%	49%	41%	14%	11%	10%	5%
Virginia	17%	10%	18%	29%	48%	4%	3%	11%	57%	50%	23%	11%	9%	10%
Washington	18%	11%	17%	26%	39%	9%	9%	17%	53%	45%	22%	12%	11%	8%
West Virginia	22%	20%	23%	29%	41%	14%	13%	24%	48%	46%	22%	9%	8%	5%
Wisconsin	17%	10%	17%	28%	41%	7%	10%	17%	56%	44%	21%	12%	11%	8%
Wyoming	18%	10%	—	—	—	—	—	—	—	—	—	—	—	—

— Data not available.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.



## Appendix 1d. Socioeconomic Characteristics by Population Segment and State: Race/Ethnicity

	Share of total population		White			Black			Hispanic			Other		
	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need
<b>United States</b>	<b>17%</b>	<b>12%</b>	<b>66%</b>	<b>76%</b>	<b>69%</b>	<b>12%</b>	<b>10%</b>	<b>15%</b>	<b>15%</b>	<b>9%</b>	<b>11%</b>	<b>8%</b>	<b>5%</b>	<b>6%</b>
Alabama	19%	18%	69%	75%	71%	25%	22%	25%	3%	—	—	3%	2%	3%
Alaska	15%	8%	65%	70%	64%	4%	—	—	6%	—	—	24%	21%	26%
Arizona	18%	12%	61%	71%	69%	4%	4%	3%	26%	19%	21%	8%	6%	8%
Arkansas	17%	18%	77%	82%	77%	13%	13%	14%	6%	—	—	4%	4%	6%
California	14%	9%	44%	57%	52%	6%	7%	12%	34%	26%	26%	16%	10%	11%
Colorado	15%	8%	73%	81%	73%	4%	3%	5%	18%	11%	17%	5%	5%	5%
Connecticut	18%	10%	72%	81%	67%	9%	8%	11%	13%	9%	17%	6%	2%	6%
Delaware	19%	12%	67%	79%	63%	20%	15%	27%	8%	—	—	5%	3%	5%
District of Columbia	14%	10%	41%	37%	11%	42%	51%	76%	10%	—	—	7%	5%	—
Florida	17%	13%	60%	74%	66%	14%	9%	12%	22%	14%	18%	4%	3%	4%
Georgia	16%	13%	58%	68%	60%	29%	24%	34%	8%	—	—	5%	4%	4%
Hawaii	17%	7%	26%	28%	28%	2%	—	—	8%	8%	9%	63%	63%	61%
Idaho	18%	9%	86%	91%	84%	—	—	—	10%	6%	—	4%	—	8%
Illinois	17%	9%	66%	74%	63%	13%	12%	24%	14%	10%	12%	6%	—	—
Indiana	19%	13%	83%	88%	85%	8%	8%	10%	5%	—	—	3%	2%	4%
Iowa	18%	10%	90%	94%	90%	2%	—	—	4%	—	—	3%	—	—
Kansas	17%	11%	80%	87%	81%	6%	5%	8%	9%	4%	5%	5%	4%	6%
Kentucky	19%	19%	87%	89%	89%	7%	7%	7%	3%	—	—	3%	2%	3%
Louisiana	16%	15%	62%	68%	62%	30%	26%	33%	4%	—	—	4%	3%	4%
