

HPC DATAPOINTS

Persistently High Out-of-Pocket Costs Make Health Care Increasingly Unaffordable and Perpetuate Inequalities in Massachusetts

Characteristics of individuals with persistently high out-of-pocket costs, including spending amounts, health conditions, firm size, and geographic distribution across Massachusetts

INTRODUCTION

Health care affordability is a continued concern for Massachusetts residents. Health insurance premiums rise year after year even as the percentage of commercially-insured residents enrolled in high deductible plans increases (from 28.5% in 2017 to 31.5% in 2018) and as out-of-pocket (OOP) spending continues to rise (5.6% in 2018) faster than residents' incomes.ⁱ The Massachusetts Health Policy Commission (HPC) estimated that nearly 40 cents of every additional dollar earned by Massachusetts families between 2016 and 2018 was spent on health care and that 23% of middle class families in Massachusetts with employer coverage devoted more than a quarter of all earnings to health care.ⁱⁱ

The burden of increasing health care spending is not distributed equally among Massachusetts residents. While payers, providers, and researchers often focus on “super-utilizers” who use extreme amounts of health care services, individuals and families are more directly impacted financially by what they pay for premiums and OOP spending – amounts which vary considerably from person to person. While acute health care episodes can lead to high OOP spending for patients at a point in time, many patients experience high OOP spending for health care each year. To better understand how this spending affects residents of the Commonwealth, this 19th publication in the DataPoints series focuses on those with persistently high OOP spending, defined as commercially-insured individuals with OOP spending that places them among the highest 10% of the residents studied in each of the three years from 2015 to 2017. OOP spending includes total copayments, co-insurance, and deductibles for both medical and prescription spending. This analysis includes members with commercial insurance coverage who are included in the Massachusetts All-Payer Claims Database (APCD) in all three years.

This is a printable version of DataPoints. The online version features interactive graphics that show additional information, and is available on the HPC's website at www.mass.gov/service-details/hpc-datapoints-series.

