ISSUE BRIEF
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Catastrophic Out-of-Pocket Health Care Costs: A Problem Mainly for Middle-Income Americans with Employer Coverage

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ABSTRACT

ISSUE: Many studies report that high out-of-pocket health spending is an increasing problem, despite expanded insurance coverage under the Affordable Care Act (ACA). Little is known about how Americans' out-of-pocket spending has changed over time.

GOALS: To observe trends in high out-of-pocket spending and describe the distribution and composition of out-of-pocket spending over time, focusing on the top 5 percent and 1 percent of spenders.

METHODS: Analysis of Medical Expenditure Panel Survey (MEPS) data.

KEY FINDINGS AND CONCLUSIONS: Expansions in insurance coverage and in the quality of coverage through the ACA have protected most Americans from high out-of-pocket costs. Recently, however, out-of-pocket costs for the highest out-of-pocket spenders (the 99th percentile) have been increasing. In 2017, one in 100 Americans under age 64 spent $5,000 or more out of pocket for medical services, and about one in 20 spent more than $1,700. High out-of-pocket spending mostly affects those with employer coverage and those with incomes above 400 percent (and, in particular, above 600 percent) of the federal poverty level. The plurality of this spending is for physician services. High deductibles and out-of-pocket maximums in private insurance, combined with exposure to out-of-network bills for physician services, leave many Americans facing very high out-of-pocket costs.

TOPLINES

- For most Americans, the Affordable Care Act reduced the risk of very high out-of-pocket health care costs.
- Currently, people with private insurance bear the brunt of high out-of-pocket health care costs.
- In 2017, 1 percent of Americans under age 64 spent at least $5,000 on out-of-pocket health care costs, with physician care accounting for the greatest share of this spending.

The Commonwealth Fund

INTRODUCTION

Americans are increasingly concerned about the high cost-sharing requirements in their health insurance coverage.[1] According to federal data, average deductibles in employer plans more than doubled between 2008 and 2017, from $869 to $1,808.[2] Although most Americans have insurance coverage, only 62 percent of adults in a recent Commonwealth Fund survey reported they were very or somewhat confident in their ability to afford health care, while those earning less than 250 percent of the federal poverty level (FPL) — $12,490 for a single person and $21,330 for a family of three in 2019 — were even less confident.[3]

Despite recent increases in cost-sharing requirements, both average per capita out-of-pocket spending and the out-of-pocket share of national health expenditures have remained relatively flat in the past 15 years.[4] Analysis of average out-of-pocket spending, however, may offer a misleading picture of the risks people, especially those with serious illnesses, face.

Health care spending is highly concentrated among the highest spenders. In 2016, the top 5 percent of spenders accounted for half of health care spending, spending about $50,000 annually.[5] Out-of-pocket spending was similarly concentrated: the highest 5 percent accounted for 46 percent of overall out-of-pocket spending.[6]

Very high out-of-pocket expenses may have dangerous consequences: high costs have been linked to poor medication adherence and treatment delays in patients with rheumatoid arthritis, kidney disease, diabetes, oral cancer, and breast cancer.[7] We find that, in 2017, one in 100 Americans under age 65 spent $5,000 or more out of pocket for medical services, and about 1 in 20 spent more than $1,700. Protecting people from such catastrophic spending is among the most important roles of health insurance.

Many provisions of the Affordable Care Act (ACA) were designed to help reduce the incidence of high out-of-pocket spending. Nearly 20 million more Americans now have health insurance coverage than before the ACA took effect, and the duration of coverage gaps also has declined.[8] The ACA's expansion of access to preventive services without copayments reduced out-of-pocket bills for these services, while the elimination of annual and lifetime maximums provided financial protection to those with the highest medical costs.[9] Current coverage offered in the individual market has more generous benefits and lower cost-sharing provisions than was the case before the ACA.[10] In 2019, ACA-compliant coverage could not have an out-of-pocket maximum above $7,900 for individuals and $15,800 for families.[11] While these out-of-pocket requirements are lower than those seen in the individual market before the ACA, these deductibles and out-of-pocket maximums remain very high relative to household incomes.

Other developments in health care markets have increased the risks of high out-of-pocket spending, especially among those with employer-sponsored insurance. Since 2003, tax policy has encouraged employers to offer high-deductible insurance plans with tax-favored health savings accounts. Today, 19 percent[12] of employees are enrolled in such plans, but few — only 5 percent of taxpayers in 2014 — contributed to their health savings accounts.[13]

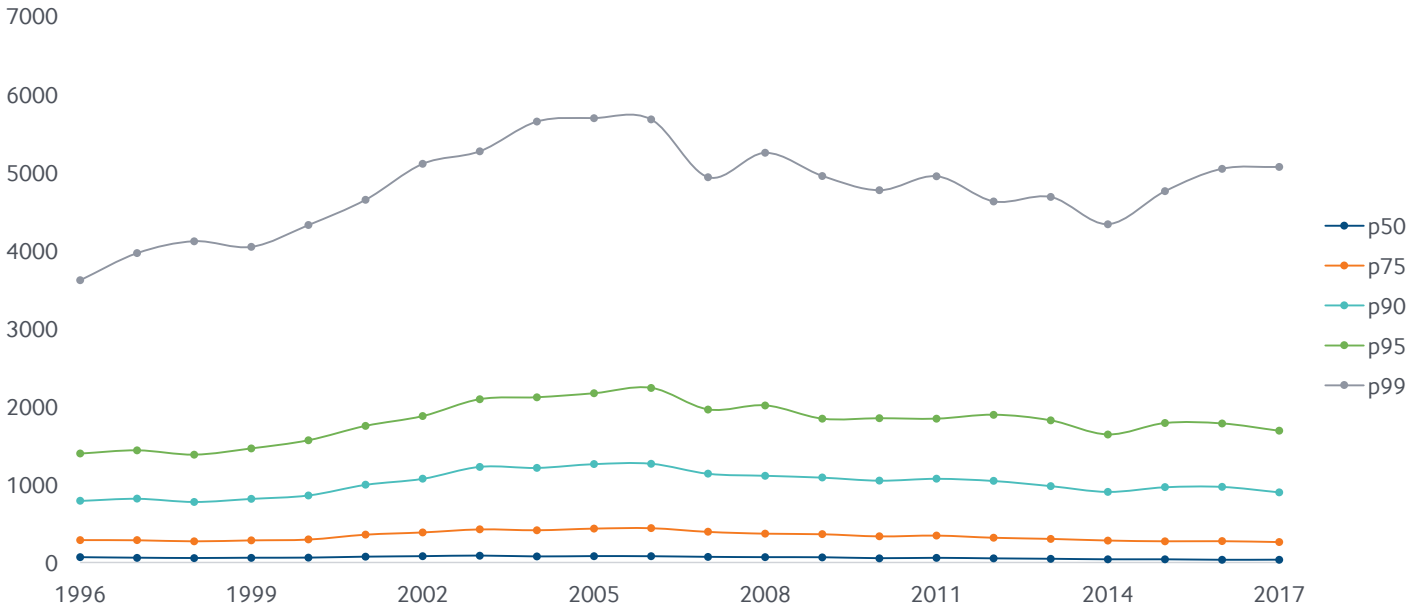
This issue brief examines trends in the level and distribution of high out-of-pocket spending across insurance coverage, age, and income categories. Focusing on the population under age 64, we examine trends in out-of-pocket spending at the 50th, 75th, 90th, 95th, and 99th percentiles. We then examine the composition of spending among those in the top 5 percent and 1 percent of the spending distribution.

FINDINGS

Between 1996 and 2006, out-of-pocket spending (adjusted for economy-wide inflation) increased rapidly for most Americans (Exhibit 1). At the median, out-of-pocket expenses over this period increased by 19 percent. Since 2006, however, patterns have diverged considerably across the spending distribution. For those who spend very little out of pocket on health care (about three-quarters of the population), out-of-pocket spending has fallen. Between 1996 and 2017, out-of-pocket spending at the lower end of the spending distribution declined, from $65 to $33 at the 50th percentile and from $285 to $260 at the 75th percentile.

