



HEALTH CARE
COST INSTITUTE

2019 HEALTH CARE COST AND UTILIZATION REPORT





2019 Health Care Cost and Utilization Report

On behalf of the Health Care Cost Institute, I am pleased to release the 2019 Health Care Cost and Utilization Report (HCCUR). The report draws on data from more than 2.5 billion medical and prescription drug claims for approximately 55 million individuals enrolled in employer-sponsored health insurance annually between 2015 and 2019. We are publishing this report in somber times. With the world still reeling from a once-in-a-generation pandemic, releasing data about health care utilization and spending in 2019 feels strange, and possibly even irrelevant. It serves as a stark reminder of how much the world has changed and has sparked renewed reflection on the unimaginable suffering, loss, and grief the world has endured and continues to endure. We hope we are nearing a point at which we can refer to COVID-19 in the past tense and begin to study in earnest how it has affected health and health care in the US and around the world.

In other respects, however, the detailed study of US health care spending and utilization has been rendered more important than ever as a result of the COVID-19 pandemic. Commercial health care spending, driven predominantly by health care prices, continues to climb at unsustainable rates. To that end, we are issuing this 2019 report to describe health care spending and utilization in the commercial market immediately before the COVID-19 pandemic so that we can understand how the health care system changed during and after the pandemic. In early 2022, we plan to release the 2020 HCCUR, which will begin to describe health care spending in the first year of the COVID-19 pandemic.

Between 2015 and 2019, per-person spending grew 21.8%, exceeding \$6,000 for the first time. This estimate is largely consistent with National Health Expenditure data from the Centers for Medicare & Medicaid Services. That rise outpaced growth in per-capita GDP, which increased 14.7% over the same period. Notably, however, per-capita GDP grew slightly faster than health care spending per person from 2018 to 2019. About two-thirds of the increase in per-person spending is explained by growth in prices for health care services. As in previous years, all data underlying the figures and analysis presented in this report are available for download on our website.

This is the first Health Care Cost and Utilization Report to feature data from HCCI's updated dataset, which allows us to continue to provide a critical resource to those seeking to understand the levels and drivers of health care spending. We are immensely grateful to our founding partners, CVSHealth/Aetna, Humana, and Kaiser Permanente – and our new partner Blue Health Intelligence - for allowing us to continue the important work of better understanding and addressing US health care spending trends.

As the US continues to reckon with many years of systemic racism that has led to persistent health equity issues, I want to note that based on the best information available to us, we believe that the racial and ethnic distribution of the population in HCCI's data is similar to the national employer-sponsored insurance population. Nationally, however, Black and Hispanic populations are under-represented in employer-sponsored insurance, and as such health care costs and use among these individuals are likely under-represented in our findings in this report.

Finally, I would like to acknowledge the HCCI team – in particular John Hargraves, Jessica Chang, Kevin Kennedy, Aditi Sen, and Debra Bozzi – for drafting this report and for the tireless data work that underlies it. We also are grateful for additional technical advice and input from Mike Chernew, Emily Gee, and Roy Goldman.

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About HCCI

The Health Care Cost Institute was launched in 2011 to promote independent, nonpartisan research and analysis on the causes of the rise in U.S. health spending. HCCI holds one of the largest databases for the commercially insured population, and in 2014 became the first national Qualified Entity (QE) entitled to hold Medicare data. For more information, visit healthcostinstitute.org, email us at info@healthcostinstitute.org, or follow us on Twitter [@healthcostinst](https://twitter.com/healthcostinst)



Executive Summary

The 2019 Health Care Cost and Utilization Report presents data on health care spending, utilization, and average prices from 2015 through 2019 for individuals under the age of 65 who receive health insurance coverage through an employer. The report relies on de-identified commercial health insurance claims contributed by Aetna, Humana, and Blue Health Intelligence during this period. The key findings are:



In 2019, per person spending reached \$6,001. This represented a 2.9% increase from 2018 and was the lowest growth rate over the five-year period. The total includes amount paid for medical and pharmacy claims but does not reflect manufacturer rebates for prescription drugs.



Average per person out-of-pocket spending totaled \$829 in 2019.



Average prices grew 3.6% in 2019. While that is the lowest rate of growth over the five-year period, consistent annual increases means that prices in 2019 were 18.3% higher than prices in 2015.