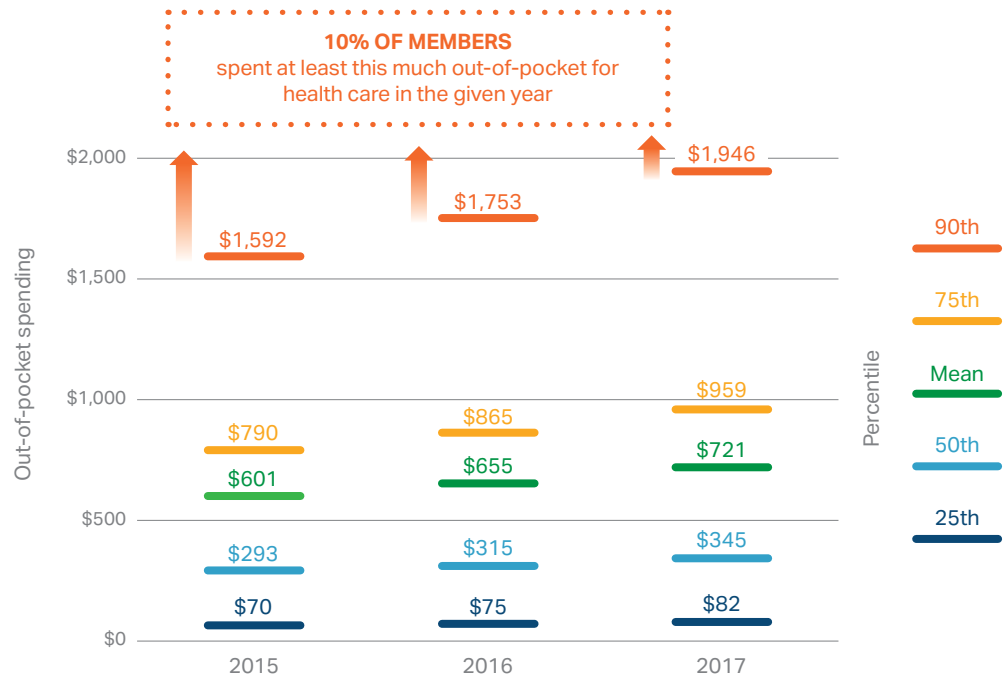
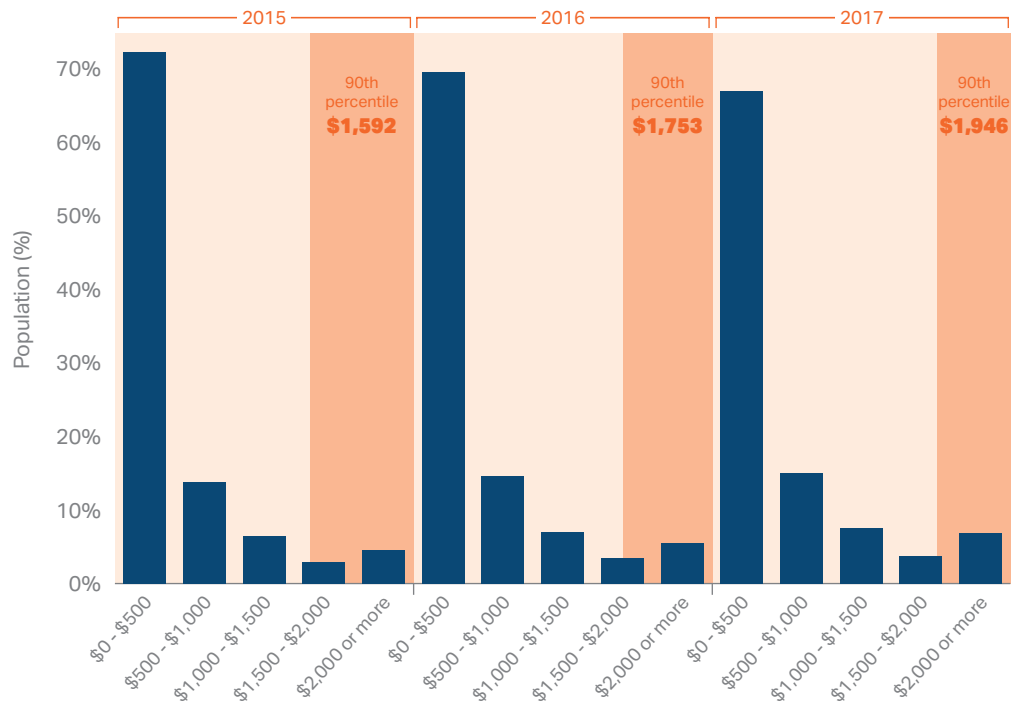
TRENDS IN OUT-OF-POCKET SPENDING

From 2015-2017, average annual OOP spending for the commercially insured grew about 20%, from \$601 to \$721. However, this average masks a great deal of variation across individuals. In 2017, half of all members spent \$345 or less OOP annually, while those at or above the 90th percentile of OOP spending in all three years spent ten times more, or \$3,499 on average. OOP spending also grew faster from 2015-2017 for those with the highest OOP spending. From 2015-2017, median OOP spending grew 17.5%, compared to a 22.2% increase for those at the 90th percentile.

i Massachusetts Center for Health Information and Analysis, 2019 Annual report. <https://www.chiamass.gov/assets/2019-annual-report/2019-Annual-Report.pdf>

ii Massachusetts Health Policy Commission, 2019 Annual Health Care Cost Trends Report. <https://www.mass.gov/doc/2019-health-care-cost-trends-report/download>

Distribution of out-of-pocket spending by year, 2015 – 2017



3% of commercially-insured members have **persistently high OOP spending**, totaling an estimated more than **100,000 people** in Massachusetts. They paid an average **\$3,499** OOP in 2017

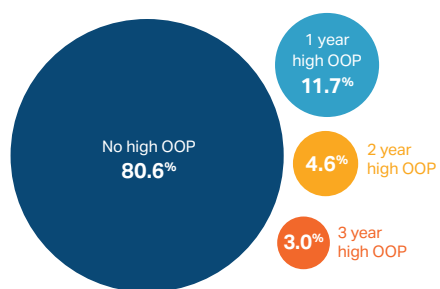
Four in ten of those with persistently **high OOP spending** also had persistently **high total spending**; there was relatively **little overlap** between these groups.

