



# Past-Due Medical Debt among Nonelderly Adults, 2012–15

*Michael Karpman and Kyle J. Caswell*

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**Medical bills contribute to financial insecurity for many Americans. In this brief, we use survey data to examine the prevalence of past-due medical debt among nonelderly adults—specifically, how it varies across states, and how it has changed over time. We find that states differ substantially in the share of nonelderly adults reporting that they have unpaid medical bills that are past due.**

Many Americans carry past-due medical debt balances. A recent Consumer Financial Protection Bureau report found that unpaid debt in collections owed to hospitals and other medical providers made up about half of all debt in collections, and that 19 percent of consumers with a credit file had some form of medical debt in collections (CFPB 2014). Families with medical debt report that it reduces their ability to save and to afford basic household needs, increases their reliance on credit cards and other forms of debt, damages their credit, and induces them to forgo needed health care (Hamel et al. 2016; Pollitz et al. 2014). In extreme cases, medical debt may contribute to personal bankruptcy, although the extent to which medical bills cause bankruptcy is debated (Dobkin et al. 2016; Dranove and Millenson 2006; Gross and Notowidigdo 2011; Himmelstein et al. 2005).

A fundamental function of health insurance is to protect people against the risk of unexpected medical bills, and several studies have found that health insurance reduces medical debt as well as other forms of debt. For example, expansions of health insurance coverage that occurred before the Affordable Care Act (ACA) lowered the share of individuals with medical debt in collections, personal bankruptcy rates, and total debt past due (Finkelstein et al. 2011; Gross and Notowidigdo 2011; Mazumder and Miller 2016). More recently, the ACA's Medicaid expansion has been shown to reduce nonmedical debt in collections in communities with high shares of low-income and uninsured people (Hu et al. 2016).

However, health insurance may not fully offset the costs of medical care received and does not necessarily eliminate the risk of acquiring medical debt. One study suggests that most patients who incur medical debt do so when they are covered by health insurance (Karpman and Long 2015). For those with coverage, the risk of accumulating medical debt may depend on their health plan's benefit design and cost sharing requirements, their understanding of their plan's benefits, and their state's insurance regulations. The patient's family income, savings, need for and use of medical care, and financial knowledge could also affect the likelihood of incurring medical debt. Although health insurance coverage rates and other potential determinants of medical debt differ across states and have changed over time, we found no published studies examining geographic variation in the prevalence of medical debt and how it has changed across states in recent years.

This brief provides the first available state-level estimates on past-due medical debt. It draws on data from the 2012 and 2015 iterations of the National Financial Capability Study (NFCS) to estimate the share of nonelderly adults (ages 18 to 64) nationally and in each state with medical bills that are past due (see the Data and Approach section on page 10 for more information about the NFCS and limitations of this analysis). Our focus on the nonelderly population is motivated by the different risk factors this group faces compared with elderly adults. In particular, most people ages 65 and older have health insurance coverage through Medicare, and most are not working.<sup>1</sup> Consequently, recent trends that may affect levels of medical debt—for example, improving economic conditions, expansion of health insurance coverage under the ACA, and the ongoing shift toward high-deductible employer-based health plans (Claxton et al. 2016)—are much more relevant to nonelderly adults.

This work is part of a larger Urban Institute project to produce research that can be used to improve family financial health and capability as it relates to the risk of accumulating medical debt. We address the following questions:

- What share of nonelderly adults had past-due medical debt in 2012 and in 2015?
- Which states have the highest and lowest prevalence of past-due medical debt among nonelderly residents?
- How did the prevalence of past-due medical debt among nonelderly adults change, nationally and in individual states, between 2012 and 2015?
- How much did the prevalence of past-due medical debt change over time for nonelderly adults of different demographic and socioeconomic backgrounds?
- How does the prevalence of past-due medical debt vary by health insurance coverage status?

The NFCS data indicate that past-due medical debt is common and that reported past-due medical debt varies considerably across states.<sup>2</sup>