Exhibit 1. Per-Person Out-of-Pocket Spending (MEPS, Inflation-Adjusted)

Out-of-pocket spending in 2019 dollars



Notes: Out-of-pocket spending was generated by excluding spending on home health care, vision aids, and dental costs from the overall out-of-pocket spending variable. The 50th, 75th, 90th, 95th, and 99th percentiles for the population age 63 and under were then calculated for each year and Consumer Price Index (CPI)-adjusted to 2019 dollars.

Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

For those with higher levels of out-of-pocket spending (above the 90th percentile), spending was relatively flat between 2006 and 2014, and then dropped sharply in 2014. Since 2014, however, out-of-pocket spending has begun to increase again among those at the 99th percentile of the spending distribution.

Increases in out-of-pocket spending have been most apparent among those holding employer coverage.

Because of fairly steady annual increases over a decade, inflation-adjusted out-of-pocket expenses among the top 1 percent of spenders with employer-sponsored coverage in 2017 were 15 percent higher than in 2007 (increasing from $4,675 to $5,426) (Exhibit 2).

Increases in spending at the 99th percentile are also evident in the individual health insurance market, where out-of-pocket expenses have consistently been much higher. Because the individual market is small, we report three-year moving averages for this population (Appendix Exhibit 1). From 2015 to 2017, the top 1 percent of spenders in the individual market spent, on average, more than $10,509 out of pocket annually, up 9 percent from $9,679 in 2005 to 2007.

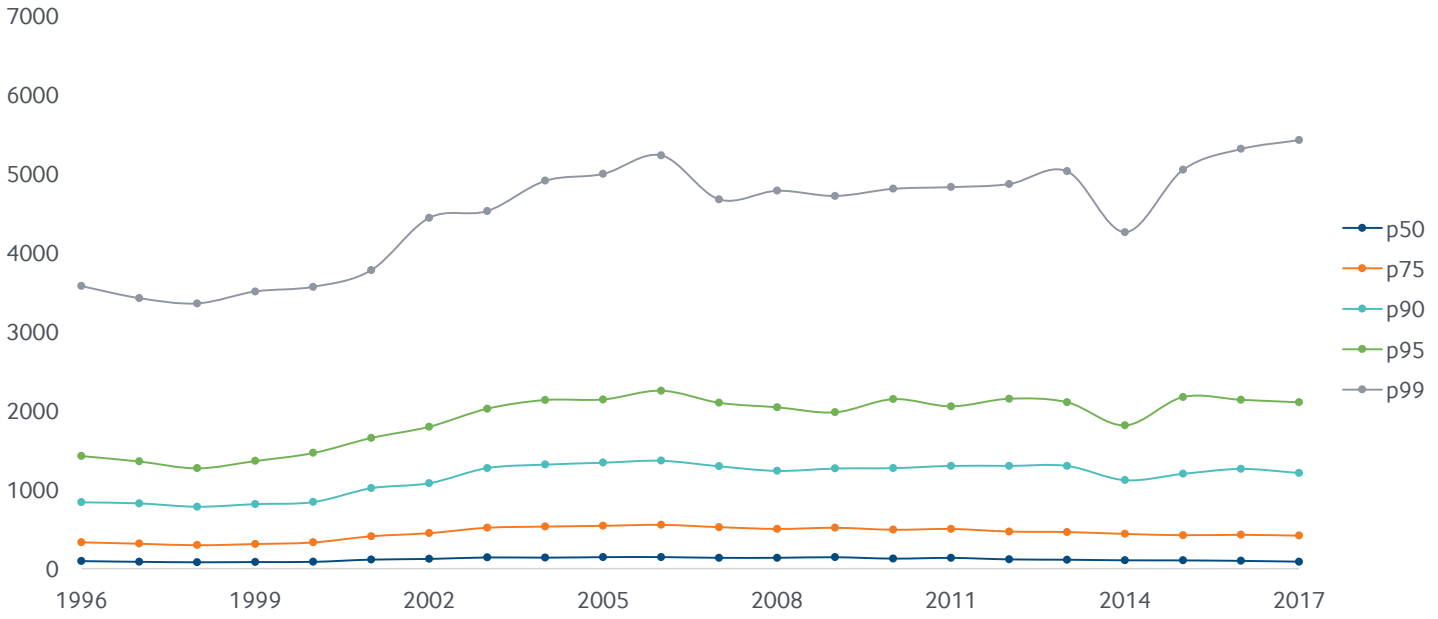
Policy changes have afforded much more risk protection to low-income groups but have increased out-of-pocket risk for higher-income groups.

Exhibit 3 shows the spending trend among the top 5 percent of out-of-pocket spenders within each income group.

In 2001, about one in 20 people in households with incomes above 400 percent of FPL (about $81,700 for a family of three) and about one in 20 people in households with incomes below 100 percent of FPL (about $21,300 for a family of three) each spent more than $1,300 on out-of-pocket medical expenditures. By 2017, spending patterns in the two income groups had diverged. The top 5 percent of spenders in higher-income households spent about $2,200 on out-of-pocket expenses, 70 percent more than in 2001. Meanwhile, the top 5 percent of spenders in the lowest income households spent about $650 out of pocket, half as much as in 2001.

Exhibit 2. Out-of-Pocket Spending Among Those Covered by Full-Year Employer-Sponsored Insurance

Out-of-pocket spending in 2019 dollars

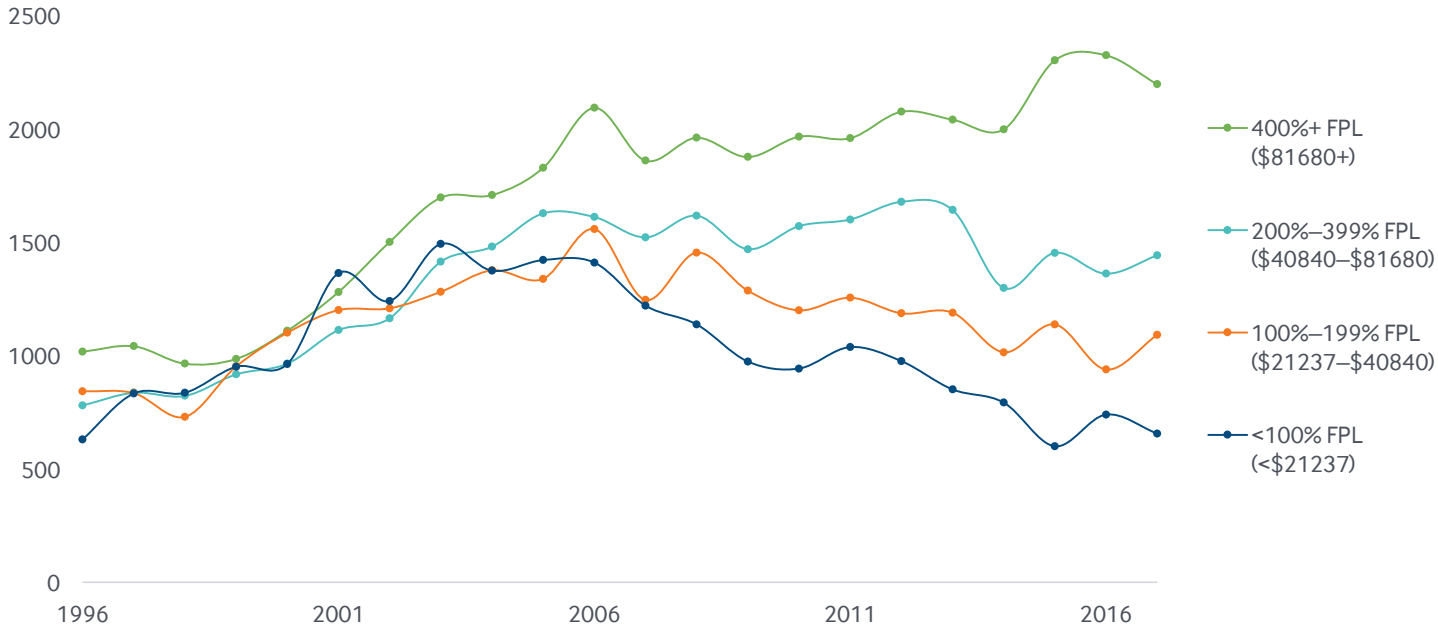


Notes: Lines describe the 50th, 75th, 90th, 95th, and 99th percentiles of out-of-pocket spending for holders of private group insurance (CPI-adjusted to 2019 dollars). Employer coverage includes the MEPS categories of employer/union group insurance and other group insurance.

Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Exhibit 3. Out-of-Pocket Spending at the 95th Percentile of Spenders by Income Category

Out-of-pocket spending in 2019 dollars



Notes: Lines describe the 95th percentile of out-of-pocket spending (defined as in above exhibits) by income group (CPI-adjusted to 2019 dollars). Income groups are defined as the percentage of the federal poverty level (FPL) for a family of three.

Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

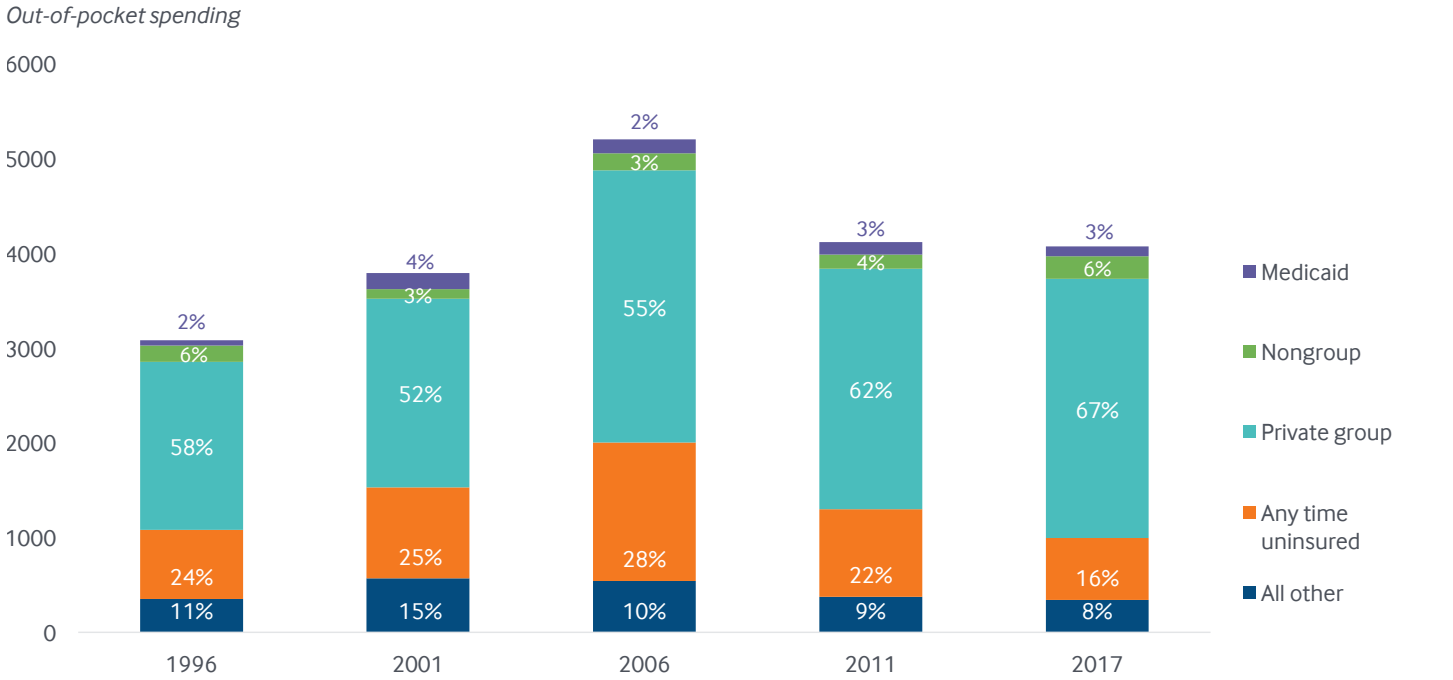
The main reason for this divergence is that before 2014, many high out-of-pocket spenders were uninsured, and most uninsured people had lower incomes.[14] Since then, there has been a substantial reduction in the share of very high out-of-pocket spenders who are uninsured (Exhibit 4). In 2006, 28 percent of those in the top 5 percent of out-of-pocket spenders and 32 percent of those in the top 1 percent had spent at least part of the year uninsured. In 2017, only 16 percent of those in the top 5 percent and 20 percent in the top 1 percent had spent any time uninsured.

This reduction in the percentage of the uninsured population means that a greater percentage of the highest out-of-pocket spenders today have employer-sponsored and individual health insurance coverage. Among those in the top 1 percent of spenders, the proportion that had been insured all year rose from two-thirds in 2009 to 80 percent in 2017.

An even more striking shift has occurred by income, especially since 2014 (Exhibit 5). Most of the new coverage options available through the ACA expansions were targeted at those with incomes below 400 percent of FPL. Improvements in the quality of coverage since 2014 also have benefited lower-income people. Medicaid expansions, cost-sharing subsidies, and improvements in the scope of private insurance under the ACA have led to absolute reductions in out-of-pocket spending among those with incomes below 400 percent of FPL within each insurance category.

Consistent with this pattern, the share of high out-of-pocket spenders with lower incomes has declined substantially. In 2013, 49 percent of those in the top 5 percent of out-of-pocket spending had incomes below 400 percent of FPL. In 2017, that share had fallen to 39 percent. Conversely, the share of those in the top 5 percent of spending in the highest income groups rose; the percentage of the highest spenders with incomes over 600 percent of FPL rose from 25 percent in 2013 to 35 percent in 2017.

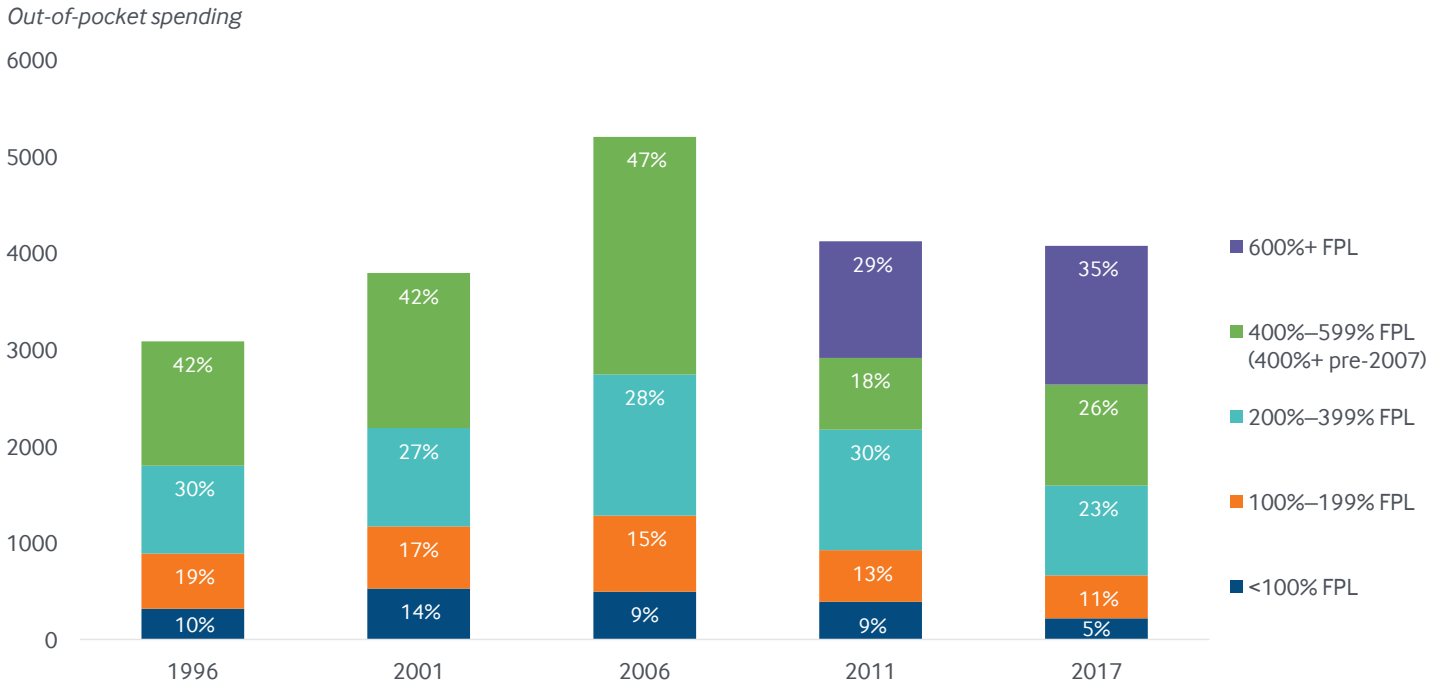
Exhibit 4. Insurance Coverage of the Top 5 Percent of All Out-of-Pocket Spenders



Notes: Bars describe the proportion of individuals in each insurance category among those with out-of-pocket spending (defined as in previous exhibits) at or above the 95th percentile. The height of the bars describes mean out-of-pocket spending among those in the top 5 percent of out-of-pocket spenders.

Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Exhibit 5. Distribution of the Top 5 Percent of Out-of-Pocket Spenders by Income Category



Notes: Bars describe the proportion of individuals at each poverty category among those with out-of-pocket spending (defined as in previous exhibits) at or above the 95th percentile. The height of the bars describes mean out-of-pocket spending among those in the top 5 percent of out-of-pocket spenders.

Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Reductions in out-of-pocket spending among lower-income groups might have occurred because of better insurance protection — but they might also have occurred because high cost-sharing reduced overall service use in these groups. To assess this possibility, we examined how total spending for these groups changed over time. Both the 95th percentile of total health care spending and average total health care spending among those in the top 5 percent of out-of-pocket spenders increased similarly for all income groups during this period (Appendix Exhibits 2 and 3). These patterns suggest that better risk protection, rather than less utilization, explains the reduced out-of-pocket spending of lower-income groups.

Physician services, not prescription drugs, account for a greater share of out-of-pocket spending among high spenders.

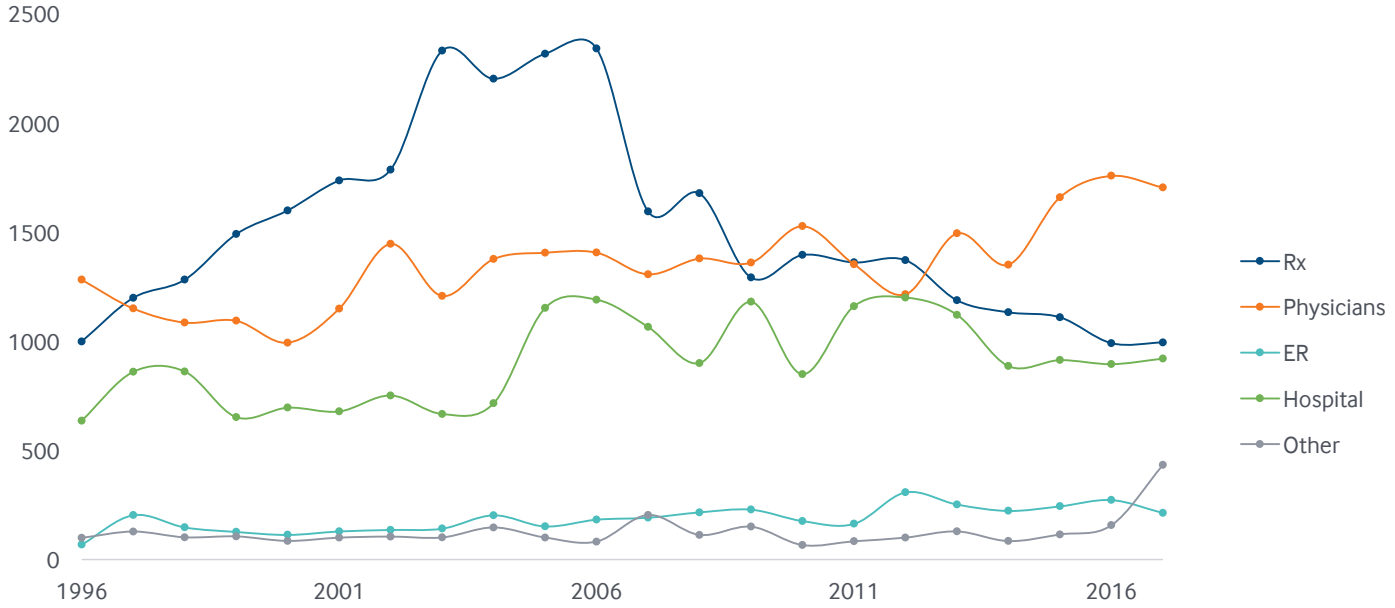
Finally, we examined trends in out-of-pocket spending on specific services among high spenders (Exhibit 6). Average out-of-pocket spending on prescription drugs peaked in 2006 but has declined quite steadily since then. Average out-of-pocket spending on hospital and emergency care has remained relatively stable over time. Average out-of-pocket spending on physician care, however, has been increasing since 2014.

The consequence of these patterns is that retail prescription drug costs have diminished as a share of out-of-pocket spending among high spenders (Exhibit 7). In 2003, about 55 percent of all spending among those in the top 5 percent of the spending distribution was for prescription drugs. In 2017, only 24 percent of all spending for these high spenders went toward prescription drugs. By contrast, the share of spending among the top 5 percent of spenders that went to physician and related services rose from 27 percent in 2003 to 44 percent in 2017.

We see similar patterns when we focus only on those with private insurance. These findings are consistent with a recent analysis of National Health Expenditure Accounts data, which similarly show that per capita out-of-pocket spending on prescription drugs has decreased since the mid-2000s, both as a share of spending and in absolute value, while out-of-pocket spending on physicians and hospitals has been increasing.[15]

Exhibit 6. Mean Out-of-Pocket Spending on Selected Services Among the Top 5 Percent of Out-of-Pocket Spenders

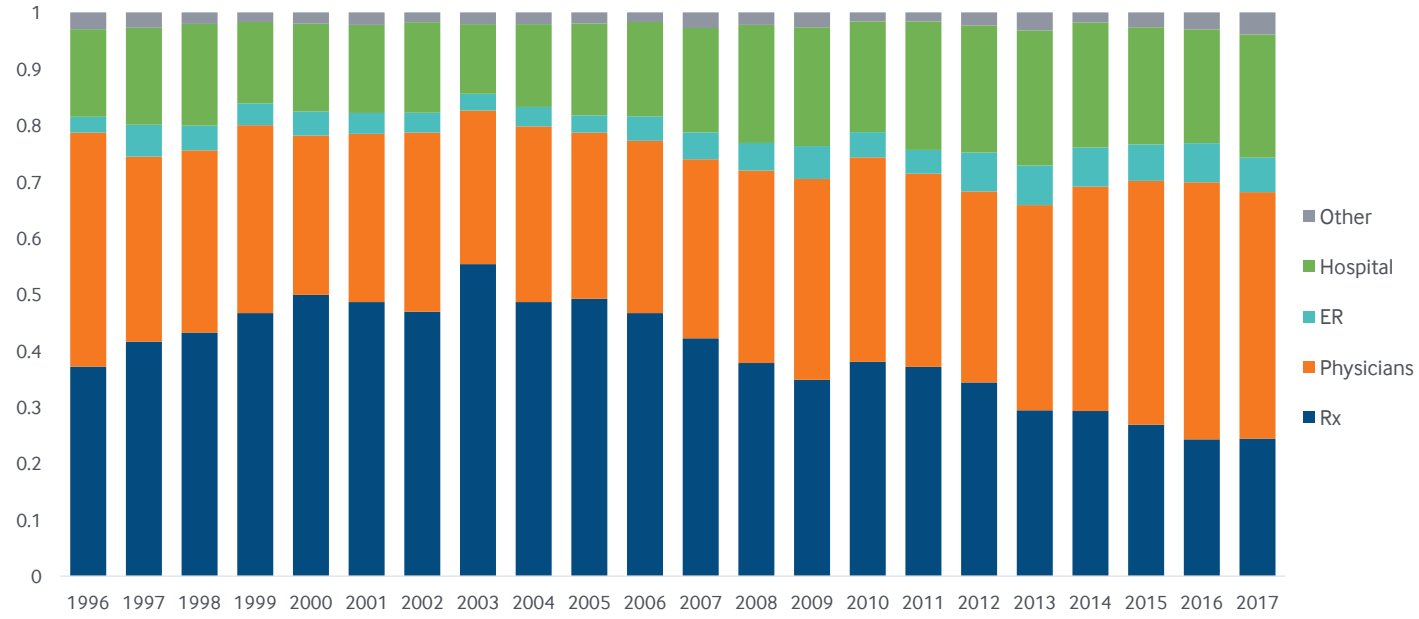
Out-of-pocket spending in 2019 dollars



Notes: Lines describe mean spending on each service among those at or above the 95th percentile of the out-of-pocket spending distribution (all figures CPI-adjusted to 2019 dollars).

Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Exhibit 7. Proportion of Out-of-Pocket Spending on Selected Services of the Top 5 Percent of Out-of-Pocket Spenders



Notes: Bars describe the share of spending on each category of services among those with out-of-pocket spending (defined as in previous graphs) at or above the 95th percentile. The Hospital category includes both inpatient stays and outpatient visits. The Physicians category includes office-based visits to physicians as well as other providers such as nurse practitioners and physician assistants. The Other category comprises medical supplies and equipment that do not fit in the other categories.

Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

The growing share of out-of-pocket spending that pays for physician services may reflect, in part, increased use of out-of-network services, both through surprise bills and other out-of-network uses. Health insurance plans typically provide much more limited financial protection for out-of-network use than for in-network use, including higher cost-sharing, higher out-of-pocket maximums, and no limitations on provider balance billing. Recent research shows that a large number of privately insured patients face unexpected out-of-network physician bills.[16]

POLICY IMPLICATIONS

As prior analysts have observed, rising cost-sharing requirements and concerns about out-of-pocket exposure do not correspond to rising out-of-pocket spending levels on average. We find, however, that out-of-pocket spending has been increasing since 2014 among Americans with the highest out-of-pocket spending levels. Those with private insurance and those with incomes above 400 percent of FPL (and especially above 600 percent of FPL) have been most affected by rising out-of-pocket costs.

Several factors likely drive these results. First, the ACA insurance expansions led to increases in the number of people with health insurance, reducing the share of high spenders who are uninsured. Second, particularly for those with low incomes, the ACA provided much better protection against out-of-pocket costs. Third, the proliferation of high-deductible plans with health savings accounts among people in these higher income groups may lead to higher out-of-pocket spending in this group.

One concern is that the growing share of high spenders who have higher incomes reflects a reduction in total health care utilization among those with lower incomes. We do not find evidence of this pattern — total spending for all groups has increased over this period. We also find that a growing share of out-of-pocket costs among those with high out-of-pocket spending goes toward paying for physician services. This increase may be, in part, because of the rise of surprise (and nonsurprise) bills for out-of-network physician service use.

Our results show that out-of-pocket spending for most Americans has been flat or declining, and that for most people, the ACA has reduced the risk of very high out-of-pocket spending. However, we also find that a small percentage of Americans increasingly bears the brunt of high out-of-pocket costs. High deductibles and out-of-pocket maximums shift the burden of health care costs away from premiums paid by the average insured person to those with serious illnesses and substantial health service use. This pattern undermines a principle purpose of health insurance: to protect people against catastrophic expenses.

HOW WE CONDUCTED THIS STUDY

We analyzed Medical Expenditure Panel Survey (MEPS) data from 1996 to 2017 and excluded all respondents age 64 or older to focus on the nonelderly population. The analysis excluded dental care, home health care, and vision care. The median, mean, 75th percentile, 90th percentile, 95th percentile, and 99th percentile of out-of-pocket spending were then calculated across various insurance statuses and income groups.

The second part of the analysis, which was restricted to the top 5 percent and top 1 percent of out-of-pocket spenders in a given year, examined the composition of these populations by insurance status and income group. Results were confirmed by comparing trends of spending in the Current Population Survey by insurance coverage, income categories, age categories, and racial categories from 2011 to 2018.

NOTES

1. Sara R. Collins and David C. Radley, *The Cost of Employer Insurance Is a Growing Burden for Middle-Income Families* (Commonwealth Fund, Dec. 2018).

2. Collins and Radley, *Cost of Employer Insurance,* 2018.

3. Sara R. Collins et al., "Americans' Confidence in Their Ability to Pay for Health Care Is Falling," *To the Point* (blog), Commonwealth Fund, May 10, 2018.

4. Thomas Rice et al., "Revisiting Out-of-Pocket Requirements: Trends in Spending, Financial Access Barriers, and Policy in Ten High-Income Countries," *BMC Health Services Research* 18, no. 371 (May 18, 2018); "Out-of-Pocket Spending," Peterson–KFF Health System Tracker, n.d.; and Rabah Kamal, Daniel McDermott, and Cynthia Cox, "How Has U.S. Spending on Healthcare Changed Over Time?," Peterson–KFF Health System Tracker, Dec. 20, 2019.

5. Bradley Sawyer and Nolan Sroczynski, "How Do Health Expenditures Vary Across the Population?," Peterson–KFF Health System Tracker, 2017.

6. Sawyer and Sroczynski, "How Do Health?," 2017.

7. Parvaneh Heidari, Wendy Cross, and Kimberley Crawford, "Do Out-of-Pocket Costs Affect Medication Adherence in Adults with Rheumatoid Arthritis? A Systematic Review," *Seminars in Arthritis and Rheumatism* 48, no. 1 (Aug. 2018): 12–21; Rebecca Dodd et al., "The Impact of Out-of-Pocket Costs on Treatment Commencement and Adherence in Chronic Kidney Disease: A Systematic Review," *Health Policy and Planning* 33, no. 9 (Nov. 2018): 1047–54; J. Frank Wharam et al., "Diabetes Outpatient Care and Acute Complications Before and After High-Deductible Insurance Enrollment: A Natural Experiment for Translation in Diabetes (NEXT-D) Study," *JAMA Internal Medicine* 177, no. 3 (Mar. 2017): 358–68; J. Frank Wharam et al., "High-Deductible Insurance and Delay in Care for the Macrovascular Complications of Diabetes," *Annals of Internal Medicine* 169, no. 12 (Dec. 18, 2018): 845–54; Jalpa A. Doshi et al., "Association of Patient Out-of-Pocket Costs with Prescription Abandonment and Delay in Fills of Novel Oral Anticancer Agents," *Journal of Clinical Oncology* 36, no. 5 (Feb. 10, 2018): 476–82; and J. Frank Wharam et al., "Breast Cancer Diagnosis and Treatment After High-Deductible Insurance Enrollment," *Journal of Clinical Oncology* 36, no. 11 (Apr. 10, 2018): 1121–27.

8. Sara R. Collins, Herman K. Bhupal, and Michelle M. Doty, *Health Insurance Coverage Eight Years After the ACA: Fewer Uninsured Americans and Shorter Coverage Gaps, But More Underinsured* (Commonwealth Fund, Feb. 2019); and Jennifer Tolbert et al., *Key Facts About the Uninsured Population* (Henry J. Kaiser Family Foundation, Dec. 2019).

9. Nadia Chait and Sherry Glied, "Promoting Prevention Under the Affordable Care Act," *Annual Review of Public Health* 39 (2018): 507–24; and "Lifetime & Annual Limits," U.S. Department of Health and Human Services, last updated Jan. 31, 2017.

10. Kate Fritzsche and Sarah Masi, *Federal Subsidies for Health Insurance Coverage for People Under Age 65: 2016 to 2026* (Congressional Budget Office, Mar. 24, 2016).

11. "Out-of-Pocket Maximum/Limit," HealthCare.gov, n.d.