Utilization declined 0.7% between 2018 and 2019, reversing the trend of utilization growth during the five-year period. This shift was largely attributable to a 4.9% decline in inpatient admissions in 2019.



Prices accounted for the largest part (nearly two-thirds) of per-person spending growth between 2015 and 2019.

This report examines trends within four categories of service: inpatient admissions, outpatient visits and procedures, professional services, and prescription drugs. All data were weighted to reflect the age, sex, and geographic mix of the national employer-sponsored insurance (ESI) population. Each section that follows highlights a dimension of health care spending and can stand alone as a single, independent analysis.

Definitions of Reported Measures

Spending per person: Total expenditures per person on medical and prescription drug claims (defined as sum of payer paid and patient out-of-pocket amounts) weighted by age, sex, and geographic mix of the ESI population. The prescription drug component reflects point-of-sale expenditures and does not include manufacturer rebates provided through separate transactions because these data are not readily available at the transaction level.

Out-of-pocket spending per person: Total payments per person paid by patients for health care services (defined as sum of deductibles, co-payments, and co-insurance amounts) weighted by age, sex, and geographic mix of the ESI population.

Utilization: The count of inpatient admissions, outpatient facility procedures, professional services, and days covered by a filled prescription. In the results presented in this report, utilization does not account for changes in the mix of services over time. However, in supplemental analyses we applied weights to adjust for changes in the makeup of services relative to the prior years. We describe our methodology for service mix adjustment in more detail in the appendix.

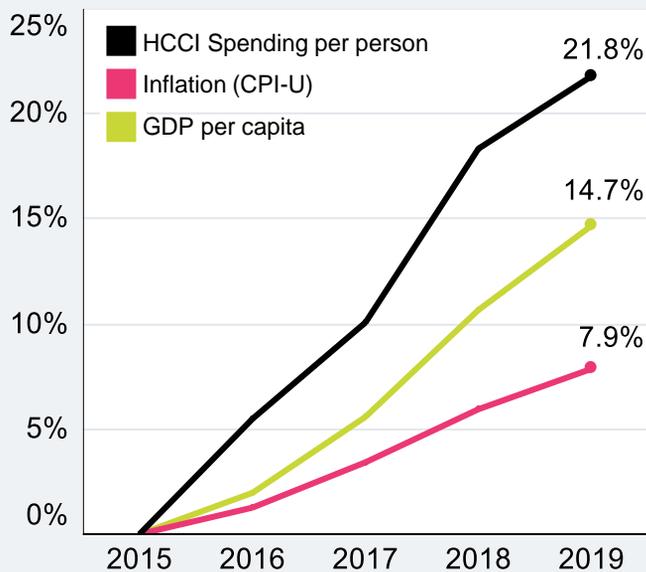
Average Price: Spending per service (admissions, visits, procedures, or days supplied depending on the service category). Spending and utilization were aggregated across all services in a category. The average price per service in a category was then calculated by dividing total spending by total utilization. The year-over-year change in average prices reflects both inflation and service price growth above inflation.

Spending Growth Between 2015 and 2019

Between 2015 and 2019, health care spending growth outpaced growth in the economy. Among individuals with employer sponsored insurance (ESI), health care spending per person grew 21.8% over five years, compared to 14.7% growth in U.S. per-capita GDP, and 7.9% growth in inflation as measured by the consumer price index (CPI-U) [Figure 1].

Over the five years, spending per person increased over \$1,000 from \$4,928 to \$6,001 (21.8%). The rise in spending was driven by increases in both average prices and utilization, although increases in prices significantly outpaced increases in utilization [Figure 2].

Figure 1: Cumulative Change in ESI Health Care Spending, Inflation, and GDP per Capita