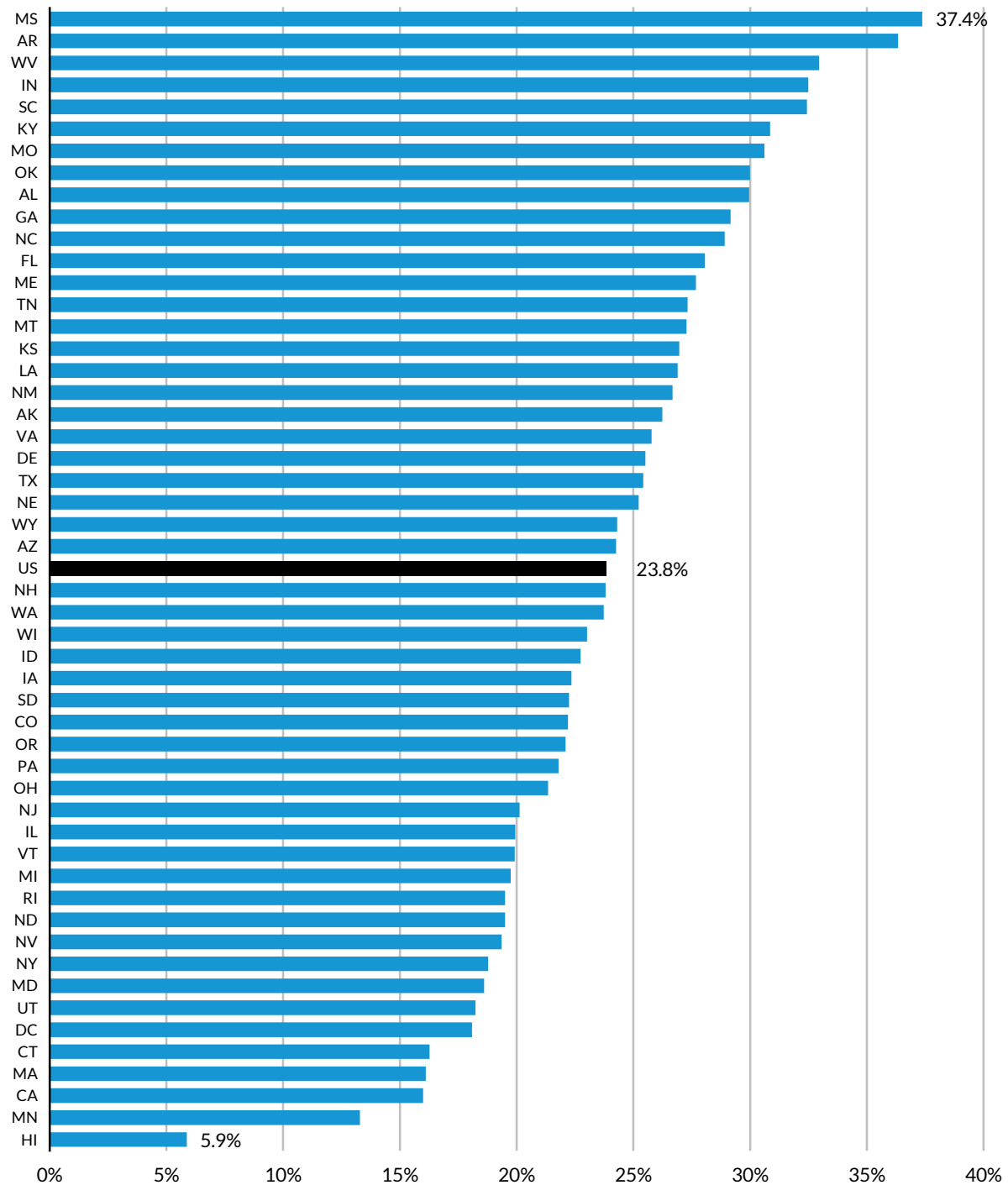
# Results

## **Past-Due Medical Debt Affects Many Nonelderly Adults and Is Most Prevalent in the South**

Nearly one-quarter (23.8 percent) of nonelderly adults reported past-due medical debt in 2015, with the highest prevalence found in the South (figure 1).<sup>3</sup> The share of adults who reported past-due medical debt varies substantially across states, ranging from 5.9 percent in Hawaii to 37.4 percent in Mississippi. Eight of the 10 states with the highest rates of past-due medical debt rates are in the South (Mississippi, Arkansas, West Virginia, South Carolina, Kentucky, Oklahoma, Alabama, and Georgia) and two are in the Midwest (Indiana and Missouri). The 10 states with the lowest prevalence of past-due medical debt are more geographically dispersed: three are located in the Northeast (Massachusetts, Connecticut, and New York), one in the Midwest (Minnesota), four in the West (Hawaii, California, Utah, and Nevada), and two in the South (the District of Columbia and Maryland).<sup>4</sup> Overall, state past-due medical debt rates correlate strongly with state uninsured rates (figure 2).

FIGURE 1

Share of Adults Ages 18 to 64 Reporting Past-Due Medical Debt, 2015



Source: National Financial Capability Study, 2015.

Note: Adults reporting that they don't know if they have past-due medical debt or who refuse to report whether they have past-due medical debt are excluded from the denominator when calculating the share of adults reporting past-due medical debt.



With some notable exceptions (e.g., Nevada, Ohio), states that had a relatively high prevalence of past-due medical debt in 2012 also had a high prevalence in 2015. In addition, there was no correlation between the change in a state's share of nonelderly adults with past-due medical debt and the change in the state's uninsured rate as reported in the NFCS (data not shown).<sup>5</sup>