12. Robin A. Cohen and Emily P. Zammitti, *High-Deductible Health Plan Enrollment Among Adults Aged 18–64 with Employment-Based Insurance Coverage*, NCHS Data Brief 317 (National Center for Health Statistics, Aug. 2018): 1–8.

13. Tax Policy Center, *Tax Policy Center Briefing Book: Key Elements of the U.S. Tax System* (Urban Institute and Brookings Institution, 2017).

14. Fewer than 2 percent of high out-of-pocket spenders in any year of the MEPS since 2007 (when detailed income categories were included) were uninsured people with incomes above 600 percent of FPL.

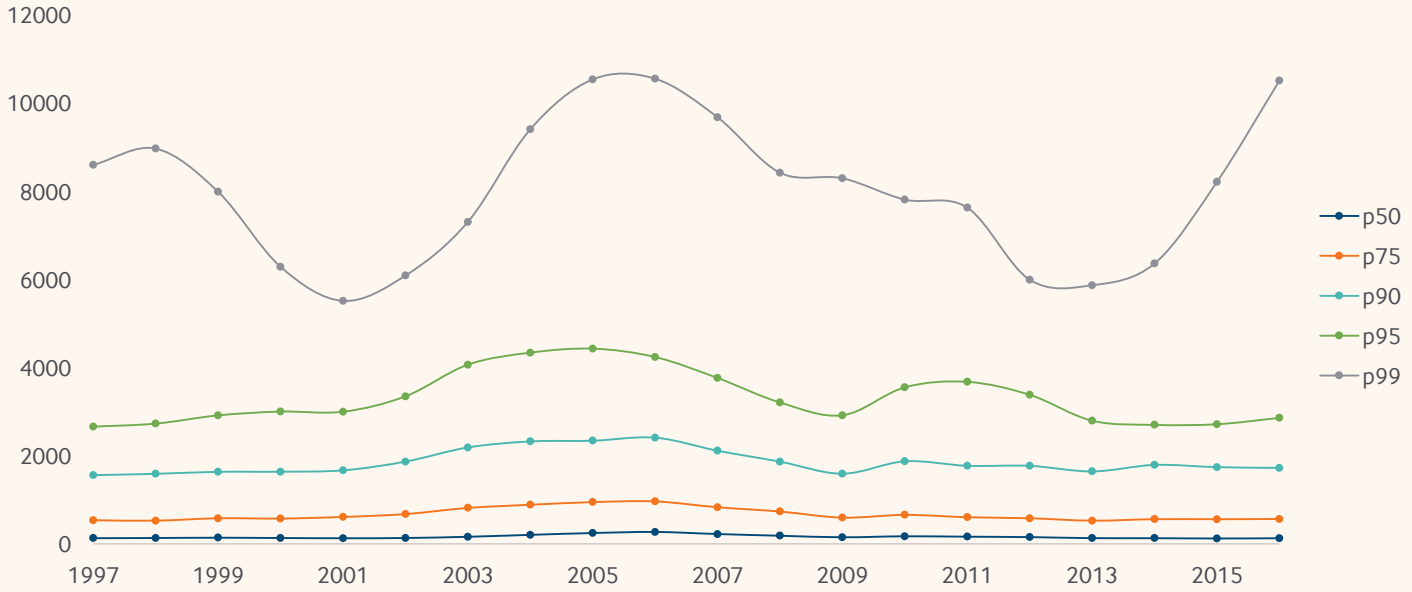
15. Rabah Kamal, Cynthia Cox, and Daniel McDermott, "What Are the Recent and Forecasted Trends in Prescription Drug Spending?," Peterson–KFF Health System Tracker, Feb. 20, 2019.

16. Zack Cooper et al., "Out-of-Network Billing and Negotiated Payments for Hospital-Based Physicians," *Health Affairs* 39, no. 1 (Jan. 2020): 24–32.

APPENDIX

Appendix Exhibit 1. Out-of-Pocket Spending Among Those Covered by Full-Year Individual Insurance, Three-Year Moving Averages

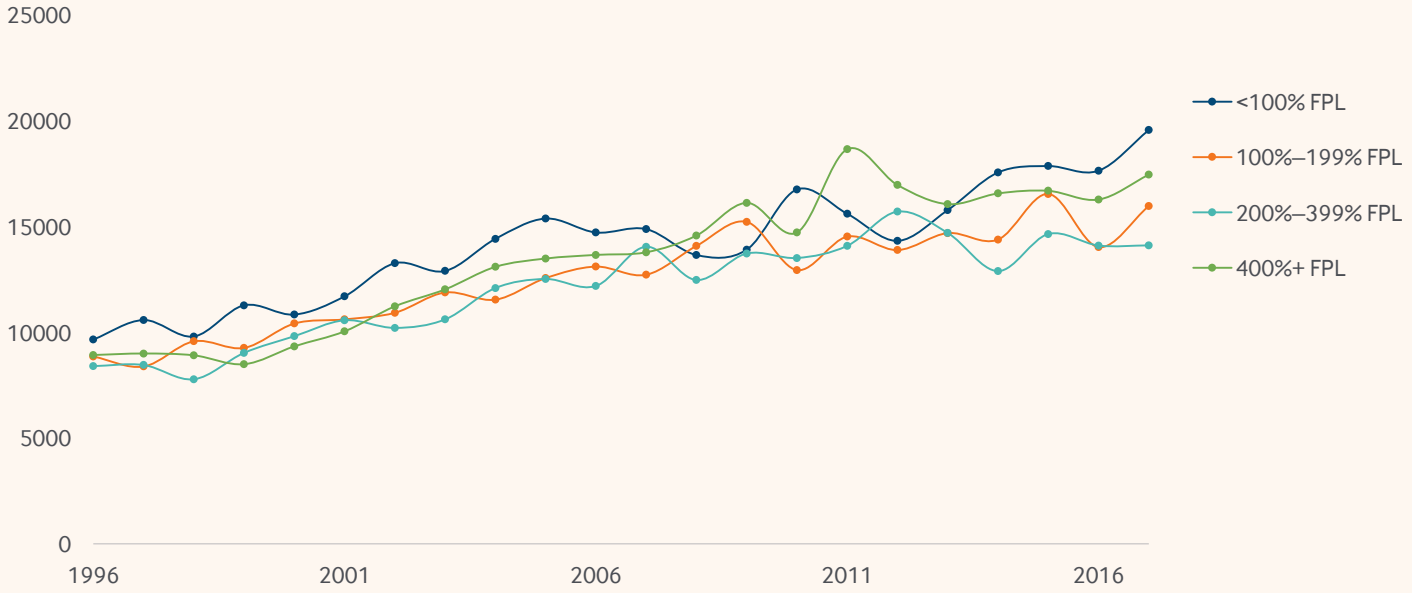
Out-of-pocket spending in 2019 dollars



Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Appendix Exhibit 2. Per-Person Total Spending at the 95th Percentile by Percentage of Federal Poverty Level, Inflation-Adjusted, Under Age 64

