HEALTH CARE COST INSTITUTE

2020 Health Care Cost and Utilization Report

May 2022

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On behalf of the Health Care Cost Institute, I am pleased to present the 2020 Health Care Cost and Utilization Report. It goes without saying that 2020 was a year unlike any other for health care in the United States. In this, the third year of a once-in-a-generation pandemic, 2020 feels like a lifetime ago. This report takes us back to the beginning of this extraordinary time demonstrating how the health care system responded and the impact of that response.

Throughout the report, you can see the effect of COVID-19 on health care spending even though we do not pull out COVID services specifically. Most dramatically, utilization fell 7.5% from 2019 to 2020 leading to a 3.6% drop in spending. This is the first decrease in spending we have seen in 12 years. As we will describe in future publications, the decline in utilization was concentrated in the early months of the pandemic. Even though it rebounded back to pre-pandemic levels by mid-2020, the decrease in use was so dramatic it affected 2020 annual numbers.

The impact of COVID and COVID-related policies shows up in other ways as well. For example, spending on respiratory inpatient admissions increased dramatically between 2016 and 2020, driven by a large increase from 2019 to 2020. Changes in reimbursement, coverage, and other regulatory policies related to telehealth during the pandemic also are evident in the report. Spending on telehealth evaluation and management services increased 250-fold from 2016 to 2020 with virtually all of that increase occurring from 2019 to 2020.

As much as we hope these data and this report contribute to broader understanding of COVID-19's impact, we also acknowledge that there are repercussions beyond what we describe here. To that end, we acknowledge the unimaginable suffering people and families have endured. Moreover, the 2020 HCCUR focuses only on one segment of society – people who get health insurance through work. The impacts on people with fewer resources may be different and also should be studied carefully.

While this year's report captures substantial changes caused by COVID, it also reflects longstanding trends in health care spending. Even though per person spending in 2020 was lower than it was in 2019, it still is 9.3% higher than it was in 2016. In many ways, the 2020 report documents the continuation of trends we have seen in earlier reports and in the first four years of the report's window.

This year's report includes new breakdowns of inpatient, outpatient, and physician spending intended to provide a more granular, patient-focused view of the drivers of spending in the U.S. As in previous years, all data underlying the figures and analysis presented in this report are available for download on our website.

HCCI's mission is to get to the heart of the key issues affecting the U.S. health care system by using the best data to get the best answers. We hope this report does that and sparks discussion about the causes of and solutions to challenges we have identified – both COVID-related and otherwise. We also hope that HCCI's data can help researchers and policymakers answer their important questions.

I would like to acknowledge the HCCI team – especially John Hargraves, Jessica Chang, and Aditi Sen – for drafting this report and the tireless work that underlies it. We are grateful for our partners, CVSHealth/Aetna, Humana, Kaiser Permanente, and Blue Health Intelligence and for additional technical advice and input from Mike Chernew, Roy Goldman, and Kosali Simon.

Katie Martin
President and CEO, HCCI

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@healthcostinstititute.org, or follow us on Twitter @healthcostinst

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If you are interested in exploring state trends, the data that powers this report, or our methodology visit:

https://healthcostinstitute.org/health-care-cost-and-utilization-report/annual-reports

Executive Summary

The 2020 Health Care Cost and Utilization Report presents data on health care spending, utilization, and average prices from 2016 through 2020 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 CVS Health/Aetna, Humana, and Blue Health Intelligence during this period. The key findings are:

- In 2020, per-person spending decreased to $5,607 from $5,834 in 2019. This total includes amounts paid for medical and pharmacy claims but does not subtract manufacturer rebates for prescription drugs. The average out-of-pocket spending decreased to $724 per person from $817 in 2019.
- Per person health care spending decreased 4% in 2020, the first decrease after 12 consecutive years of growth as described in earlier versions of this report.
- Average prices grew just over 4% in 2020. Cumulatively, prices were 16% higher in 2020 than 2016. Prices grew most for inpatient services (25%) and least for professional services (9%) over the five-year period.
- Utilization decreased 7.5% from 2019 to 2020. Utilization declined for all medical service categories (inpatient, outpatient, and professional services), but increased for prescription drugs. In comparison, utilization increased just over 1% from 2018 to 2019.
- There was a rapid growth in telehealth service use in 2020, leading to a 250-fold increase in spending on telehealth between 2016 and 2020.