TABLE 1

Share of Adults Ages 18 to 64 Reporting Past-Due Medical Debt, 2012 and 2015

	Share in 2012	Share in 2015	Percentage-point difference	Percent change
Alabama	33.3%	30.0%	-3.3	-10.0%
Alaska	30.1%	26.2%	-3.8	-12.8%
Arizona	31.4%	24.3%	-7.2	-22.8%
Arkansas	40.3%	36.3%	-3.9	-9.8%
California	16.4%	16.0%	-0.4	-2.6%
Colorado	30.0%	22.2%	-7.8	-26.1%
Connecticut	26.4%	16.3%	-10.1	-38.4%
Delaware	34.2%	25.5%	-8.7	-25.3%
District of Columbia	22.1%	18.1%	-4.0	-18.2%
Florida	28.6%	28.1%	-0.5	-1.8%
Georgia	31.0%	29.2%	-1.8	-5.9%
Hawaii	14.6%	5.9%	-8.8	-59.9%
Idaho	31.5%	22.7%	-8.8	-27.9%
Illinois	28.0%	19.9%	-8.1	-28.8%
Indiana	32.7%	32.5%	-0.2	-0.6%
Iowa	29.2%	22.3%	-6.9	-23.5%
Kansas	31.1%	27.0%	-4.1	-13.2%
Kentucky	42.1%	30.9%	-11.2	-26.7%
Louisiana	32.8%	26.9%	-5.9	-18.0%
Maine	29.1%	27.7%	-1.4	-5.0%
Maryland	24.8%	18.6%	-6.2	-25.0%
Massachusetts	20.2%	16.1%	-4.1	-20.2%
Michigan	28.2%	19.7%	-8.5	-30.0%
Minnesota	25.0%	13.3%	-11.7	-46.8%
Mississippi	49.0%	37.4%	-11.7	-23.8%
Missouri	34.5%	30.6%	-3.9	-11.3%
Montana	36.7%	27.3%	-9.4	-25.7%
Nebraska	32.7%	25.2%	-7.5	-22.8%
Nevada	32.8%	19.4%	-13.5	-41.1%
New Hampshire	28.2%	23.8%	-4.4	-15.5%
New Jersey	21.6%	20.1%	-1.4	-6.7%
New Mexico	27.6%	26.7%	-0.9	-3.2%
New York	23.8%	18.8%	-5.1	-21.2%
North Carolina	41.9%	28.9%	-13.0	-31.0%
North Dakota	29.7%	19.5%	-10.2	-34.2%
Ohio	31.3%	21.3%	-10.0	-31.8%
Oklahoma	38.0%	30.0%	-8.0	-21.0%
Oregon	27.2%	22.1%	-5.1	-18.8%
Pennsylvania	23.4%	21.8%	-1.6	-6.8%
Rhode Island	25.3%	19.5%	-5.8	-23.0%

	Share in 2012	Share in 2015	Percentage-point difference	Percent change
South Carolina	36.8%	32.4%	-4.4	-11.9%
South Dakota	31.3%	22.2%	-9.0	-28.9%
Tennessee	37.8%	27.3%	-10.4	-27.6%
Texas	35.0%	25.4%	-9.6	-27.4%
Utah	25.5%	18.2%	-7.3	-28.5%
Vermont	30.5%	19.9%	-10.6	-34.7%
Virginia	30.5%	25.8%	-4.7	-15.5%
Washington	28.2%	23.7%	-4.5	-15.8%
West Virginia	37.5%	33.0%	-4.5	-12.1%
Wisconsin	27.7%	23.0%	-4.7	-16.9%
Wyoming	34.6%	24.3%	-10.3	-29.8%
<b>United States</b>	<b>29.6%</b>	<b>23.8%</b>	<b>-5.8</b>	<b>-19.5%</b>

Source: National Financial Capability Study, 2012 and 2015.

## Nonelderly Adults with Low and Moderate Incomes Had the Largest Reductions in Past-Due Medical Debt

The decline in past-due medical debt between 2012 and 2015 reached a broad cross-section of nonelderly adults, with the largest declines found among those with household incomes below \$50,000 (table 2). The prevalence of past-due medical debt fell 9.5 percentage points for adults with incomes below \$25,000, 7.3 percentage points for those with incomes between \$25,000 and \$35,000, and 7.0 percentage points for those with incomes between \$35,000 and \$49,999. Consistent with the changes by income groups, adults with a high school education or less had larger declines in past-due medical debt than adults with at least some college education. Past-due medical debt also fell for adults in every subcategory of age, gender, race/ethnicity, marital status, work status, household structure, and number of children in the household.

TABLE 2

Share of Adults Ages 18 to 64 Reporting Past-Due Medical Debt, by Demographic, Socioeconomic, and Geographic Characteristics, 2012 and 2015

	Share in 2012	Share in 2015	Percentage-point change	Percent change
<b>Household income</b>				
Less than \$25,000	37.9%	28.4%	-9.5	-25.1%
\$25,000–34,999	38.1%	30.8%	-7.3	-19.0%
\$35,000–49,999	34.7%	27.7%	-7.0	-20.1%
\$50,000–74,999	27.7%	23.8%	-3.9	-13.9%
\$75,000–99,999	21.3%	21.4%	0.1	0.4%
\$100,000–149,999	14.8%	12.2%	-2.5	-17.0%
\$150,000 and above	10.2%	7.8%	-2.3	-23.0%