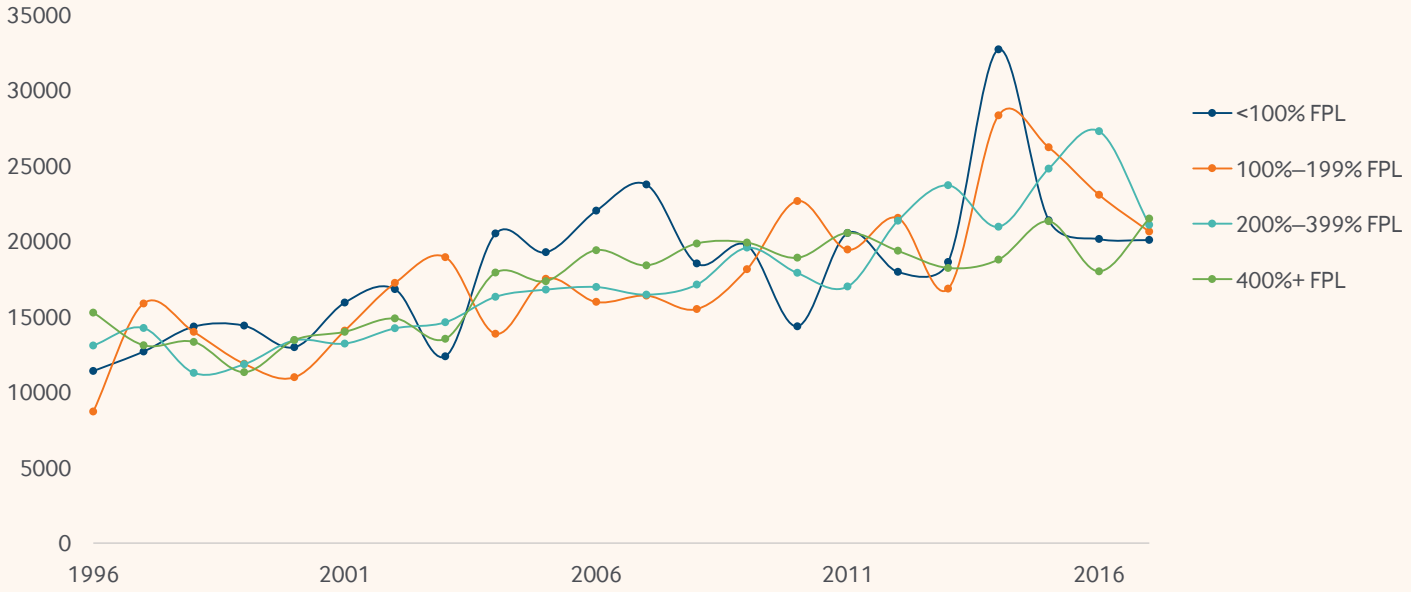
Total spending in 2019 dollars



Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Appendix Exhibit 3. Average Per-Person Total Spending Among the Top 5 Percent of Out-of-Pocket Spenders by Income Category, Under Age 64

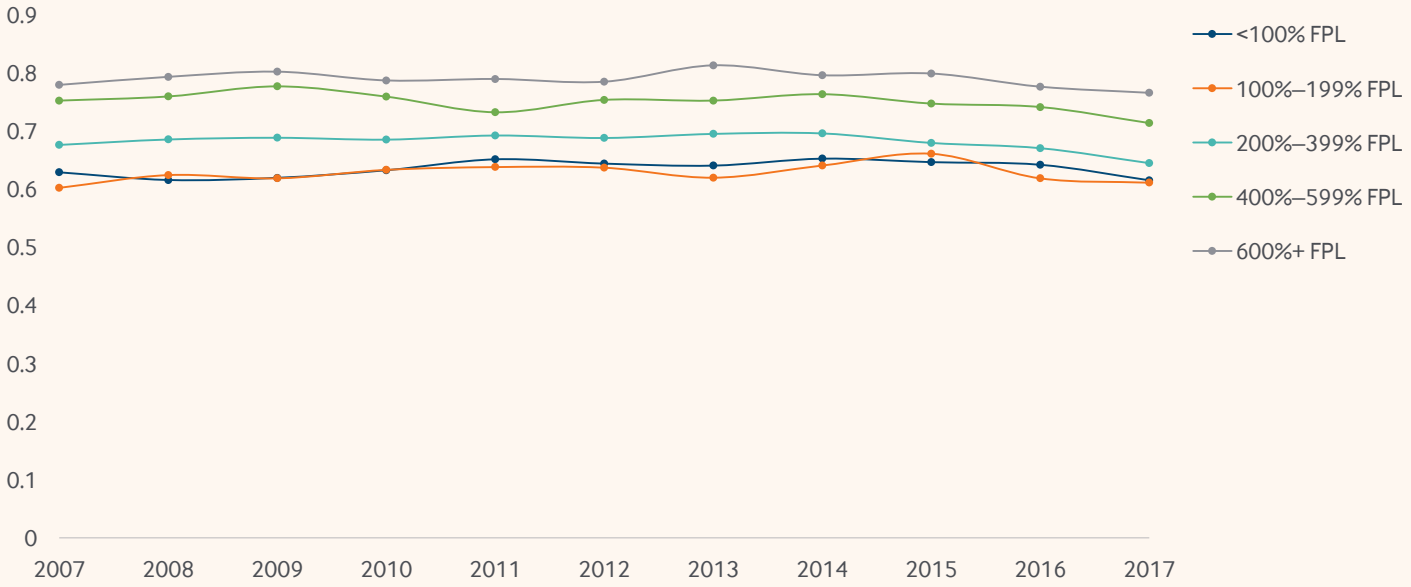
Total spending in 2019 dollars



Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Appendix Exhibit 4a. Proportion of Individuals in Each Income Category with at Least One Office Visit

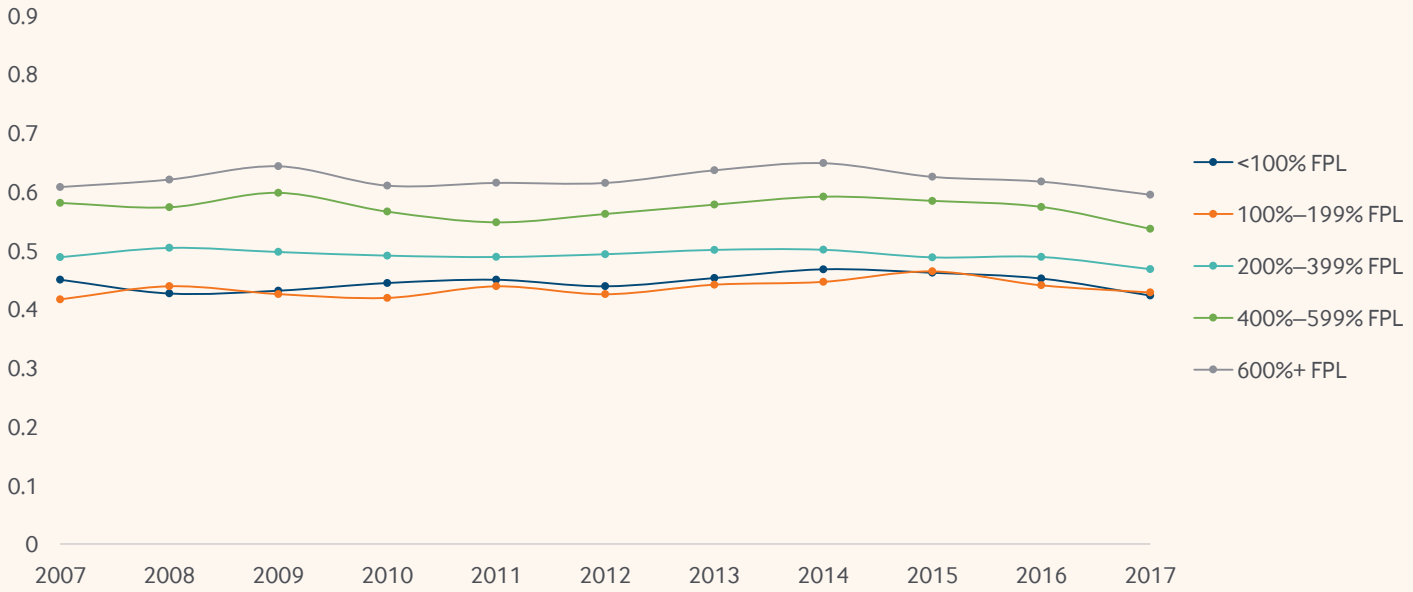
Proportion with one or more office visits



Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Appendix Exhibit 4b. Proportion of Individuals in Each Income Category with at Least Two Office Visits