This report examines trends across four broad categories of service: inpatient admissions; outpatient services; professional (i.e., physician and other clinician) services; and prescription drugs. We also look at granular trends within each category. All data were weighted to reflect the age, gender, and geographic mix of the employer-sponsored insurance (ESI) population by year. We do not adjust for changes in the composition of services provided over time in our main report. We believe the racial and ethnic distribution of the population in HCCI's data is similar to the national ESI population. Nationally, however, Black, American Indian and Alaska Native, and Hispanic populations are under-represented in ESI, so health care costs and use among these people are likely under-represented in this report's findings.

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.

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 as well as any changes in the mix of services provided.

Average Out-of-Pocket Price: The average amount for which individuals receiving a service were liable. Calculated as the sum of out-of-pocket amounts due in a service category divided by the number of people who received a service in that category. In contrast to spending per person and out-of-pocket spending per person, the denominator varies by service category.

Health Care Spending: Changes Between 2016 and 2020

From 2016 to 2020, **spending** per person increased $460 from $5,147 to $5,607 (9.3%). The increase in spending was driven by rising average **prices**, which grew close to 16% over 2016–20. In that period, there was a cumulative 5.4% decline in **use**, driven by a large decrease in 2020 [Figure 1].

Utilization decreased or was relatively flat over 2016–19, with an average annual change of 0.7% [Figure 2]. In 2020, utilization fell 7.5%, leading to a 3.6% drop in spending from 2019–2020 after experiencing 4.3% average annual growth between 2016 and 2019. **Prices** grew just over 4% in 2020.

Figure 1: Cumulative Change in **Spending per Person**, **Utilization**, and **Price** since 2016

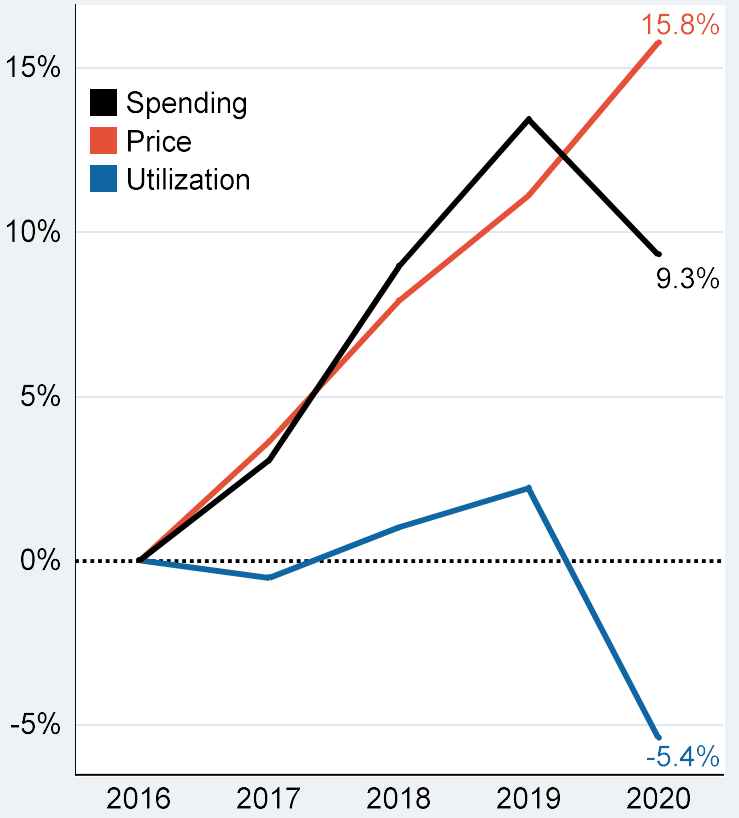
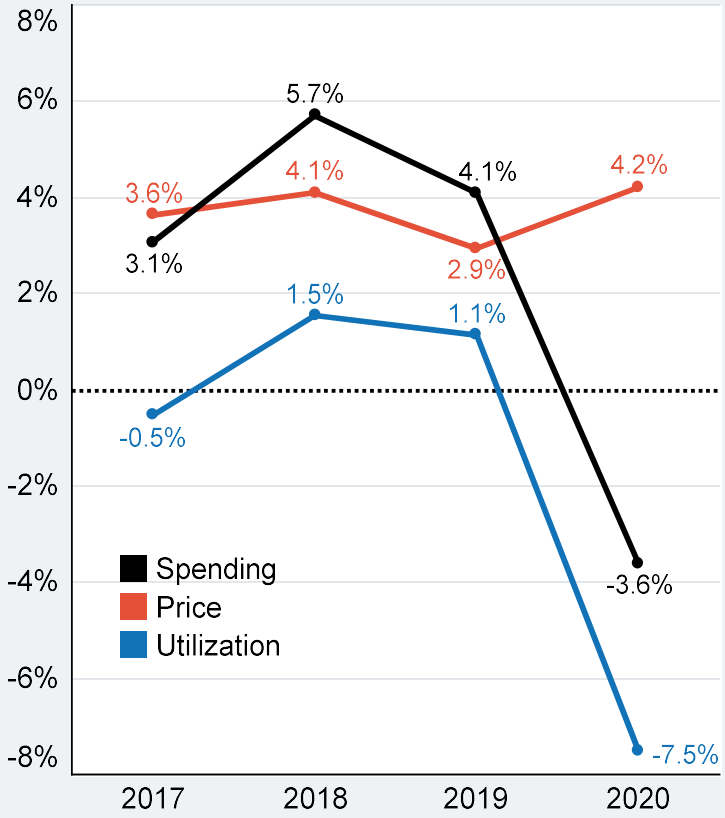