POPULATION WITH PERSISTENTLY HIGH OUT-OF-POCKET SPENDING

Most commercially-insured members did not reach the 90th percentile of OOP spending in any of the three years studied. From 2015-2017, 19.4% of members experienced at least one year of high OOP spending, while 80.6% never met the threshold (click the far left panel of the below graphic). Three percent of the study sample reached the 90th percentile threshold in all three years. If that figure is extrapolated to the entire commercially-insured population in Massachusetts (approximately 4 million people), more than 100,000 commercially-insured individuals would meet that criteria.ⁱⁱⁱ This group of people with persistently high OOP spending had very high annual OOP spending, growing from \$2,989 in 2015 to \$3,499 in 2017 and averaging \$3,247 across the three years, as shown on the right of the below graphic.

Commercial member out-of-pocket spending, 2015 – 2017

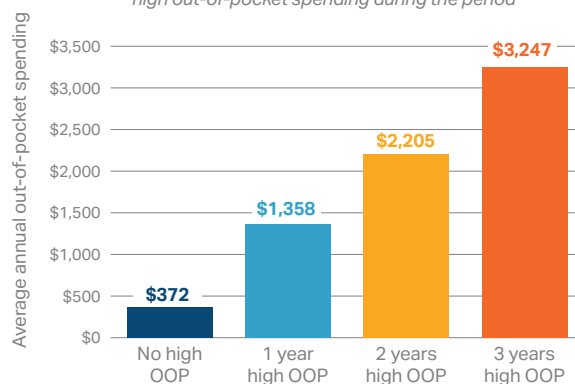
The majority of members (80.6%) do not experience high out-of-pocket spending during the three-year period



GROUP

■ No high OOP ■ 1 year high OOP ■ 2 years high OOP ■ 3 years high OOP

Those experiencing three years of high out-of-pocket (3.0%) spend nearly nine times more than those not experiencing high out-of-pocket spending during the period



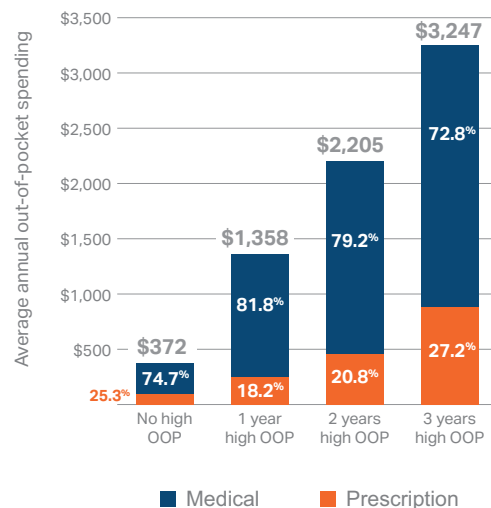
For total health care spending (including insurer spending and OOP spending), 3% of commercial-insured residents had spending in the 90th percentile for each year from 2015-2017, but there was relatively little overlap between individuals with high total spending and high OOP spending. Just over four in ten (42%) of those with persistently high OOP spending also had persistently high total spending.

MEDICAL VERSUS PRESCRIPTION OUT-OF-POCKET SPENDING

For the population with persistently high OOP spending, cost-sharing for prescription drugs comprised a larger portion of total OOP spending (27.2%) than for other individuals. This suggests that these members may use more costly drugs, require a higher number of prescriptions, or have less generous prescription drug coverage.