	Share in 2012	Share in 2015	Percentage-point change	Percent change
<b>Age</b>				
18–24	27.3%	21.1%	-6.2	-22.7%
25–34	35.2%	27.8%	-7.4	-21.0%
35–44	32.8%	26.7%	-6.1	-18.7%
44–54	29.3%	23.8%	-5.5	-18.8%
55–64	23.1%	19.2%	-4.0	-17.1%
<b>Gender</b>				
Male	26.1%	20.8%	-5.3	-20.3%
Female	33.0%	26.8%	-6.2	-18.8%
<b>Race/ethnicity</b>				
White, non-Hispanic	29.6%	23.4%	-6.2	-20.9%
Black, non-Hispanic	36.7%	30.9%	-5.7	-15.6%
Other race, non-Hispanic	20.5%	16.6%	-3.9	-19.2%
Hispanic	28.3%	23.6%	-4.7	-16.8%
<b>Education</b>				
Less than high school	47.1%	36.5%	-10.5	-22.4%
High school	33.4%	27.2%	-6.2	-18.5%
Some college	29.8%	25.9%	-3.9	-13.0%
College or more	19.6%	16.2%	-3.5	-17.7%
<b>Marital status</b>				
Married	30.1%	24.5%	-5.6	-18.5%
Not married	29.1%	23.1%	-6.0	-20.6%
<b>Work status</b>				
Working	27.5%	22.7%	-4.9	-17.8%
Not working	32.6%	25.9%	-6.8	-20.7%
<b>Number of children in household</b>				
0	23.5%	18.7%	-4.8	-20.5%
1	35.3%	29.3%	-6.0	-17.0%
2	36.0%	29.4%	-6.6	-18.3%
3 or more	42.7%	36.7%	-6.0	-14.1%
<b>Household structure</b>				
Single	28.8%	24.7%	-4.1	-14.1%
Lives with spouse or partner	31.0%	24.5%	-6.5	-20.9%
Lives with parents	20.3%	17.6%	-2.7	-13.3%
Lives with other adults	32.7%	25.4%	-7.3	-22.2%
<b>Region</b>				
Northeast	24.3%	20.9%	-3.4	-13.8%
Midwest	30.0%	23.4%	-6.6	-22.1%
South	34.5%	27.8%	-6.7	-19.4%
West	25.8%	20.1%	-5.6	-21.9%
<b>Health insurance coverage status</b>				
Insured	26.6%	22.8%	-3.8	-14.2%
Uninsured	39.8%	30.5%	-9.3	-23.3%

Source: National Financial Capability Study, 2012 and 2015.

Notes: “Lives with parents” only includes those who did not live with spouses or partners. “Lives with other adults” only includes those who did not live with spouses, partners, or parents.



The share of nonelderly adults with past-due medical debt dropped in each of the four Census regions. The South and Midwest saw larger percentage-point reductions in past-due medical debt than the Northeast, but those regions also had higher base levels of past-due medical debt in 2012. States in the South continued to have higher shares of adults (27.8 percent) with past-due medical debt in 2015 than states in the Northeast (20.9 percent) and West (20.1 percent).

## Many Insured Nonelderly Adults Report Past-Due Medical Debt

Though uninsured people are most likely to report past-due medical debt, many insured adults also reported medical bills that were past due, despite the protection their coverage offers against high medical expenses. In 2015, 22.8 percent of insured adults reported past-due medical debt, compared with 30.5 percent of uninsured adults (table 2).

Geographic and temporal variation in past-due medical debt is only partially explained by differences in nonelderly adults' health insurance coverage status and other observable characteristics. For instance, when accounting for state-to-state differences in age, income, education, health insurance coverage status, work status, and other demographic characteristics, the differences in past-due medical debt between states are somewhat narrower in both 2012 and in 2015 (appendix tables A.1 and A.2). However, the basic patterns are unchanged, and most of the variation in levels of past-due medical debt is not explained by these factors.

Similarly, controlling for differences in the characteristics of nonelderly adults within each state between 2012 and 2015 yields smaller estimates of the change in past-due medical debt over time (appendix table A.3). This is not surprising; as the economy recovered and health insurance expanded under the ACA, adults were more likely to have coverage and to be working in 2015. But in most states, other unobserved factors account for a significant portion of the change in past-due medical debt between 2012 and 2015.

## Discussion

Past-due medical debt can be a source of financial distress for families in the United States. Knowledge about the prevalence of and risk factors for accumulating past-due medical debt is critical to addressing this aspect of family financial health. By studying how the likelihood of incurring medical debt varies by state and over time, this brief highlights the scope of the issue and helps identify where targeted and successful policies aimed at reducing the risk of medical debt could have the largest impact.

The NFCS data indicate that nearly one in four nonelderly adults in the United States reported having past-due medical debt in 2015. Moreover, the likelihood that an individual had past-due medical debt varies substantially by state of residence. The high prevalence of past-due medical debt reported in southern states may in part reflect the region's lower household incomes,<sup>6</sup> high uninsured rates (Smith and Medalia 2015), and larger share of adults in poor health (UnitedHealth Foundation 2015).

Although reported past-due medical debt decreased markedly between 2012 and 2015—a period that coincided with economic recovery and gains in health insurance coverage nationwide—health insurance coverage did not guarantee that adults would pay all their medical bills on time. For many adults with coverage, past-due medical debt may result from exposure to medical costs in the form of deductibles, coinsurance, and copayments; services not covered by their plan; or services from providers outside their plan’s network. Insured adults may also have outstanding debt incurred when they did not have insurance. Many factors affect a person’s risk of having past-due medical debt; some of these are described in the Urban Institute’s companion brief drawing on the same NFCS data (Braga, McKernan, and Karas 2017).