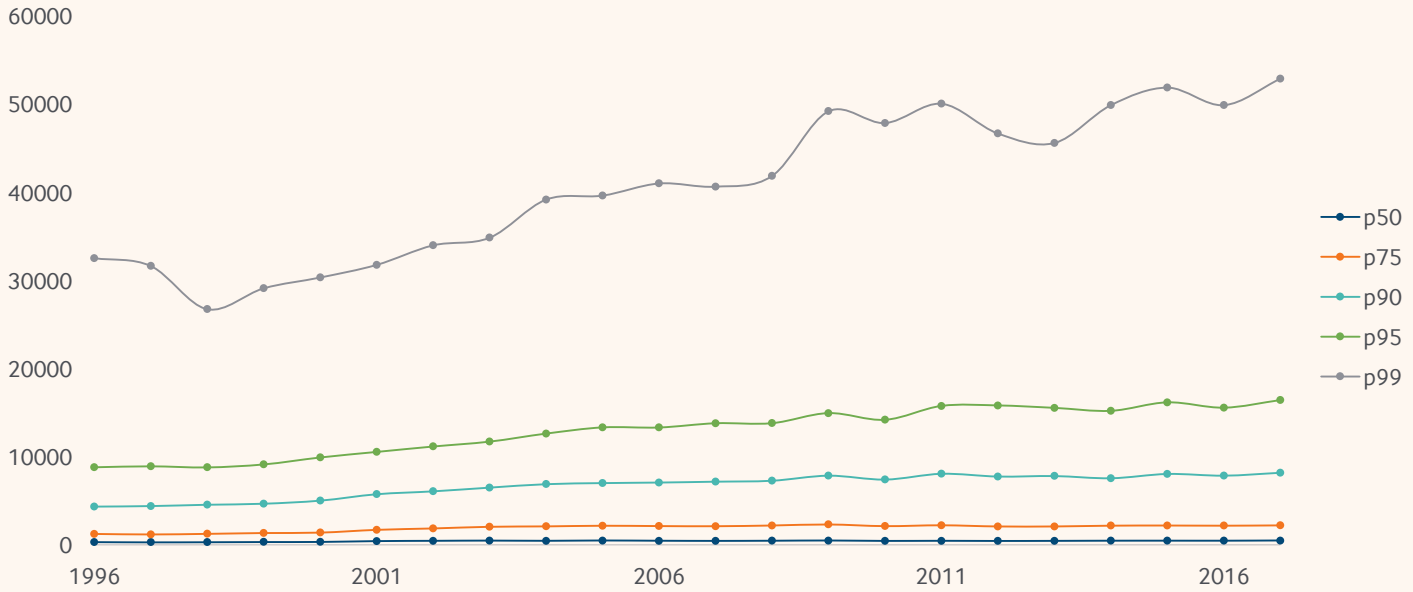
Proportion with two or more office visits



Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Appendix Exhibit 5. Per-Person Total Spending, Inflation-Adjusted MEPS, Under Age 64

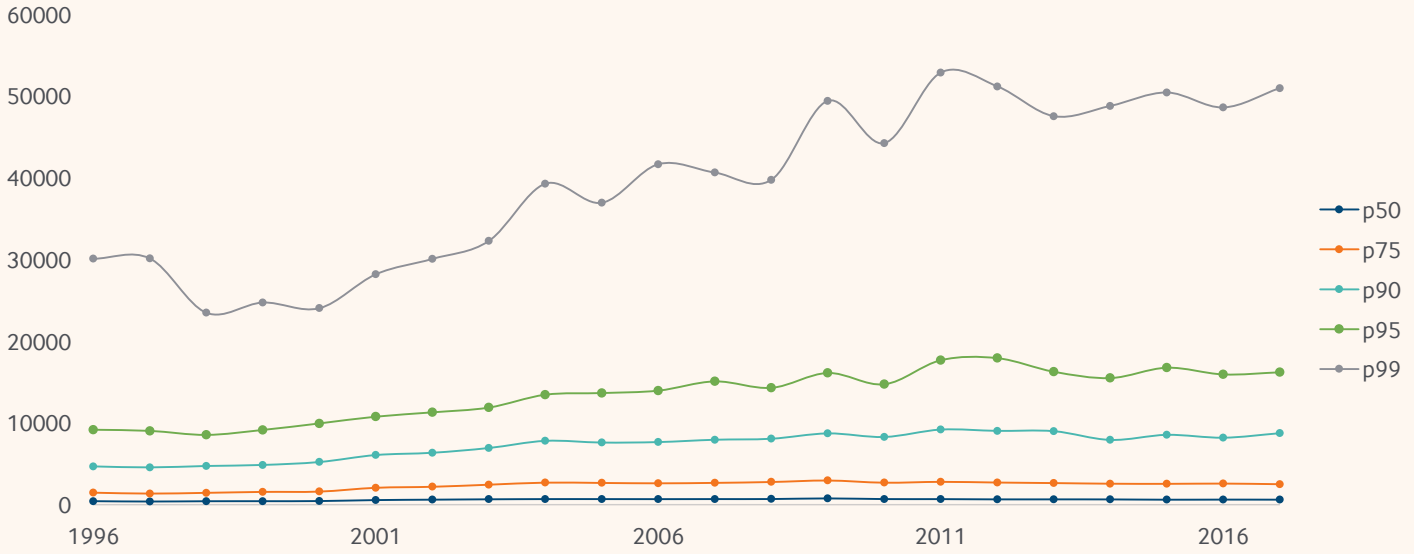
Total spending in 2019 dollars



Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Appendix Exhibit 6a. Per-Person Total Spending, Inflation-Adjusted, Employer-Sponsored Coverage, Under Age 64

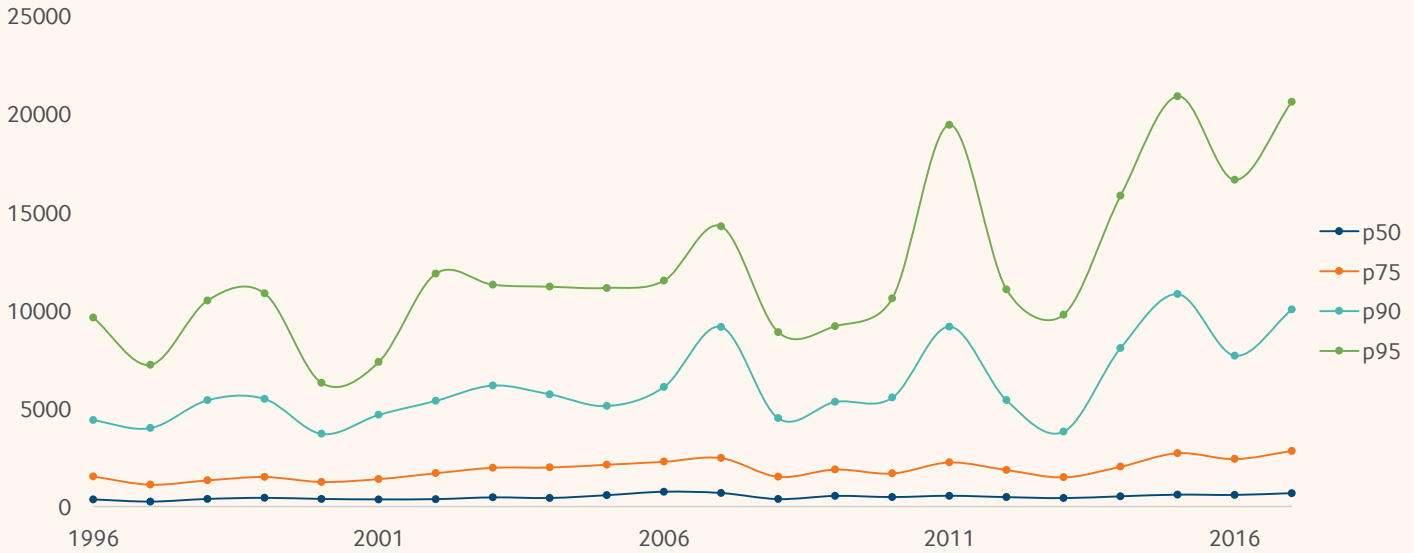
Total spending in 2019 dollars



Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

Appendix Exhibit 6b. Per-Person Total Spending, Inflation-Adjusted, Individual Market Coverage, Under Age 64

Total spending in 2019 dollars



Note: The p99 values for individual market coverage were too volatile and thus excluded from the exhibit.

Data: Authors' analysis of Medical Expenditure Panel Survey (MEPS), 1996–2017.

ABOUT THE AUTHORS

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