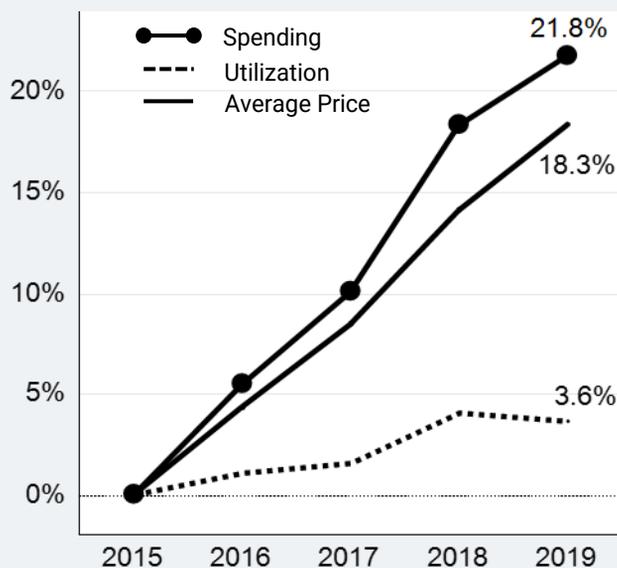


Note: GDP per capita estimates from Bureau of Economic Analysis and CPI-U estimates from Bureau of Labor Statistics

Note:

Unless otherwise stated, any references to changes in prices in this report include the effect of inflation and service price growth above inflation, and changes in utilization include the effect of age and sex composition changes in the ESI population and changes in the quantity of services used. We decompose these components of spending in a later section of the report. Further, spending per person measures include non-utilizers, who account for one quarter of the population in the setting of medical use and one third of the population in the context of prescription drug use.

Figure 2: Cumulative Change in Spending per Person, Utilization, and Average Price since 2015



Note: All numbers presented in charts are available as downloadable data tables.



Health Care Spending: Variation By Service Category

Annual spending per person grew to \$6,001 in 2019, an increase of 21.8% from 2015. The largest category of spending was **professional services** (\$1,885), constituting 31.4% of annual spending per person [Figure 3]. This was followed by \$1,668 in facility payments for **outpatient** visits and procedures (27.8%), \$1,294 in **prescription drugs** (21.6%), and \$1,155 in facility payments for **inpatient** admissions (19.3%).

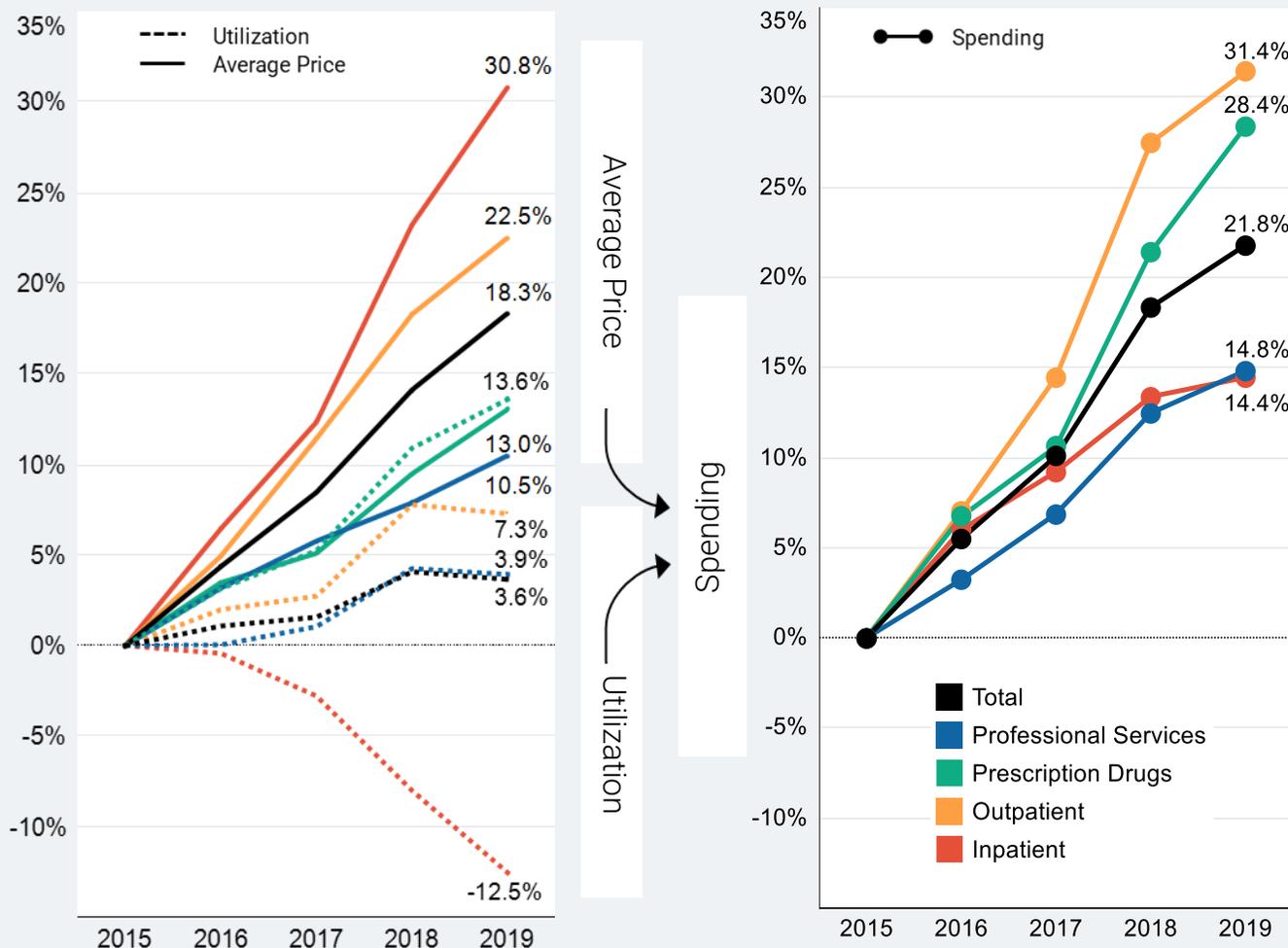
Both price increases and utilization contributed to the 21.8% increase in total health care spending between 2015 and 2019. However, prices increased by 18.3%, while the cumulative growth in utilization was only 3.6% over the same period [Figure 4].

