

Top Spenders Among the Commercially-Insured: Increased Spending Concentration and Consistent Turnover from 2013 to 2015

It is [well documented](#) that each year the majority of U.S. health care spending is concentrated among a small group of high spenders. However, less is known about how people move throughout the spending distribution over time. Understanding how spending is distributed across the population is important to the ongoing debate about how to ensure access to health care for people with complex health needs and high health care costs.

What We Did. We analyzed the distribution of health care spending among commercially-insured individuals, and how their spending changed over time. Our analysis considered the annual health care spending of more than 9 million individuals under the age of 65 in each pair of years from 2012 to 2015. Within each pair of years, we restricted our analysis to people with 24 months of continuous enrollment in medical and prescription drug coverage.

Questions We Asked.

- 1. How is health care spending distributed among the commercially insured?*
- 2. Are top spenders the same from year to year?*
- 3. How does new top spenders' health care spending change from year to year?*
- 4. How do new top spenders compare to persistent top spenders?*
- 5. How has spending changed for top spenders over time?*
- 6. Was increased prescription drug spending by top spenders due to increased use or increased prices?*

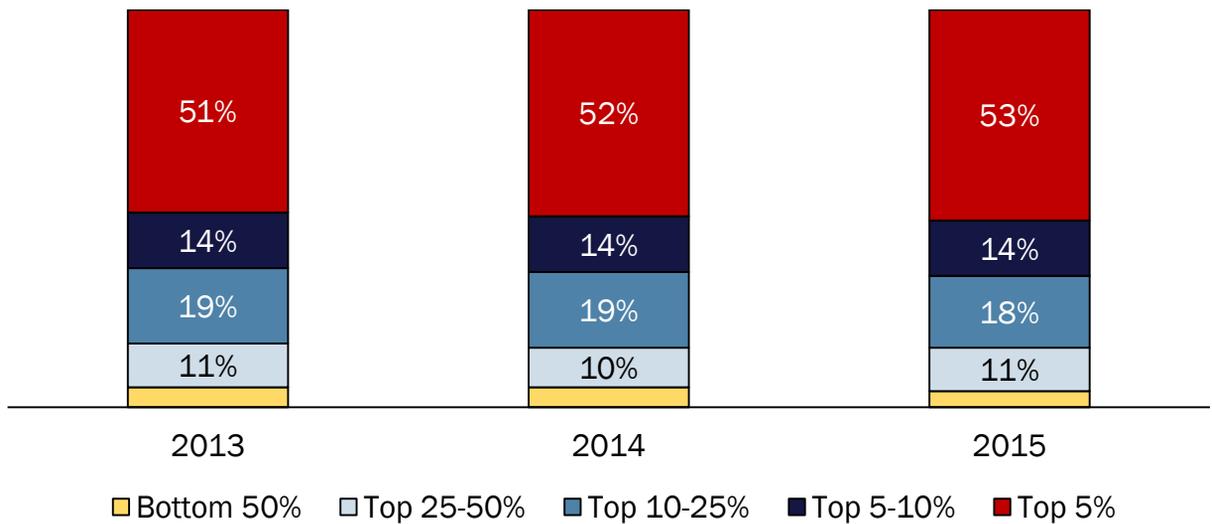
What We Found. In each year we studied, the top 5% of spenders (“top spenders”) accounted for more than half of all health care dollars. Within a given year, only a small proportion of people incur very high spending, but there is significant turnover in this group: each year, more than 3 of 5 top spenders were not top spenders during the previous year. These new top spenders faced dramatic changes in year to year spending. In comparison to the persistent top spenders, new top spenders were on average younger and had lower spending – particularly on prescription drugs and professional services.

From 2013 to 2015, the top 5% of spenders accounted for an increasing share of total spending. This increase in concentration coincided with an increase in prescription drugs' share of spending by the top spenders.

Spending is concentrated in a small group of high spenders

In each year from 2013 to 2015, the top 5% of spenders accounted for more than half of all health care spending. The share of total spending by the top 5% of spenders grew each year.

Figure 1: Share of Total Annual Spending by the Commercially-Insured, by Level of Individual Spending



Source: Authors' analysis of HCCI claims data.

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- The top 5% of spenders accounted for **53%** of total health care spending in 2015.
- The bottom 50% of spenders accounted for **less than 5%** of spending in 2015.
- In 2015, the median member of the top 5% had **\$39,409** in total health care spending and **\$3,850** in out-of-pocket (OOP) spending.
- The median member of the bottom 50% had **\$447** in total health care spending in 2015, and **\$120** in OOP spending.