Federal and state policies can play an important role in helping individuals and families avoid accumulating medical expenses that they cannot afford to pay. In particular, expanding access to health insurance coverage has proved an effective strategy for protecting more individuals from medical debt. Efforts to reduce exposure to large medical bills (e.g., by reducing cost-sharing requirements) for those who already have insurance may also alleviate debt burdens. Other programs might address the challenges of past-due medical debt by boosting family income and savings, promoting preventive care (and thereby reducing the need for more expensive medical care), and increasing consumers’ financial and health insurance knowledge. Community-based organizations and local agencies can help raise awareness of the consequences and risk factors associated with incurring medical debt, and they can incorporate messages about how health insurance works and why it is important into existing financial education programs.

## Data and Approach

### Data, Sample, and Definition of Past-Due Medical Debt

This brief uses data from the 2012 and 2015 rounds of the National Financial Capability Study, a nationwide Internet-based survey of over 25,000 US adults ages 18 and older.<sup>7</sup> In each round, samples of approximately 500 adults are drawn from each state and the District of Columbia from existing online panels.<sup>8</sup> Survey weights are used to make the sample representative of the national population based on distributions of demographic characteristics in the American Community Survey (ACS), and state-level survey weights are similarly designed to produce representative state samples. Though the data have limitations, the NFCS is a unique source of state-level information on the financial behaviors and circumstances of US adults, including their experience with past-due medical debt.

All analyses in this brief were limited to nonelderly adults (ages 18 to 64), providing a sample size of approximately 400 people per state in each year.<sup>9</sup> Nonelderly adults are defined as having past-due medical debt if they answered yes to the following question: “Do you currently have any unpaid bills from a health care or medical service provider (e.g., a hospital, a doctor’s office, or a testing lab) that are past due?”<sup>10</sup> The brief presents descriptive results showing the share of nonelderly adults with past-due medical debt nationally (overall and by demographic characteristics) and in each state in 2012 and 2015.

## Benchmarking

We compared NFCS national data with data from other household surveys. This benchmarking analysis included a comparison of weighted demographic characteristics of respondents who completed the 2012 and 2015 NFCS with benchmarks from the 2012 and 2014 ACS, respectively; public use data for the 2015 ACS are not currently available. Compared with ACS respondents, NFCS respondents were somewhat less advantaged: they were less likely to be employed, own a home, and have health insurance, and more likely to have low household incomes.

Our benchmarking analysis also assessed national differences between the medical debt measure used in the NFCS and measures used in the National Health Interview Survey (NHIS), which is a key source of national data on medical debt.<sup>11</sup> The questions in the two surveys differ somewhat; the NFCS asks about unpaid bills that are past due, and the NHIS asks about medical bills that are being paid off over time. Estimates from the two surveys differ but are roughly of the same magnitude. Specifically, the share of nonelderly adults in the 2012 NFCS reporting past-due medical debt (29.6 percent) is higher than the share of nonelderly adults in the 2012 NHIS reporting having family medical bills that are being paid off over time (26.1 percent), but NFCS and NHIS estimates for these measures were more similar in 2015 (23.8 percent versus 24.2 percent).

These estimates may differ because the NFCS and NHIS measure different concepts. In addition, although past-due medical debt may carry over from year to year, NFCS respondents may only recall past-due medical bills incurred shortly before the interview. Notably, the 19.5 percent decline in past-due medical debt reported in the NFCS between 2012 and 2015 is the same as the 19.5 percent decline in a shorter-term measure of health care affordability—the share of nonelderly adults reporting problems paying family medical bills in the previous year—in the NHIS during this period (from 19.8 percent to 15.9 percent).

## Limitations

The estimates in this brief show general patterns and trends in the prevalence of reported past-due medical debt by state, but people may underreport or forget about unpaid bills (i.e., recall bias). However, any systematic change in misreporting over time is unlikely.

In addition, the nonprobability sampling design used in the NFCS introduces more risk of generating biased estimates than a probability sampling design because under the former method each person's probability of selection is unknown.<sup>12</sup> Respondents for the NFCS were selected from among those who volunteered to participate in online surveys and polls through panels maintained by Survey Sampling International, EMI Online Research Solutions, and Research Now.<sup>13</sup> The data have been weighted to reflect the demographic composition of U.S. adults nationally and within each state. Because the sample is based on those who initially self-selected for participation in these panels rather than a probability sample, as stated in the American Association for Public Opinion Research guidelines, no estimates of sampling error can be calculated.<sup>14</sup> All sample surveys and polls may be subject to multiple sources of error, including sampling error, coverage error, and measurement error.

## Appendix

To better understand how much of the variation in past-due medical debt across states can be explained by the observable characteristics of nonelderly adults in the sample, tables A.1 and A.2 provide regression-adjusted differences in past-due medical debt in 2012 and 2015, respectively, that control for household income, age, gender, race/ethnicity, education, marital status, work status, presence of a working spouse or partner in the household, household structure, homeownership status, number of children in the household, and health insurance coverage status.