ⁱⁱⁱ The number of individuals in the sample of data from the All-Payer Claims Database (APCD) with persistently high OOP spending was just over 27,000 individuals out of a total of approximately 913,000. The data includes commercially-insured members of Blue Cross Blue Shield of Massachusetts, Tufts Health Plan, Harvard Pilgrim Health Care, and AllWays Health Partners, and excludes most members of self-insured plans (which typically do not report data to the APCD). This analysis restricts the sample to individuals who are observed for three consecutive years in the data (2015-2017). The information in the chronic condition analyses herein has been processed by software called The Johns Hopkins ACG® System © 1990, 2017, Johns Hopkins University. All Rights Reserved.

Medical and prescription out-of-pocket spending, 2015 – 2017



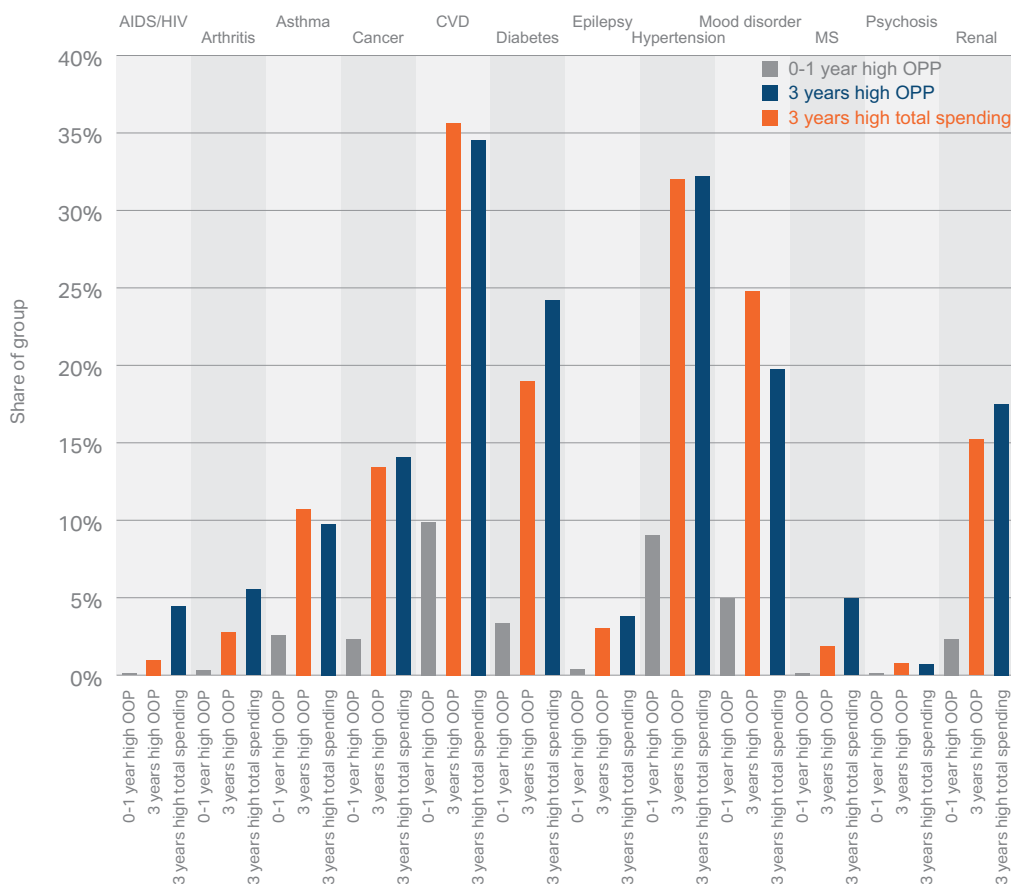
80%
of those with
**persistently high
OOP spending**
had a chronic
condition, a rate
**three times
higher** than
among those with
**zero or one year of
high OOP spending.**

CHRONIC CONDITIONS

Those with persistently high OOP spending were more likely to have a chronic condition. In 2017, about 80% of those with persistently high OOP spending had a chronic condition, a rate about three times higher than among those with zero or one year of high OOP spending (25%). The population with persistently high OOP spending was also more likely to have multiple chronic conditions. Among those with persistently high OOP spending who had at least one chronic condition, the average number of conditions was 2.1. For those with zero or one year of high OOP spending and at least one chronic condition, the average number of conditions was 1.4.