Maine	23%	11%	95%	96%	93%	1%	—	—	1%	—	—	3%	3%	6%
Maryland	17%	9%	55%	66%	61%	28%	26%	31%	8%	4%	4%	8%	4%	5%
Massachusetts	18%	11%	77%	84%	74%	6%	5%	5%	9%	7%	13%	8%	4%	7%
Michigan	20%	13%	78%	82%	74%	13%	11%	18%	4%	—	—	5%	3%	5%
Minnesota	16%	8%	85%	90%	85%	5%	4%	6%	4%	3%	4%	6%	3%	5%
Mississippi	17%	16%	61%	69%	61%	35%	30%	36%	2%	—	—	3%	—	—
Missouri	19%	13%	83%	86%	83%	11%	8%	13%	3%	—	—	4%	4%	4%
Montana	18%	12%	89%	90%	88%	—	—	—	3%	—	—	8%	8%	10%
Nebraska	17%	9%	84%	90%	84%	4%	2%	7%	8%	4%	5%	4%	4%	4%
Nevada	16%	10%	56%	67%	71%	8%	10%	—	24%	14%	—	12%	9%	9%
New Hampshire	18%	10%	93%	95%	95%	1%	—	—	3%	—	—	4%	3%	3%
New Jersey	15%	9%	59%	72%	59%	12%	12%	15%	18%	11%	21%	10%	5%	5%
New Mexico	17%	13%	43%	54%	45%	2%	—	—	44%	36%	42%	11%	8%	11%
New York	15%	11%	59%	71%	53%	14%	12%	16%	17%	13%	23%	10%	5%	8%
North Carolina	16%	13%	67%	79%	68%	20%	15%	25%	7%	3%	—	5%	3%	5%
North Dakota	17%	9%	90%	95%	88%	1%	—	—	2%	—	—	7%	4%	10%
Ohio	19%	13%	83%	85%	82%	11%	12%	13%	3%	2%	—	3%	1%	3%
Oklahoma	17%	16%	71%	75%	76%	7%	7%	6%	8%	4%	3%	14%	15%	14%
Oregon	20%	12%	81%	85%	84%	2%	—	—	10%	7%	—	7%	8%	8%
Pennsylvania	20%	11%	80%	85%	80%	10%	9%	13%	5%	4%	—	4%	2%	3%
Rhode Island	18%	11%	78%	86%	77%	4%	3%	4%	12%	7%	12%	6%	4%	7%
South Carolina	18%	14%	67%	75%	68%	26%	20%	27%	4%	—	—	3%	3%	3%
South Dakota	19%	9%	86%	87%	87%	—	—	—	3%	—	—	10%	10%	11%
Tennessee	17%	17%	77%	82%	81%	16%	11%	13%	3%	—	—	4%	4%	5%
Texas	12%	11%	47%	61%	52%	12%	12%	15%	36%	23%	29%	6%	3%	4%
Utah	16%	8%	82%	87%	84%	1%	—	—	12%	7%	10%	6%	5%	6%
Vermont	20%	10%	95%	96%	92%	1%	—	—	1%	—	—	4%	3%	7%
Virginia	17%	10%	66%	72%	69%	18%	19%	20%	8%	4%	—	8%	5%	8%
Washington	18%	11%	75%	84%	79%	3%	—	—	10%	6%	6%	13%	8%	10%
West Virginia	22%	20%	93%	94%	93%	3%	—	3%	1%	—	—	2%	2%	3%
Wisconsin	17%	10%	86%	88%	81%	5%	6%	11%	5%	—	—	4%	4%	5%
Wyoming	18%	10%	86%	86%	85%	—	—	—	8%	8%	9%	5%	6%	5%