TABLE A.1

### Unadjusted and Regression-Adjusted Shares of Adults Ages 18 to 64 Reporting Past-Due Medical Debt, 2012

	Unadjusted	Regression-adjusted	Percentage-point difference between unadjusted and adjusted
Alabama	33.3%	29.9%	3.4
Alaska	30.1%	30.7%	-0.6
Arizona	31.4%	30.5%	0.9
Arkansas	40.3%	38.3%	2.0
California	16.4%	19.5%	-3.1
Colorado	30.0%	31.1%	-1.1
Connecticut	26.4%	30.1%	-3.7
Delaware	34.2%	35.5%	-1.3
District of Columbia	22.1%	24.6%	-2.5
Florida	28.6%	27.2%	1.4
Georgia	31.0%	29.4%	1.6
Hawaii	14.6%	18.6%	-3.9
Idaho	31.5%	30.0%	1.6
Illinois	28.0%	28.4%	-0.4
Indiana	32.7%	30.0%	2.6
Iowa	29.2%	29.3%	-0.1
Kansas	31.1%	30.6%	0.5
Kentucky	42.1%	38.0%	4.1
Louisiana	32.8%	29.5%	3.3
Maine	29.1%	29.6%	-0.4
Maryland	24.8%	27.6%	-2.8
Massachusetts	20.2%	23.5%	-3.3
Michigan	28.2%	28.2%	0.0
Minnesota	25.0%	27.4%	-2.4
Mississippi	49.0%	44.3%	4.7
Missouri	34.5%	32.2%	2.3
Montana	36.7%	34.8%	1.9
Nebraska	32.7%	33.3%	-0.6
Nevada	32.8%	30.8%	2.1
New Hampshire	28.2%	30.9%	-2.8
New Jersey	21.6%	25.4%	-3.8
New Mexico	27.6%	26.7%	0.9
New York	23.8%	26.5%	-2.7
North Carolina	41.9%	39.7%	2.2
North Dakota	29.7%	30.5%	-0.8

	Unadjusted	Regression-adjusted	Percentage-point difference between unadjusted and adjusted
Ohio	31.3%	30.1%	1.2
Oklahoma	38.0%	34.7%	3.2
Oregon	27.2%	26.7%	0.5
Pennsylvania	23.4%	24.5%	-1.1
Rhode Island	25.3%	27.1%	-1.8
South Carolina	36.8%	34.0%	2.8
South Dakota	31.3%	31.1%	0.2
Tennessee	37.8%	34.8%	3.0
Texas	35.0%	34.0%	1.0
Utah	25.5%	26.8%	-1.2
Vermont	30.5%	30.9%	-0.4
Virginia	30.5%	32.4%	-1.8
Washington	28.2%	28.5%	-0.3
West Virginia	37.5%	35.3%	2.2
Wisconsin	27.7%	28.7%	-1.0
Wyoming	34.6%	35.2%	-0.5
<b>United States</b>	<b>29.6%</b>	<b>--</b>	<b>--</b>

Source: National Financial Capability Survey, 2012.

Note: Regression adjustment controls for differences across states in coverage status, household income, age, sex, race/ethnicity, educational attainment, marital status, work status, presence of a working spouse or partner in the household, household structure, homeownership, and number of children in the household.

TABLE A.2

**Unadjusted and Regression-Adjusted Share of Adults Ages 18 to 64 Reporting Past-Due Medical Debt, 2015**

	Unadjusted	Regression-adjusted	Percentage-point difference between unadjusted and adjusted
Alabama	30.0%	28.4%	1.6
Alaska	26.2%	26.6%	-0.4
Arizona	24.3%	23.7%	0.6
Arkansas	36.3%	33.5%	2.8
California	16.0%	17.0%	-1.0
Colorado	22.2%	22.6%	-0.4
Connecticut	16.3%	18.5%	-2.3
Delaware	25.5%	26.7%	-1.2
District of Columbia	18.1%	18.7%	-0.6
Florida	28.1%	26.7%	1.4
Georgia	29.2%	26.6%	2.6
Hawaii	5.9%	8.9%	-3.0
Idaho	22.7%	20.5%	2.2
Illinois	19.9%	21.4%	-1.5
Indiana	32.5%	31.2%	1.3
Iowa	22.3%	22.8%	-0.5
Kansas	27.0%	26.4%	0.6
Kentucky	30.9%	29.4%	1.5
Louisiana	26.9%	25.0%	1.9
Maine	27.7%	27.2%	0.4

	Unadjusted	Regression-adjusted	Percentage-point difference between unadjusted and adjusted
Maryland	18.6%	21.2%	-2.5
Massachusetts	16.1%	19.4%	-3.3
Michigan	19.7%	19.9%	-0.1
Minnesota	13.3%	15.2%	-1.9
Mississippi	37.4%	33.8%	3.6
Missouri	30.6%	29.9%	0.7
Montana	27.3%	26.9%	0.4
Nebraska	25.2%	25.8%	-0.6
Nevada	19.4%	18.3%	1.0
New Hampshire	23.8%	25.4%	-1.6
New Jersey	20.1%	22.4%	-2.3
New Mexico	26.7%	27.0%	-0.3
New York	18.8%	19.8%	-1.1
North Carolina	28.9%	26.9%	2.0
North Dakota	19.5%	20.0%	-0.5
Ohio	21.3%	20.9%	0.4
Oklahoma	30.0%	28.4%	1.6
Oregon	22.1%	21.7%	0.4
Pennsylvania	21.8%	23.0%	-1.2
Rhode Island	19.5%	21.1%	-1.6
South Carolina	32.4%	30.9%	1.5
South Dakota	22.2%	22.2%	0.1
Tennessee	27.3%	26.0%	1.3
Texas	25.4%	24.1%	1.3
Utah	18.2%	17.3%	1.0
Vermont	19.9%	21.2%	-1.3
Virginia	25.8%	26.8%	-1.1
Washington	23.7%	24.0%	-0.3
West Virginia	33.0%	32.3%	0.7
Wisconsin	23.0%	24.2%	-1.2
Wyoming	24.3%	24.8%	-0.5
<b>United States</b>	23.8%	--	--