This distribution of spending among the commercially insured is consistent with findings [from numerous previous studies](#).

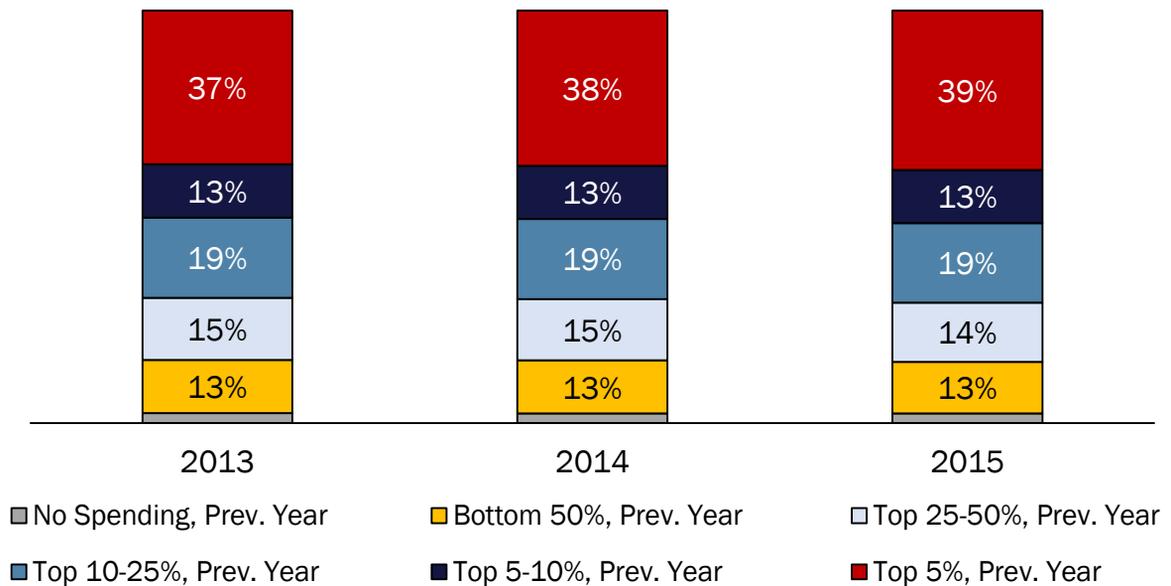
A note on terminology:

The term *top spenders* refers to individuals whose total health care spending over the course of the entire year is in the top 5% of all spenders in that year. The term *new top spenders* refers to top spenders whose health care spending was not in the top 5% of spenders in the previous year, and *persistent top spenders* refers to individuals whose total health care spending was in the top 5% of all spenders in the current and previous years.

Each year, there is considerable turnover in the group of top spenders

Within a given year only a small proportion of people incur very high spending, but across years, high spending affects a changing group of people. In each year, more than 3 in 5 top spenders are different from the previous year.

Figure 2: Top 5% of Spenders by Category of Spending in the Previous Year



Source: Authors' analysis of HCCI claims data.

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- From 2013 to 2015, less than 40% of the top 5% of spenders were in the top 5% of spenders in the previous year.
- Across years, the turnover among top spenders is consistent.
- New top spenders come from across the spending distribution: in each year almost 15% of top spenders were in the bottom 50% of spenders or had no spending in the previous year.

New top spenders experience dramatic fluctuations in annual health care spending

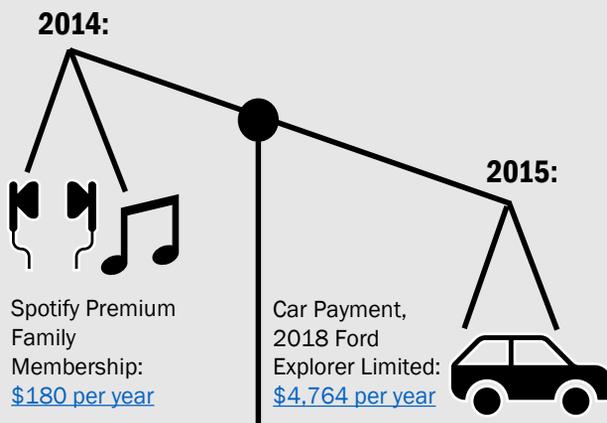
Table 1: Median Spending by Year, Top 5% of Spenders, 2015