Across the four service categories, spending growth was driven by a shift in the average price and utilization. The extent to which each component contributed to the spending increase, however, varied by service category. In all cases, double digit growth in average prices drove increases in cumulative spending. For three of the four services, utilization also grew, though at a substantially smaller amount compared to prices. Utilization of inpatient admissions declined substantially, by 12.5%, over the five-year period.

Figure 3: Spending per Person in 2019



Figure 4: Cumulative Change in Spending per Person, Utilization, and Average Price by Service Category



Note: All numbers presented in charts are available as downloadable data tables.



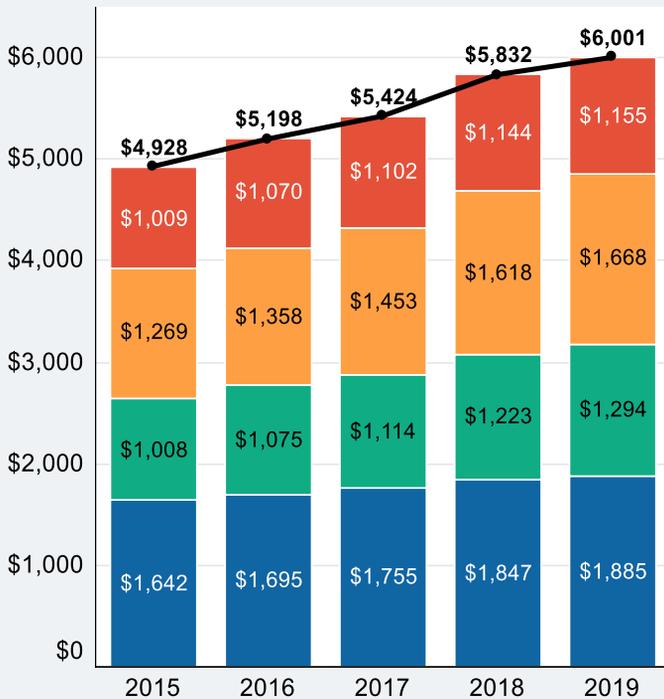
Per Person Spending Growth by Service Category

Total spending per person increased year-over-year between 2015 and 2019 [Figure 5]. Spending increased \$1,074 per person over five years, an average increase of \$268 each year [Figure 6].

Spending per person grew across all service categories in all years. Outpatient services and prescription drugs had the largest increases in spending per person between 2015 and 2019.