— Data not available.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

## Appendix 2a. Select Health Care Experiences by Population Segment and State: Access, Utilization, and Patient Satisfaction with Care

	Usual source of care			Average number of provider visits in past year			Patients "somewhat" or "not" satisfied with care		
	Total	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need
<b>United States</b>	<b>77%</b>	<b>89%</b>	<b>91%</b>	<b>5%</b>	<b>7%</b>	<b>11%</b>	<b>35%</b>	<b>33%</b>	<b>43%</b>
Alabama	77%	87%	92%	5%	6%	9%	33%	32%	41%
Alaska	66%	84%	82%	5%	7%	13%	42%	41%	56%
Arizona	72%	85%	90%	5%	6%	12%	37%	35%	43%
Arkansas	78%	88%	91%	—	—	—	—	—	—
California	75%	88%	94%	—	—	—	—	—	—
Colorado	76%	89%	92%	—	—	—	—	—	—
Connecticut	84%	93%	94%	5%	7%	14%	32%	31%	41%
Delaware	86%	94%	93%	5%	7%	11%	33%	29%	41%
District of Columbia	75%	85%	90%	5%	7%	11%	32%	27%	49%
Florida	76%	88%	90%	—	—	—	—	—	—
Georgia	72%	82%	88%	5%	6%	11%	38%	38%	49%
Hawaii	85%	90%	95%	—	—	—	—	—	—
Idaho	71%	83%	88%	5%	7%	11%	35%	37%	44%
Illinois	82%	92%	95%	5%	7%	10%	32%	33%	40%
Indiana	80%	90%	91%	—	—	—	—	—	—
Iowa	81%	93%	91%	5%	7%	11%	28%	29%	33%
Kansas	81%	90%	92%	—	—	—	—	—	—
Kentucky	80%	90%	90%	5%	6%	10%	38%	39%	46%
Louisiana	75%	88%	89%	5%	5%	9%	35%	29%	39%
Maine	88%	94%	94%	—	—	—	—	—	—
Maryland	83%	92%	94%	5%	7%	12%	32%	30%	40%
Massachusetts	90%	95%	96%	6%	7%	13%	33%	29%	39%
Michigan	84%	91%	91%	5%	6%	11%	37%	35%	43%
Minnesota	76%	90%	91%	5%	7%	11%	30%	27%	36%
Mississippi	74%	86%	89%	4%	5%	8%	40%	35%	46%
Missouri	79%	88%	92%	—	—	—	—	—	—
Montana	71%	83%	90%	5%	6%	11%	37%	35%	44%
Nebraska	80%	91%	92%	4%	6%	10%	30%	29%	37%
Nevada	65%	80%	87%	4%	6%	11%	45%	47%	52%
New Hampshire	85%	93%	91%	5%	6%	13%	31%	28%	44%
New Jersey	82%	92%	94%	5%	7%	13%	36%	33%	44%
New Mexico	70%	82%	86%	5%	6%	10%	43%	42%	49%
New York	82%	92%	96%	6%	8%	14%	37%	35%	43%
North Carolina	76%	90%	91%	4%	6%	10%	35%	34%	43%
North Dakota	71%	86%	91%	4%	6%	10%	35%	33%	44%
Ohio	80%	91%	91%	5%	7%	11%	34%	31%	45%
Oklahoma	75%	86%	90%	—	—	—	—	—	—
Oregon	77%	89%	91%	5%	7%	10%	36%	30%	48%
Pennsylvania	85%	93%	95%	6%	7%	13%	34%	33%	42%
Rhode Island	87%	95%	94%	5%	6%	10%	31%	29%	38%
South Carolina	77%	89%	88%	5%	6%	10%	37%	34%	47%
South Dakota	76%	84%	89%	—	—	—	—	—	—
Tennessee	76%	85%	88%	5%	6%	9%	36%	34%	38%
Texas	67%	84%	86%	—	—	—	—	—	—
Utah	71%	86%	87%	4%	6%	11%	37%	35%	44%
Vermont	87%	95%	94%	5%	7%	13%	30%	28%	42%
Virginia	76%	86%	91%	5%	7%	11%	34%	34%	41%
Washington	75%	88%	90%	6%	7%	12%	35%	30%	42%
West Virginia	77%	86%	91%	6%	6%	11%	43%	41%	47%
Wisconsin	82%	92%	93%	5%	6%	11%	31%	28%	40%
Wyoming	70%	80%	84%	—	—	—	—	—	—