| | Share of Top 5%, 2015 | Median Total Spending | | Median OOP Spending | |
|-------------------------|-----------------------|-----------------------|-----------|---------------------|----------|
| | | 2014 | 2015 | 2014 | 2015 |
| Persistent Top 5%, 2015 | 39% | \$ 42,099 | \$ 46,873 | \$ 3,441 | \$ 3,460 |
| New Top 5%, 2015 | 61% | \$ 4,221 | \$ 35,657 | \$ 987 | \$ 4,105 |
| No Spending, 2014 | 2% | \$ 0 | \$ 39,675 | \$ 0 | \$ 5,255 |
| Bottom 50%, 2014 | 13% | \$ 573 | \$ 35,967 | \$ 178 | \$ 4,731 |
| Top 26-50%, 2014 | 14% | \$ 2,383 | \$ 35,444 | \$ 738 | \$ 4,281 |
| Top 11-25%, 2014 | 19% | \$ 6,706 | \$ 35,854 | \$ 1,574 | \$ 4,000 |
| Top 6-10%, 2014 | 13% | \$ 15,093 | \$ 34,751 | \$ 2,566 | \$ 3,680 |

Consider the median new top 5% spender in 2015:

- Their total spending increased by **\$31,436** (over 800%) from 2014 to 2015, while their median out-of-pocket (OOP) spending increased by **\$3,118** (over 400%).
- By comparison, a Federal Reserve Board survey found that 44% of respondents could not afford a surprise **\$400** medical bill.

Putting Year to Year Spending In Context: New Top Spenders



13% of top spenders in 2015 were in the bottom 50% of spenders in 2014 (Table 1).

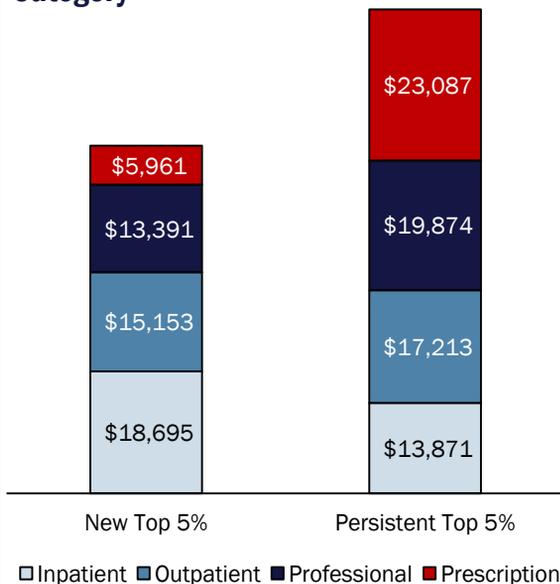
Out-of-pocket spending for the median member of this group increased from **\$178** in 2014 to **\$4,731** in 2015.

From an individual consumer's perspective, this increase is comparable to having one's spending on a Spotify membership this year become as expensive as a car payment next year.

New and persistent top spenders are different populations with different needs

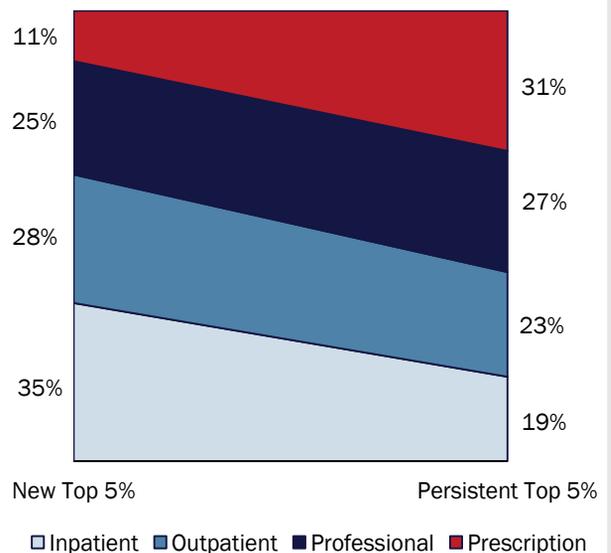
Persistent top spenders have higher average spending than new top spenders, with a larger share of their spending going to prescription drugs and professional services. These findings are consistent with the notion that top spenders disproportionately suffer from chronic conditions, which is documented in [other studies](#).