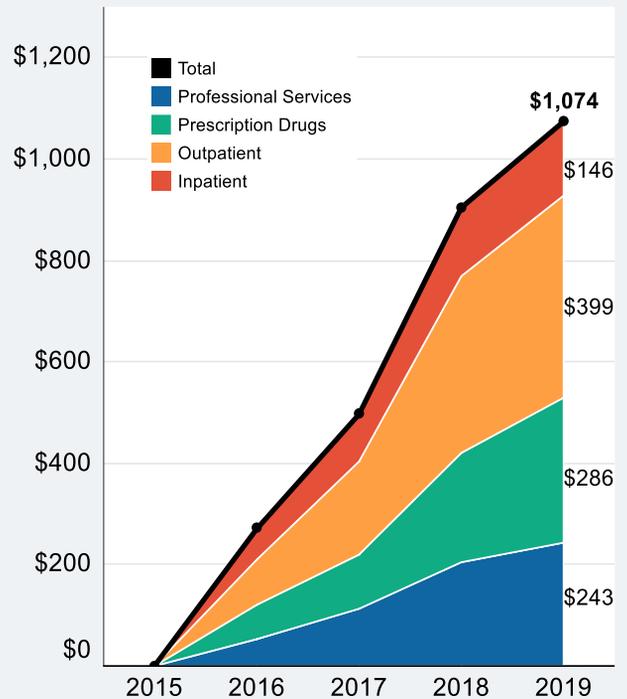
- Spending on facility payments for **outpatient** services increased \$399 per person over five years.
- Spending on **prescription drugs** increased \$286 per person over five years. This total does not reflect manufacturer rebates.
- Spending on **professional services** increased \$243 per person over five years.
- Spending on facility payments for **inpatient** admissions increased \$146 per person over five years. This was the smallest nominal increase in spending among the four service categories.

Figure 5: Annual Spending per Person, 2015-2019 



Note: All numbers presented in charts are available as downloadable data tables.

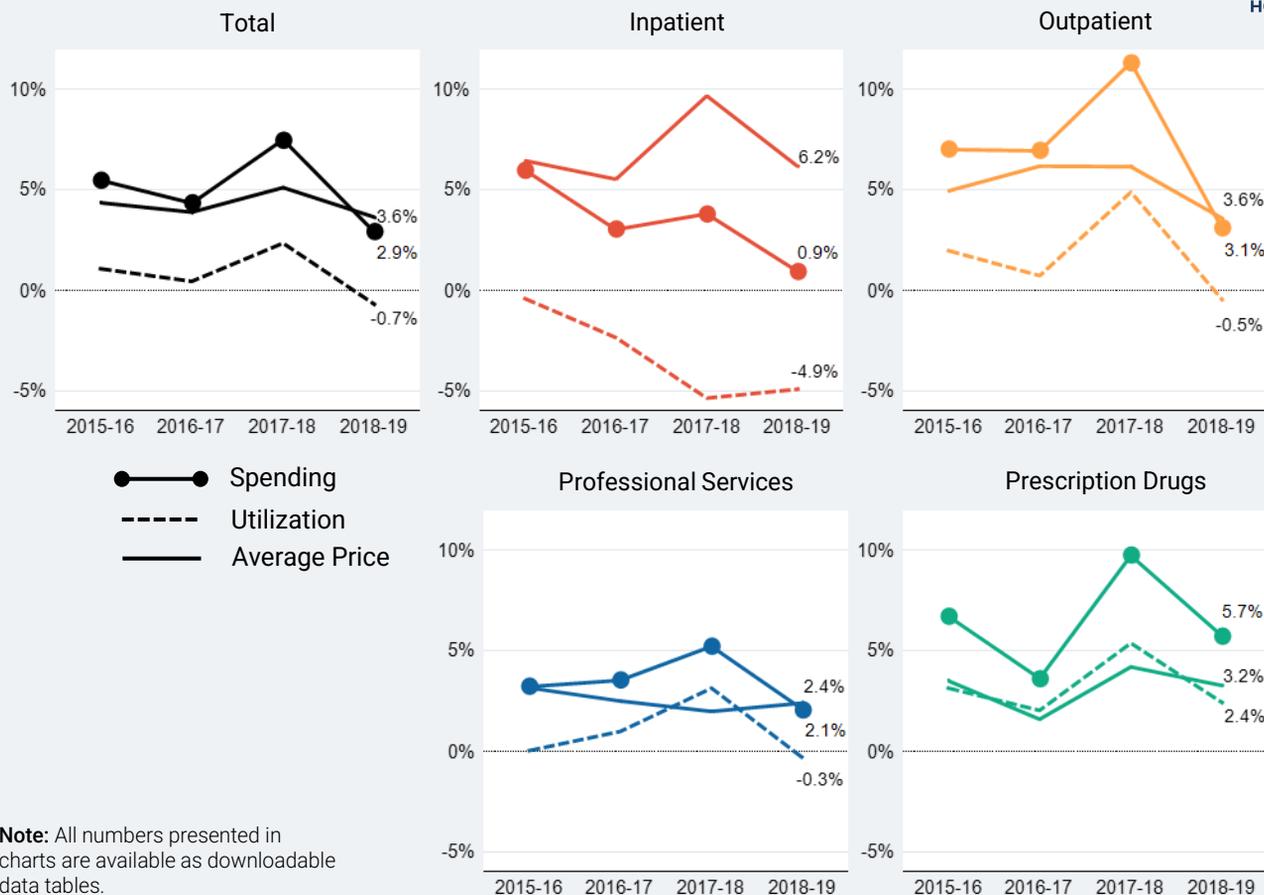
Figure 6: Cumulative Change in Spending per Person 