Source: National Financial Capability Study, 2015.

Note: Regression adjustment controls for differences across states in coverage status, household income, age, sex, race/ethnicity, educational attainment, marital status, work status, presence of a working spouse or partner in the household, household structure, homeownership, and number of children in the household.

Table A.3 shows regression-adjusted differences in the prevalence of past-due medical debt across years within each state, controlling for the same factors. These estimates differ from those in tables A.1 and A.2, which are adjusted to control for characteristics of adults across states within each year. Although the estimated changes over time in past-due medical debt are adjusted to control for changes in individual characteristics, this analysis is not intended to disentangle the effect of the ACA from other factors that affect the likelihood of having past-due medical debt.

TABLE A.3

Regression-Adjusted Change in Share of Adults Ages 18 to 64 Reporting Past-Due Medical Debt, 2012–15

	2012 regression- adjusted share	2015 regression- adjusted share	Regression-adjusted percentage-point difference	Unadjusted percentage- point difference
Alabama	31.4%	31.1%	-0.3	-3.3
Alaska	29.4%	27.2%	-2.2	-3.8
Arizona	29.5%	26.2%	-3.3	-7.2
Arkansas	40.1%	34.6%	-5.5	-3.9
California	16.7%	16.0%	-0.7	-0.4
Colorado	29.2%	21.8%	-7.4	-7.8
Connecticut	26.1%	16.3%	-9.8	-10.1
Delaware	32.7%	27.0%	-5.7	-8.7
District of Columbia	21.9%	18.3%	-3.7	-4.0
Florida	27.5%	29.1%	1.5	-0.5
Georgia	30.6%	29.4%	-1.2	-1.8
Hawaii	13.8%	6.5%	-7.3	-8.8
Idaho	30.4%	23.3%	-7.1	-8.8
Illinois	25.4%	20.5%	-4.9	-8.1
Indiana	29.5%	35.9%	6.3	-0.2
Iowa	27.4%	23.3%	-4.1	-6.9
Kansas	30.1%	28.0%	-2.1	-4.1
Kentucky	38.8%	33.7%	-5.1	-11.2
Louisiana	31.2%	28.5%	-2.7	-5.9
Maine	28.9%	27.6%	-1.2	-1.4
Maryland	24.3%	19.8%	-4.4	-6.2
Massachusetts	19.9%	16.9%	-3.0	-4.1
Michigan	27.2%	20.7%	-6.5	-8.5
Minnesota	23.5%	15.3%	-8.2	-11.7
Mississippi	47.4%	39.3%	-8.1	-11.7
Missouri	32.4%	32.2%	-0.2	-3.9
Montana	34.1%	29.9%	-4.2	-9.4
Nebraska	30.8%	26.9%	-3.9	-7.5
Nevada	30.7%	19.6%	-11.1	-13.5
New Hampshire	27.3%	24.2%	-3.1	-4.4
New Jersey	21.5%	20.1%	-1.4	-1.4
New Mexico	27.6%	28.2%	0.6	-0.9
New York	23.8%	18.8%	-5.0	-5.1
North Carolina	40.6%	30.1%	-10.6	-13.0
North Dakota	28.6%	20.3%	-8.3	-10.2
Ohio	29.9%	22.2%	-7.7	-10.0
Oklahoma	36.4%	31.3%	-5.1	-8.0
Oregon	26.7%	20.9%	-5.8	-5.1
Pennsylvania	22.2%	23.0%	0.9	-1.6
Rhode Island	23.9%	20.2%	-3.7	-5.8
South Carolina	35.3%	34.4%	-0.9	-4.4
South Dakota	29.2%	23.4%	-5.8	-9.0
Tennessee	36.6%	28.5%	-8.1	-10.4
Texas	33.2%	26.4%	-6.8	-9.6
Utah	25.2%	18.3%	-6.8	-7.3

	2012 regression-adjusted share	2015 regression-adjusted share	Regression-adjusted percentage-point difference	Unadjusted percentage-point difference
Vermont	28.4%	20.8%	-7.6	-10.6
Virginia	29.6%	26.7%	-2.9	-4.7
Washington	28.0%	24.6%	-3.4	-4.5
West Virginia	38.0%	34.4%	-3.6	-4.5
Wisconsin	26.5%	24.4%	-2.1	-4.7
Wyoming	33.1%	26.0%	-7.1	-10.3
<b>United States</b>	28.5%	24.8%	-3.7	-5.8

Sources: National Financial Capability Study, 2012 and 2015.