Figure 3: Top 5% of Spenders, 2015: Per Capita Total Spending by Service Category



Source: Authors' analysis of HCCI claims data.

Figure 4: Top 5% of Spenders in 2015: Share of Total Spending by Service Category



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- Persistent top spenders had **40%** higher health care spending per capita than new top spenders.
- Prescription drugs accounted for the largest share of spending by persistent top spenders (**31%**; **\$23,087 per capita**).
- Inpatient spending accounted for the largest share of spending by new top spenders.
- **27%** of new top spenders were under the age of 35 compared to **21%** of persistent top spenders.
- **62%** of persistent top spenders were age 45 or older, compared to **56%** of new top spenders.
- A similar proportion of new (**57%**) and persistent top spenders (**55%**) were female.

Top spenders are becoming more expensive, driven by prescription drug spending

The share of total spending by the top 5% of spenders increased from 2013 to 2015. This increase in concentration coincided with prescription drugs accounting for a larger share of spending by the top 5% of spenders in 2015 than in 2013.

Figure 5: Per Capita Total Health Care Spending by Top Spenders

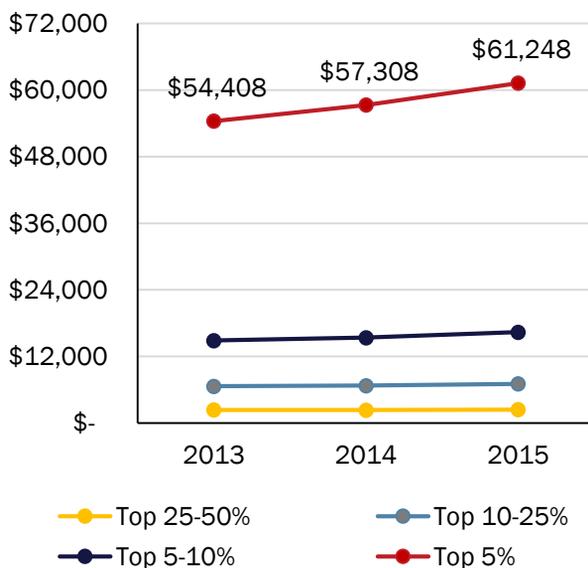
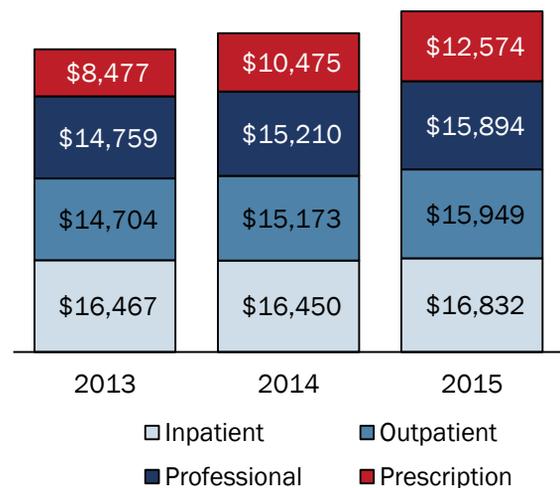


Figure 6: Per Capita Spending by Service Category, Top 5% of Spenders



Source: Authors' analysis of HCCI claims data.