Note: All numbers presented in charts are available as downloadable data tables.



Figure 7: Annual Percent Change in Spending Per Person, Utilization, and Average Price



Note: All numbers presented in charts are available as downloadable data tables.

Year-over-year changes in spending were driven by shifts in both utilization and prices [Figure 7]. Between 2015 and 2017, increases in spending tracked closely to changes in price. Over the same period, changes in utilization were much smaller. Between 2017 and 2018, price growth remained steady, while an uptick in utilization growth contributed to higher spending growth compared to prior years. However, between 2018 and 2019, declines in both price growth and utilization reduced overall annual spending growth from 7.5% to 2.9%.

Price growth continued to slow, rising on average 3.6% across service categories in 2019, the lowest rate of growth between 2015 and 2019.

- Prices of **inpatient** admissions rose 6.2% in 2019. This was the highest price growth of any service category, although lower than the 2018 increase.
- Prices of **outpatient** services rose 3.6% in 2019, substantially lower than the annual increases in previous years.
- Prices of **professional services** rose 2.4% in 2019. Price growth was relatively consistent over the five-year period.
- Prices of **prescription drugs** increased 3.2% in 2019. Prescription drug prices do not reflect manufacturer rebates, and their price growth was only slightly lower than the 2018 increase.

Utilization decreased by 0.7% across all service categories in 2019, representing the only decline over the five-year period.

- Utilization of **inpatient** admissions decreased 4.9% in 2019.
- Utilization of **outpatient** services decreased 0.5% in 2019.
- Utilization of **professional services** decreased 0.3% in 2019, after several years of accelerating growth.
- Utilization of **prescription drugs** increased 2.4% in 2019.



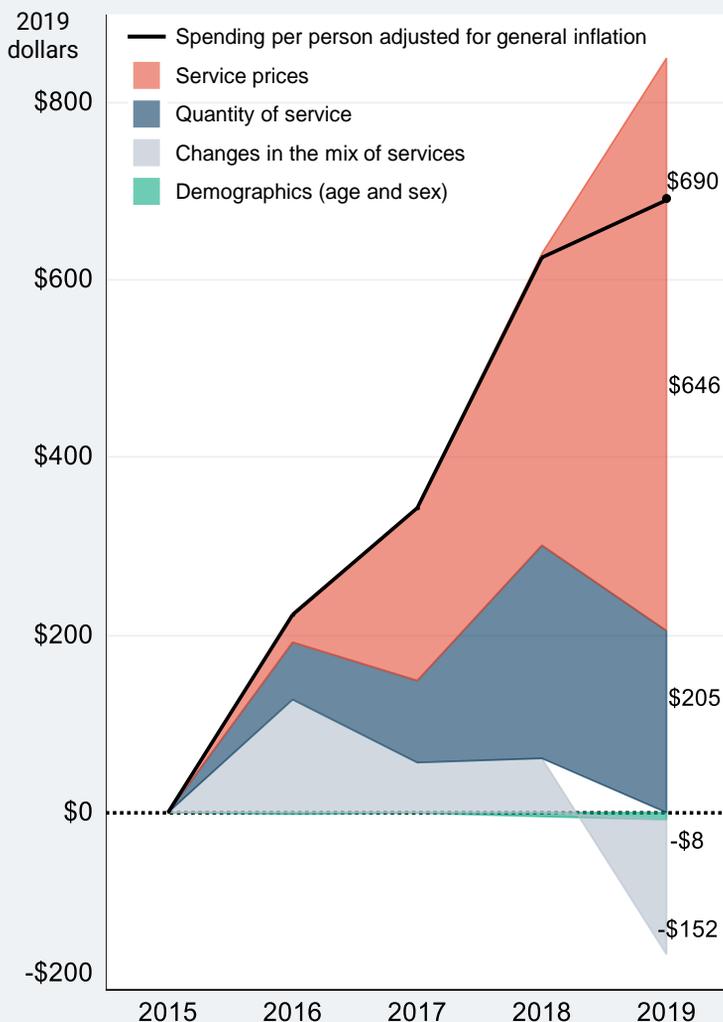
Drivers of Health Care Spending, 2015 to 2019