The graphic below displays the share of each group (zero or one year, two years, or three years of high OOP spending) with one of 12 common chronic conditions in 2017. Each of the chronic conditions studied was more common among individuals with persistently high OOP spending, compared to those with zero to two years of high OOP spending. For example, compared to those with zero or one year of high OOP spending, those with persistently high OOP spending had a 3.6 times higher rate of cardiovascular disease, a 5.7 times higher rate of cancer, and a 5.6 times higher rates of diabetes. Rates of chronic conditions for those with persistently high OOP spending were broadly similar to those with high total health care spending, with some important differences (see the orange and blue bars in the below graphic). Individuals with persistently high OOP spending were somewhat more likely than those with high total spending to have cardiovascular disease (35.6% vs 34.5%) and asthma (10.7% vs 9.7%), and in particular, more likely to have mood disorders (24.8% vs 19.7%).

Share of population with chronic conditions by out-of-pocket spending category, 2017



"OOP" is out-of-pocket spending, "CVD" is cardiovascular disease, "MS" is multiple sclerosis, and "Renal" is kidney disease.

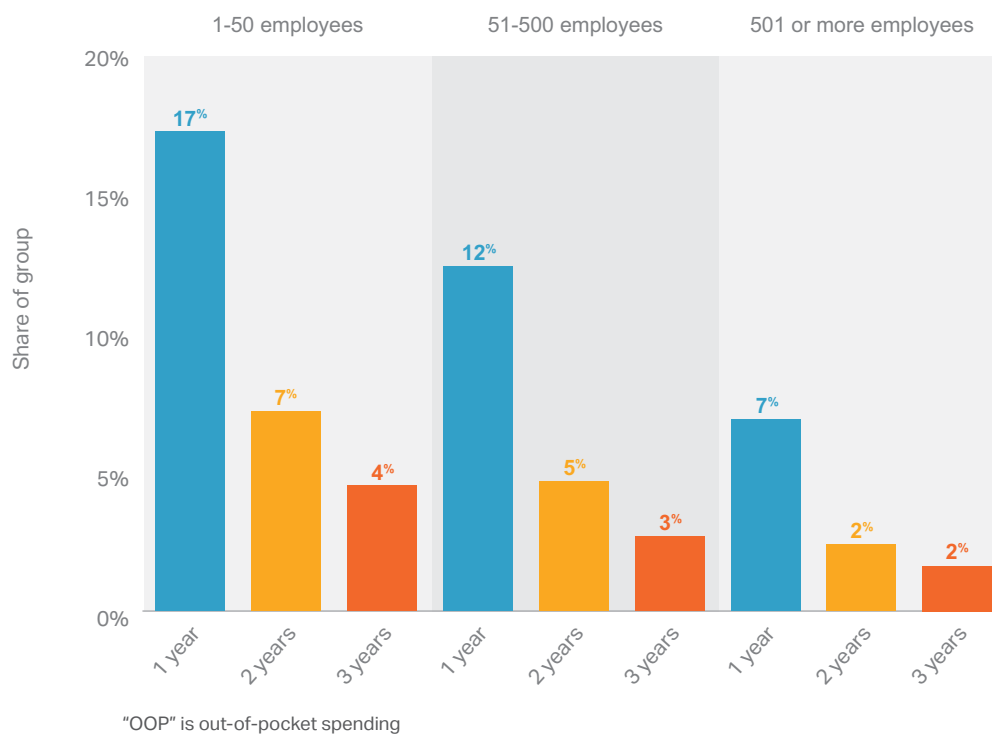
Individuals with
**persistently high
OOP spending**
had generally
similar rates
of **chronic
conditions** as those
with high OOP
spending, but were
more likely
to have **mood
disorders.**

Individuals employed by small firms were **more likely** to experience **persistently high OOP spending**. This is because people who work for **small firms** are more likely to be enrolled in plans with **higher deductibles** and **higher cost-sharing** requirements.