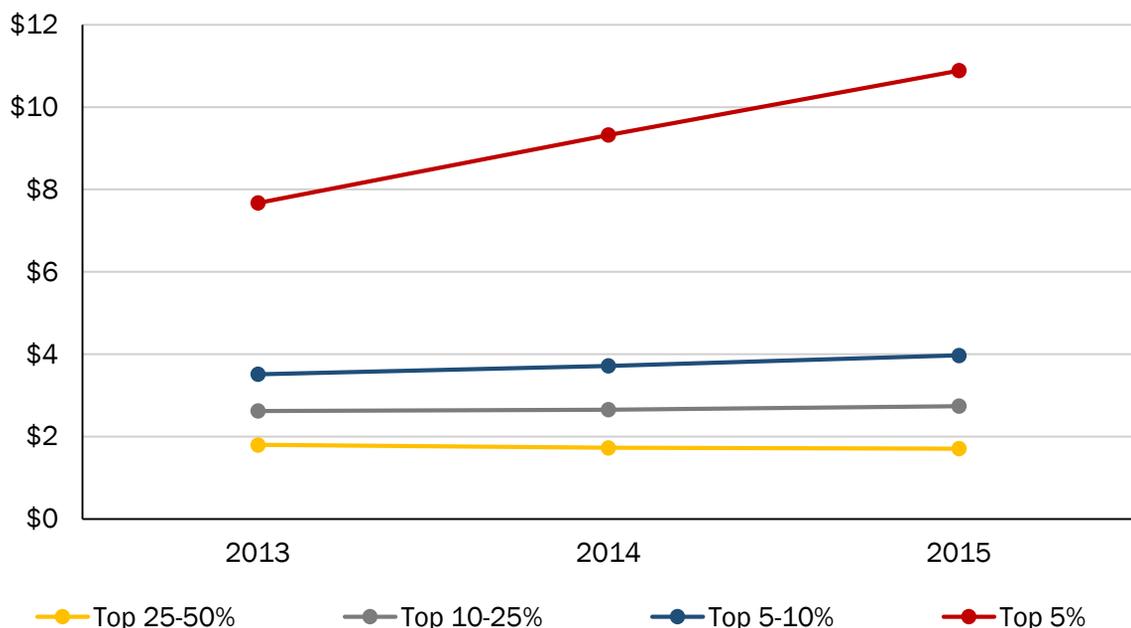
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- From 2013 to 2015, the share of total spending by the top 5% of annual spenders grew from **51** to **53**%.
- Per capita spending by members of the top 5% grew at an average of **6% per year** – the fastest growth rate of any group.
- All of these trends were unique to the top 5% of spenders.
- Per capita spending on prescription drugs by the top 5% of spenders grew to **\$12,574** in 2015 - almost **50% higher** than in 2013.
- Increased prescription drug spending accounted for **60%** of the increase in spending by the top 5% of spenders in 2015 compared to 2013.

Increased prescription drug spending by top spenders outpaced increases in prescription drug use from 2013 to 2015

On average, the top 5% of spenders had the highest spending per filled day on prescription drugs, and experienced the largest increase in spending per filled day from 2013 to 2015.

Figure 7: Prescription Drug Spending per Filled Day for Top Spenders



Source: Authors' analysis of HCII claims data.

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- Across years, the top 5% of spenders on average spent more per filled day than any other group.
- The difference between the average cost per filled day for the top 5% of spenders and for all other groups increased from 2013 to 2015.
- In 2015, top spenders paid an average of **\$10.89** per filled day for prescription drugs, compared to **\$7.67** per filled day by the top 5% of spenders in 2013.
- The increased cost per filled day of the top 5% of spenders could be due to either using different (e.g., more expensive drugs) or due to price increases.

Data and Methods

To study trends in individuals' annual spending, we analyzed HCCI claims data from 2012 to 2015. We focused our sample on individuals with commercial insurance under the age of 65. Using the HCCI claims data, we compiled a repeated two-year panel (2012-2013, 2013-2014, 2014-2015). To analyze individuals' annual spending and how their annual spending changed over time, we restricted our sample to individuals with two full years of commercial insurance coverage within each two year panel. Because we wanted to include prescription drug spending in our analysis, we further limited our sample to people with two full years of prescription drug coverage. All dollar values reported in this issue brief are nominal.

In each two-year panel, we aggregated total health care spending for individuals by year. Total spending is defined as the sum of payer spending for an individual and an individual's out-of-pocket spending. We subsequently decomposed total spending into four categories of health services: inpatient facility, outpatient facility, professional services, and prescriptions. For a more complete discussion of the methodology for assigning spending to service categories, see the standard [HCCI methodology](#). In addition to aggregating total spending, we aggregated individuals' out-of-pocket spending by year. Finally, we aggregated individuals' prescription filled days within each year to measure prescription drug use.

Within each two-year panel, we assigned individuals to spending categories (e.g., top 5% of spenders) by their level of total spending in each year. It is important to note that throughout the brief we use total spending for individuals rather than out-of-pocket spending by individuals to assign individuals to spending categories. Across years (2013, 2014, 2015) we report spending using statistics about that spending category from the second year of each two-year panel. For example, the top 5% of spenders in 2015 refers to individuals in the 2014-2015 panel whose total spending in 2015 was in the top 5% of spenders. An individual was classified as belonging to the top 5% of spenders in 2015 if their total spending was greater than the 95th percentile of total spending by people with positive spending in that year (e.g., excluding people with zero spending). Individuals were similarly assigned to other spending categories (e.g., top 50% of spenders; top 25% of spenders, etc.) by year.

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