To better understand what drove the increase in spending per person over the five-year period, we looked at five factors: general inflation, service prices, quantity of services, demographic changes in the population, and changes in the mix of services [Figure 8].

Three of those factors (general inflation, service prices, and quantity of services) caused per person spending in 2019 to be higher than in 2015.

- **General inflation** accounted for over a third of the total increase in per-person spending between 2015 and 2019 (not shown in Figure 8). To capture the change in spending attributed to general inflation, we adjusted all dollar amounts to 2019 dollars using the consumer price index. After adjusting for inflation spending per person increased \$690.
- Increases in unit **prices** for health care services accounted for \$646 of the increase, nearly two-thirds of the increase in spending.
- An uptick in the **quantity of services** accounted for \$205 of the cumulative increase in spending per person, with much of that contribution coming in the year 2018.

Figure 8: Factors Contributing to Growth in Spending per Person from 2015 to 2019



Note: All numbers presented in charts are available as downloadable data tables.

The other two factors, changes in the mix of services used and demographic changes in the population, offset some of the growth in total spending per person.

- Changes in the **mix of services** (within service category) offset the increase in per-person spending by \$152 over five years. Between 2015 and 2018, the mix of services used by the ESI population was increasingly higher-priced, particularly outpatient and professional services. Accordingly, the shift in the mix of services in those years contributed to per-person spending increases. In 2019, however, substitution from brand name to generic drugs in prescription drug use drove a shift toward lower-price services and products that resulted in the change in service mix offsetting some of the per-person spending growth. There were minimal changes in the mix among inpatient service use over this period.
- The **demographic composition** of the ESI population grew slightly younger and more male from 2015 to 2019. Both populations tend to have lower per-person spending. If the demographic composition of the ESI population in 2019 were the same as it was in 2015, 2019 spending would have been higher. Therefore, the shift in the make-up of the population offset the increase in per-person spending by \$8.



Out-of-Pocket Spending Trends

Out-of-pocket (OOP) spending includes payments made by patients for health care services and prescription drugs covered by insurance but does not include the cost of insurance or premiums. OOP spending includes deductibles, co-payments, and co-insurance, so study results are a function of medical benefit design offerings by employers. In addition, some individuals may use flexible spending accounts (FSAs), health savings accounts (HSAs), and health reimbursement accounts (HRAs) to pay for these costs. While these types of accounts still reflect out-of-pocket costs to employees, they also confer tax savings that we cannot factor into our analysis.

Total OOP spending increased between 2015 and 2019, although at a significantly lower rate than overall spending. The cumulative increase over the five-year period was 12.3%. In comparison, the cumulative growth in total spending was 21.8% over this period [Figure 9].

Annual OOP spending per person (among all individuals, including non-utilizers) was the same in 2018 and 2019, decreasing by \$1 (\$830 vs. \$829). From 2015 to 2018 OOP spending per person increased steadily at about 4.0% per year. The share of OOP spending attributable to each service category remained constant over the full five years, with the highest percentage of OOP spending on professional services [Figure 10].

Cumulative growth in OOP expenditures per person, totaling \$91 between 2015 and 2019, was largely attributable to an increase in professional and outpatient services [Figure 11].