FIRM SIZE

Individuals employed by smaller firms (fewer than 50 employees) were more likely to experience persistently high OOP spending (4.5%) compared to those employed by medium-sized firms (2.6%) and larger firms (more than 500 employees) (1.6%). These individuals were also much more likely to experience one to two years of high OOP spending than individuals employed by larger firms. This pattern generally does not apply to total spending, suggesting that the higher OOP spending among individuals in smaller firms is not due to differences in underlying health status, but rather is due to those individuals being more likely to be enrolled in plans with higher deductibles and higher cost-sharing requirements. The Center for Health Information and Analysis (CHIA) 2019 Annual Report found that in 2019, 64% of small-firm employees were enrolled in high-deductible plans compared to 25% of large-firm employees.ⁱ These differences are likely related to lower incomes and a more limited choice in plans available to employees at small firms.^{iv, v}

Share with high out-of-pocket spending by employer's firm size, 2017



REGIONAL VARIATION

The share of the population facing persistently high OOP spending varies regionally in Massachusetts. Among HPC regions in 2017, the rate of commercially-insured people who have persistently high OOP spending was 1.7 times higher in the region with the highest versus the lowest rate. The Cape and Islands, the region with the highest rate, had 43.8 members with persistently high OOP spending

iv 78% of employees in smaller firms were offered only one plan, compared to 58% of employees in larger firms. CHIA Massachusetts Employer Survey, 2019. See: <https://www.chiamass.gov/assets/docs/r/survey/Massachusetts-Employer-Survey-CHIA-2018.pdf>

v Lower-wage firms (defined as firms with at least 35% of their full-time employees earning an annual income of \$28,000 or less) are more likely to be small in size, with 57% employing fewer than 10 workers 91% employing fewer than 50 workers. In comparison, 50% of non-lower-wage firms employed fewer than 10 workers and 83% employed fewer than 50 workers. CHIA Research Brief, 2017. See: <https://www.chiamass.gov/assets/docs/r/pubs/17/mes-research-brief-august-2017.pdf>

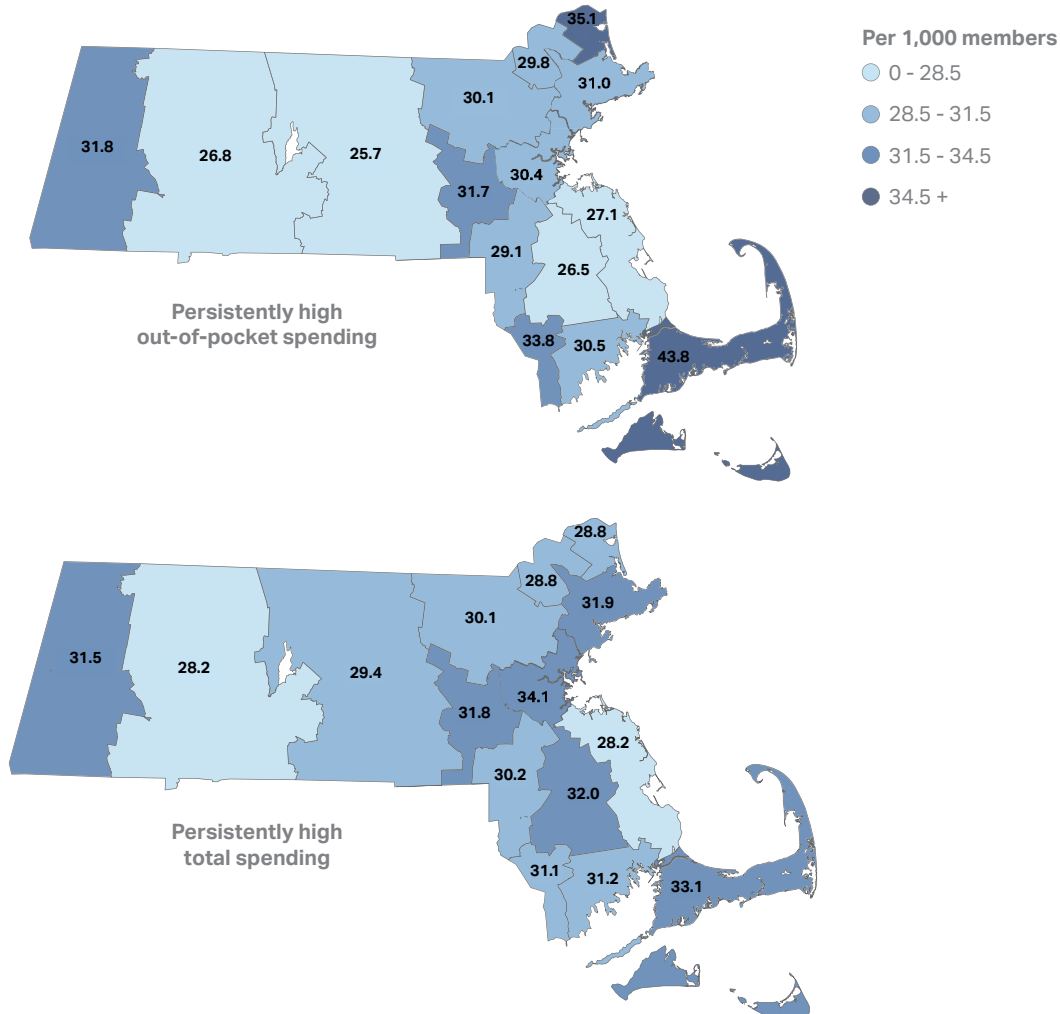
The share of the population facing **persistently high OOP spending** varies regionally in Massachusetts. The Cape and Islands has the **highest rate**.