— Data not available.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

## Appendix 2b. Select Health Care Experiences by Population Segment and State: Cost-Related Barriers to Care

	Went without a provider visit because of cost			Went without a prescription drug because of cost			Both unmet needs (no visit AND no prescription because of cost)		
	Total	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need
<b>United States</b>	<b>14%</b>	<b>15%</b>	<b>24%</b>	<b>10%</b>	<b>12%</b>	<b>22%</b>	<b>5%</b>	<b>6%</b>	<b>12%</b>
Alabama	17%	16%	29%	14%	15%	26%	8%	9%	15%
Alaska	12%	17%	23%	7%	12%	21%	4%	7%	13%
Arizona	16%	18%	24%	9%	12%	20%	5%	5%	12%
Arkansas	18%	18%	29%	—	—	—	—	—	—
California	13%	14%	18%	—	—	—	—	—	—
Colorado	13%	14%	21%	—	—	—	—	—	—
Connecticut	11%	11%	18%	7%	9%	15%	4%	5%	7%
Delaware	11%	12%	20%	9%	10%	24%	4%	5%	11%
District of Columbia	11%	10%	20%	6%	6%	18%	3%	—	—
Florida	18%	17%	28%	—	—	—	—	—	—
Georgia	19%	20%	32%	12%	15%	24%	7%	8%	14%
Hawaii	9%	9%	16%	—	—	—	—	—	—
Idaho	16%	19%	32%	9%	13%	25%	5%	8%	17%
Illinois	12%	12%	23%	9%	13%	21%	4%	—	11%
Indiana	15%	17%	26%	—	—	—	—	—	—
Iowa	8%	11%	15%	7%	9%	15%	3%	5%	6%
Kansas	12%	14%	21%	—	—	—	—	—	—
Kentucky	16%	18%	26%	12%	16%	25%	6%	7%	14%
Louisiana	17%	17%	30%	13%	17%	24%	8%	9%	16%
Maine	11%	12%	18%	—	—	—	—	—	—
Maryland	10%	11%	16%	6%	9%	15%	3%	5%	7%
Massachusetts	8%	9%	16%	9%	10%	19%	3%	3%	7%
Michigan	15%	16%	23%	10%	12%	21%	5%	5%	11%
Minnesota	9%	11%	17%	6%	9%	16%	3%	4%	8%
Mississippi	19%	19%	31%	13%	16%	25%	8%	11%	17%
Missouri	13%	15%	23%	—	—	—	—	—	—
Montana	12%	15%	23%	8%	11%	20%	4%	6%	14%
Nebraska	12%	14%	22%	8%	12%	21%	4%	7%	12%
Nevada	17%	17%	25%	10%	16%	21%	6%	8%	11%
New Hampshire	11%	9%	25%	8%	10%	23%	4%	5%	13%
New Jersey	14%	14%	24%	9%	12%	19%	5%	5%	12%
New Mexico	17%	17%	27%	10%	14%	22%	6%	6%	12%
New York	14%	15%	21%	9%	13%	18%	4%	6%	11%
North Carolina	16%	18%	29%	12%	14%	27%	7%	7%	16%
North Dakota	7%	8%	19%	5%	6%	15%	3%	—	11%
Ohio	13%	13%	26%	10%	12%	25%	5%	5%	14%
Oklahoma	15%	16%	23%	—	—	—	—	—	—
Oregon	14%	14%	22%	11%	11%	20%	6%	6%	11%
Pennsylvania	12%	13%	20%	10%	13%	20%	5%	7%	8%
Rhode Island	12%	11%	23%	9%	9%	22%	5%	4%	12%
South Carolina	18%	18%	31%	13%	15%	27%	8%	8%	17%
South Dakota	10%	10%	21%	—	—	—	—	—	—
Tennessee	16%	16%	25%	11%	12%	24%	6%	7%	13%
Texas	18%	19%	30%	—	—	—	—	—	—
Utah	14%	17%	27%	9%	13%	25%	5%	7%	15%
Vermont	9%	10%	16%	7%	10%	17%	3%	4%	8%
Virginia	13%	15%	22%	9%	13%	21%	5%	7%	12%
Washington	12%	13%	20%	7%	11%	17%	4%	5%	10%
West Virginia	17%	18%	22%	13%	15%	22%	7%	8%	12%
Wisconsin	10%	12%	22%	8%	12%	23%	4%	6%	13%
Wyoming	12%	14%	25%	—	—	—	—	—	—

— Data not available.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.