Note: Regression adjustment controls for differences across years in coverage status, household income, age, sex, race/ethnicity, educational attainment, marital status, work status, presence of a working spouse or partner in the household, household structure, homeownership, and number of children in the household.

## Notes

1. "Civilian Labor Force Participation Rate by Age, Gender, Race, and Ethnicity," US Bureau of Labor Statistics, accessed September 27, 2016, [http://www.bls.gov/emp/ep\\_table\\_303.htm](http://www.bls.gov/emp/ep_table_303.htm).
2. In this brief, tests for statistical significance of differences are not conducted due to the survey's nonprobability sampling design. See the Data and Approach section for more information.
3. The estimated share of nonelderly adults reporting past-due medical debt in 2015 is largely consistent with other recent survey data on the prevalence of medical debt. These other surveys asked respondents whether they have "medical bills that are being paid off over time," which may or may not mean that the medical debt is past due. For instance, see Zammitti and Cohen (2015), Karpman and Long (2015), and Collins et al. (2015). The estimate presented here differs slightly from the estimate in a companion brief (Braga et al. 2017) because the latter excludes those with missing information on health insurance coverage status and permanent disability status, in addition to those with missing information on past-due medical debt.
4. Although Maryland and the District of Columbia are part of the Southern Census region, they have substantially higher per capita income than most other states in this region. See US Bureau of Economic Analysis, "State Personal Income 2015," news release, March 24, 2016, <http://www.bea.gov/newsreleases/regional/spi/2016/pdf/spi0316.pdf>.
5. Percentage point changes in past-due medical debt were also similar in states that did and did not expand Medicaid under the ACA (defined as states that expanded Medicaid in 2014 or the first half of 2015 or implemented early expansions), both among all nonelderly adults and among those with incomes below 138 percent of the federal poverty level. Many in the latter category are eligible for subsidized Marketplace coverage in nonexpansion states if their incomes are above 100 percent of the federal poverty level.
6. "Median Annual Household Income," Kaiser Family Foundation, accessed September 2, 2016, <http://kff.org/other/state-indicator/median-annual-income/>.
7. The 2012 survey was fielded between July and October, and the 2015 survey was fielded between June and October. "About the National Financial Capability Study," FINRA Investor Education Foundation, accessed September 2, 2016, <http://www.usfinancialcapability.org/about.php>; "2012 NFCS State-by-State Methodology," Applied Research & Consulting LLC, accessed September 2, 2016, [http://www.usfinancialcapability.org/downloads/NFCS\\_2012\\_State\\_by\\_State\\_Meth.pdf](http://www.usfinancialcapability.org/downloads/NFCS_2012_State_by_State_Meth.pdf); "2015 NFCS State-by-State Methodology," Applied Research & Consulting LLC, accessed September 2, 2016, [http://www.usfinancialcapability.org/downloads/NFCS\\_2015\\_State\\_by\\_State\\_Meth.pdf](http://www.usfinancialcapability.org/downloads/NFCS_2015_State_by_State_Meth.pdf).
8. In 2015, larger samples were drawn for California, Illinois, New York, and Texas (roughly 1,000 people per state).



9. Our analytic sample includes approximately 800 respondents in each state that was oversampled in 2015 (California, Illinois, New York, and Texas).
10. Those who reported that they do not know or prefer not to say made up 2.8 percent of the nonelderly sample and are excluded from the analysis.
11. Because of sample size limitations, the NHIS cannot be used to produce annual state-level estimates for all states.
12. “Opt-In Surveys and Margin of Error.” American Association for Public Opinion Research, accessed December 9, 2016. <http://www.aapor.org/Education-Resources/For-Researchers/Poll-Survey-FAQ/Opt-In-Surveys-and-Margin-of-Error.aspx>.
13. “2012 NFCS State-by-State Methodology,” Applied Research & Consulting LLC, accessed September 2, 2016, [http://www.usfinancialcapability.org/downloads/NFCS\\_2012\\_State\\_by\\_State\\_Meth.pdf](http://www.usfinancialcapability.org/downloads/NFCS_2012_State_by_State_Meth.pdf); “2015 NFCS State-by-State Methodology,” Applied Research & Consulting LLC, accessed September 2, 2016, [http://www.usfinancialcapability.org/downloads/NFCS\\_2015\\_State\\_by\\_State\\_Meth.pdf](http://www.usfinancialcapability.org/downloads/NFCS_2015_State_by_State_Meth.pdf).
14. “Opt-In Surveys and Margin of Error.” American Association for Public Opinion Research, accessed December 9, 2016. <http://www.aapor.org/Education-Resources/For-Researchers/Poll-Survey-FAQ/Opt-In-Surveys-and-Margin-of-Error.aspx>.

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## About the Authors

**Michael Karpman** is a research associate in the Health Policy Center at the Urban Institute. His work primarily focuses on the implications of the Affordable Care Act, including quantitative analysis related to health insurance coverage, access to and affordability of health care, use of health care services, and health status.

**Kyle J. Caswell** is a senior research associate and economist in the Health Policy Center. His research covers multiple areas related to health and economic well-being, with a focus on vulnerable populations.

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