The regions with the **highest shares** of people working for **small firms** largely overlap with the regions with the highest shares of people with **persistently high OOP spending**.

OOP spending can present a **particular burden** for people with **lower incomes**, since these expenses can consume a **large share** of their income.

per 1,000 commercial members. The lowest rates were in Central Massachusetts (25.7 per 1,000), Metro South (26.5 per 1,000), and Pioneer Valley/Franklin (26.8 per 1,000). Rates of persistently high total spending were more evenly distributed across HPC regions, with rates 1.2 times higher in the region with the highest versus the lowest rate.

Rate of persistently high out-of-pocket spending and high total spending by HPC region, 2017



The regional distribution of people with persistently high OOP spending is shown in the above graphic. Based on the HPC's analysis of data from the U.S. Census Bureau, the regions of Massachusetts with the highest share of people working for small employers largely overlaps with the regions with the highest shares of people with persistently high OOP costs.^{vi} For example, Nantucket, Dukes, and Barnstable counties had the three largest shares of people working for employers with less than 20 employees in 2015 (59%, 54%, and 31%, respectively).

INCOME VARIATION

High OOP spending can represent a substantial proportion of income for people with low incomes. In 2017, members with persistently high OOP spending living in the highest-income areas in the state

^{vi} HPC analysis of data from 2015 County Business Patterns, U.S. Census Bureau. Data available at: <https://www.census.gov/data/tables/2015/econ/susb/2015-susb-annual.html>