## Appendix 2c. Select Health Care Experiences by Population Segment and State: Delays in Receiving Care

	Delayed needed care for reasons other than cost			Primary reason for delay: transportation			Primary reason for delay: could not get an appointment on time			Primary reason for delay: waited too long in doctor's office		
	Total	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need	Total	Multiple chronic	High need
<b>United States</b>	<b>20%</b>	<b>20%</b>	<b>35%</b>	<b>21%</b>	<b>17%</b>	<b>37%</b>	<b>32%</b>	<b>35%</b>	<b>23%</b>	<b>16%</b>	<b>16%</b>	<b>13%</b>
Alabama	21%	21%	39%	18%	13%	28%	20%	24%	18%	14%	12%	12%
Alaska	19%	25%	38%	24%	16%	52%	35%	47%	20%	15%	—	—
Arizona	25%	24%	38%	21%	17%	35%	35%	37%	32%	16%	20%	13%
Arkansas	—	—	—	—	—	—	—	—	—	—	—	—
California	—	—	—	—	—	—	—	—	—	—	—	—
Colorado	—	—	—	—	—	—	—	—	—	—	—	—
Connecticut	20%	20%	31%	22%	23%	40%	34%	31%	24%	16%	16%	15%
Delaware	19%	20%	33%	20%	—	35%	34%	38%	27%	14%	—	—
District of Columbia	26%	28%	46%	20%	—	35%	41%	42%	26%	18%	—	—
Florida	—	—	—	—	—	—	—	—	—	—	—	—
Georgia	20%	20%	35%	28%	24%	42%	28%	26%	22%	17%	18%	14%
Hawaii	—	—	—	—	—	—	—	—	—	—	—	—
Idaho	16%	20%	36%	20%	—	44%	38%	48%	34%	15%	—	—
Illinois	18%	18%	34%	15%	—	32%	33%	36%	—	13%	—	—
Indiana	—	—	—	—	—	—	—	—	—	—	—	—
Iowa	17%	21%	32%	15%	14%	35%	27%	32%	24%	12%	11%	—
Kansas	—	—	—	—	—	—	—	—	—	—	—	—
Kentucky	18%	19%	31%	24%	15%	42%	35%	41%	27%	18%	17%	16%
Louisiana	20%	19%	34%	19%	18%	33%	24%	29%	18%	14%	—	13%
Maine	—	—	—	—	—	—	—	—	—	—	—	—
Maryland	20%	20%	30%	20%	13%	37%	33%	45%	25%	18%	13%	10%
Massachusetts	20%	18%	38%	22%	17%	43%	35%	38%	19%	15%	14%	14%
Michigan	21%	22%	36%	25%	23%	40%	32%	33%	23%	17%	16%	15%
Minnesota	12%	13%	27%	20%	14%	41%	36%	41%	30%	15%	13%	10%
Mississippi	20%	25%	34%	18%	—	23%	19%	25%	16%	20%	—	22%
Missouri	—	—	—	—	—	—	—	—	—	—	—	—
Montana	19%	20%	36%	14%	17%	28%	34%	33%	36%	12%	8%	—
Nebraska	13%	13%	27%	21%	18%	46%	32%	38%	24%	17%	16%	13%
Nevada	31%	32%	49%	13%	—	26%	31%	35%	25%	21%	—	—
New Hampshire	15%	15%	34%	21%	—	49%	35%	35%	20%	11%	—	—
New Jersey	19%	18%	34%	15%	10%	30%	32%	37%	20%	24%	21%	21%
New Mexico	28%	31%	42%	19%	17%	31%	40%	44%	36%	21%	18%	16%
New York	23%	24%	39%	24%	19%	44%	34%	40%	27%	25%	26%	17%
North Carolina	19%	20%	33%	17%	—	31%	28%	35%	20%	12%	14%	11%
North Dakota	14%	15%	33%	21%	—	41%	44%	47%	40%	14%	16%	—
Ohio	19%	21%	37%	22%	18%	39%	30%	30%	20%	14%	13%	13%
Oklahoma	—	—	—	—	—	—	—	—	—	—	—	—
Oregon	21%	20%	36%	22%	—	40%	39%	45%	34%	9%	—	—
Pennsylvania	18%	19%	34%	23%	18%	48%	35%	35%	19%	14%	15%	9%
Rhode Island	21%	17%	35%	23%	19%	45%	36%	35%	18%	12%	—	14%
South Carolina	23%	19%	37%	19%	19%	35%	28%	32%	20%	19%	16%	16%
South Dakota	—	—	—	—	—	—	—	—	—	—	—	—
Tennessee	18%	22%	30%	15%	—	26%	24%	30%	22%	12%	—	11%
Texas	—	—	—	—	—	—	—	—	—	—	—	—
Utah	15%	17%	29%	16%	15%	34%	41%	47%	34%	17%	15%	10%
Vermont	16%	17%	33%	25%	20%	48%	38%	42%	24%	10%	—	—
Virginia	17%	18%	34%	21%	16%	36%	33%	37%	32%	17%	19%	13%
Washington	17%	17%	31%	22%	17%	37%	36%	38%	26%	14%	17%	13%
West Virginia	18%	19%	29%	26%	24%	43%	24%	29%	19%	5%	—	—
Wisconsin	21%	22%	40%	18%	20%	36%	25%	34%	20%	9%	—	—
Wyoming	—	—	—	—	—	—	—	—	—	—	—	—

— Data not available.

Data: 2014 Behavioral Risk Factor Surveillance System (BRFSS) representing U.S. civilian, noninstitutionalized adults.



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