Figure 9: Cumulative Change in Out-of-Pocket and Total Spending per Person since 2015

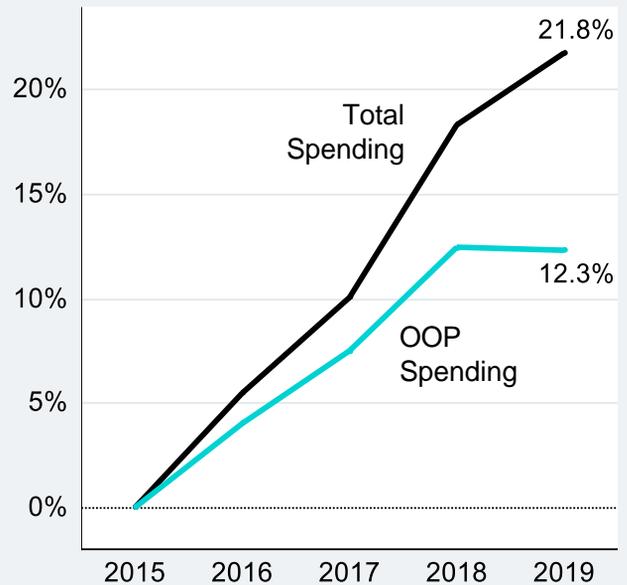
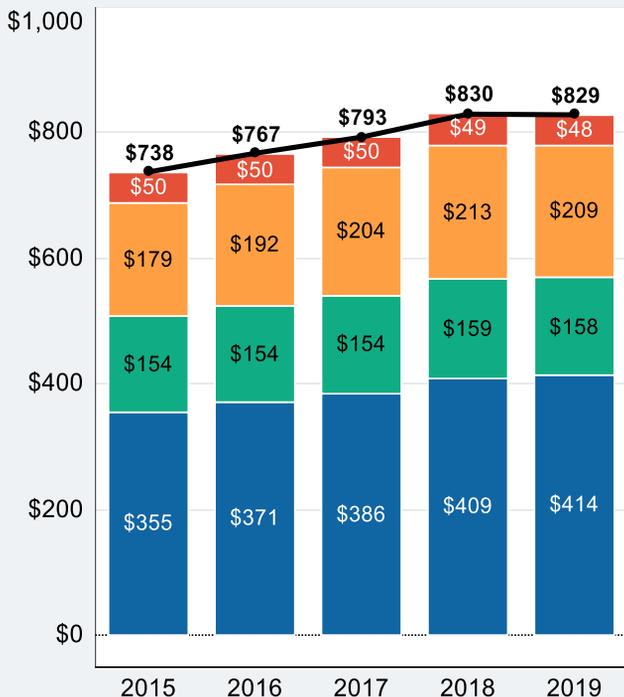
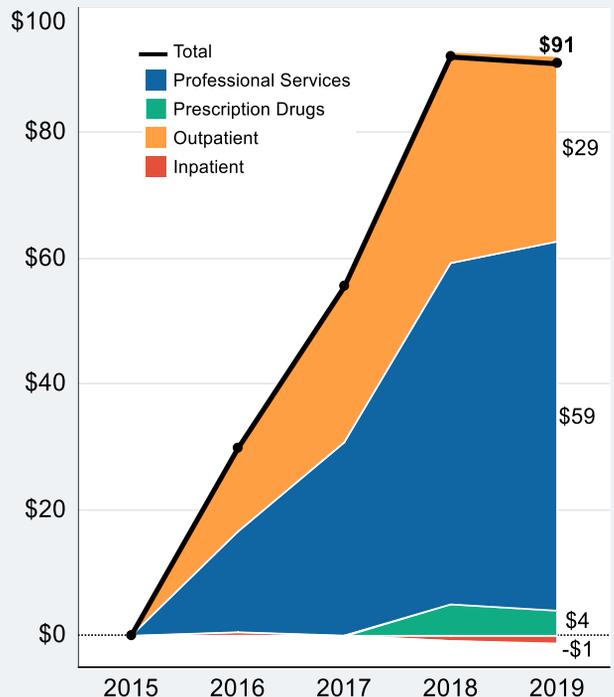


Figure 10: Annual Out-of-Pocket Spending per Person, 2015-2019



Note: All numbers presented in charts are available as downloadable data tables.

Figure 11: Cumulative Change in Out-of-Pocket Spending per Person



Note: All numbers presented in charts are available as downloadable data tables.



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