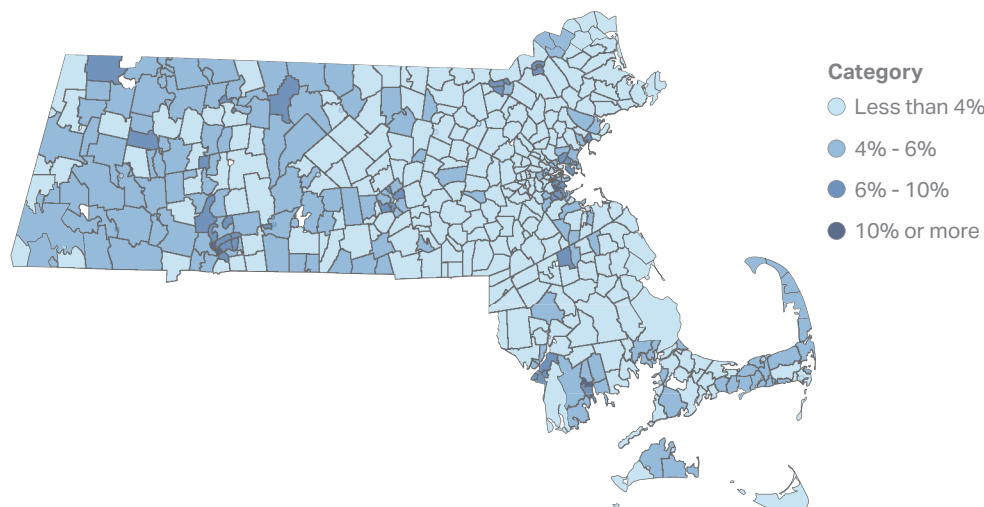
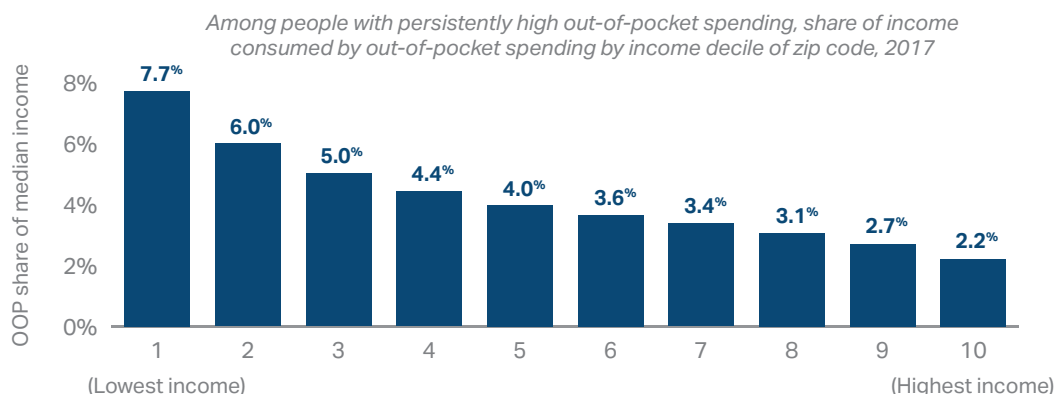
The Massachusetts Health Policy Commission (HPC) is an independent state agency that develops policy to reduce health care cost growth and improve the quality of patient care. The HPC's mission is to advance a more transparent, accountable, and equitable health care system through its independent policy leadership and innovative investment programs.

HPC DataPoints is a series of online briefs that spotlight new research and data findings relevant to the HPC's mission to drive down the cost of health care. It showcases brief overviews and interactive graphics on relevant health policy topics. The analysis underlying these briefs is conducted by HPC staff. To view all HPC DataPoints, visit our [website](#).

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(areas in the top 10% by income) paid 2-3% of their income towards OOP spending.^{vii} In contrast, members with persistently high OOP spending living in the lowest-income areas in the state (areas in the bottom 10% by income) paid on average almost 8% of their income on OOP spending.^{vii} Seven zip codes in the state, as identified on the map below, had individuals paying more than 10% of their income towards OOP spending, a key measure of health care unaffordability used by researchers.^{vii, viii}

Share of income going to health care cost-sharing by income decile of zip code, 2017



CONCLUSION

While Massachusetts residents with persistently high OOP spending tend to have long-term health care needs, these individuals do not necessarily experience the highest total health care spending. The findings in this DataPoints issue suggest that for individuals with certain types of chronic conditions, high deductible health plans and differences in typical cost-sharing amounts could be contributing factors to persistently high OOP spending. OOP spending can present a particular burden for people with lower incomes, given that such expenses can consume a large share of their income. These new findings emphasize the need to focus on policy solutions that will advance equitable and affordable health care coverage in Massachusetts.

vii Assuming these members had the median income in their zip code of residence.

viii See, e.g., the Commonwealth Fund's State Scorecards on Health System Performance: <https://www.commonwealthfund.org/publications/fund-reports/2020/sep/2020-scorecard-state-health-system-performance>