Figure 2: Annual Percent Change in **Spending per Person**, **Utilization**, and **Price**



Note:
Unless otherwise stated, any references to changes in prices in this report include the effect of inflation and service price growth above inflation as well as effects of changes in the mix of services provided. Changes in utilization include the effects of age and sex composition changes in the ESI population and changes in the quantity of services used. 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.

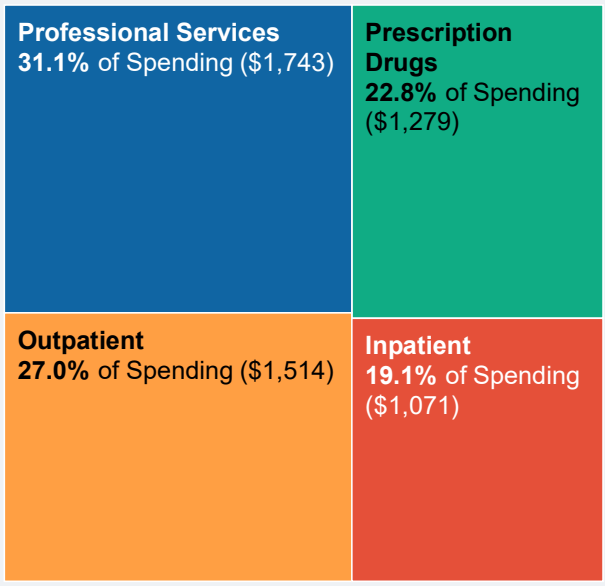
Note: All numbers presented in charts are available as downloadable data tables.

Health Care Spending: Variation by Service Category

Per-person spending grew to $5,834 in 2019, and then decreased to $5,607 in 2020. As shown on Figure 3, the largest category of spending was **professional services** ($1,743), followed by facility payments for **outpatient** visits and procedures ($1,514), **prescription drugs** ($1,279), and facility payments for **inpatient** admissions ($1,071). Note that spending on prescription drugs reflects negotiated discounts from wholesale or list prices but does not account for manufacturer rebates provided through separate transactions.

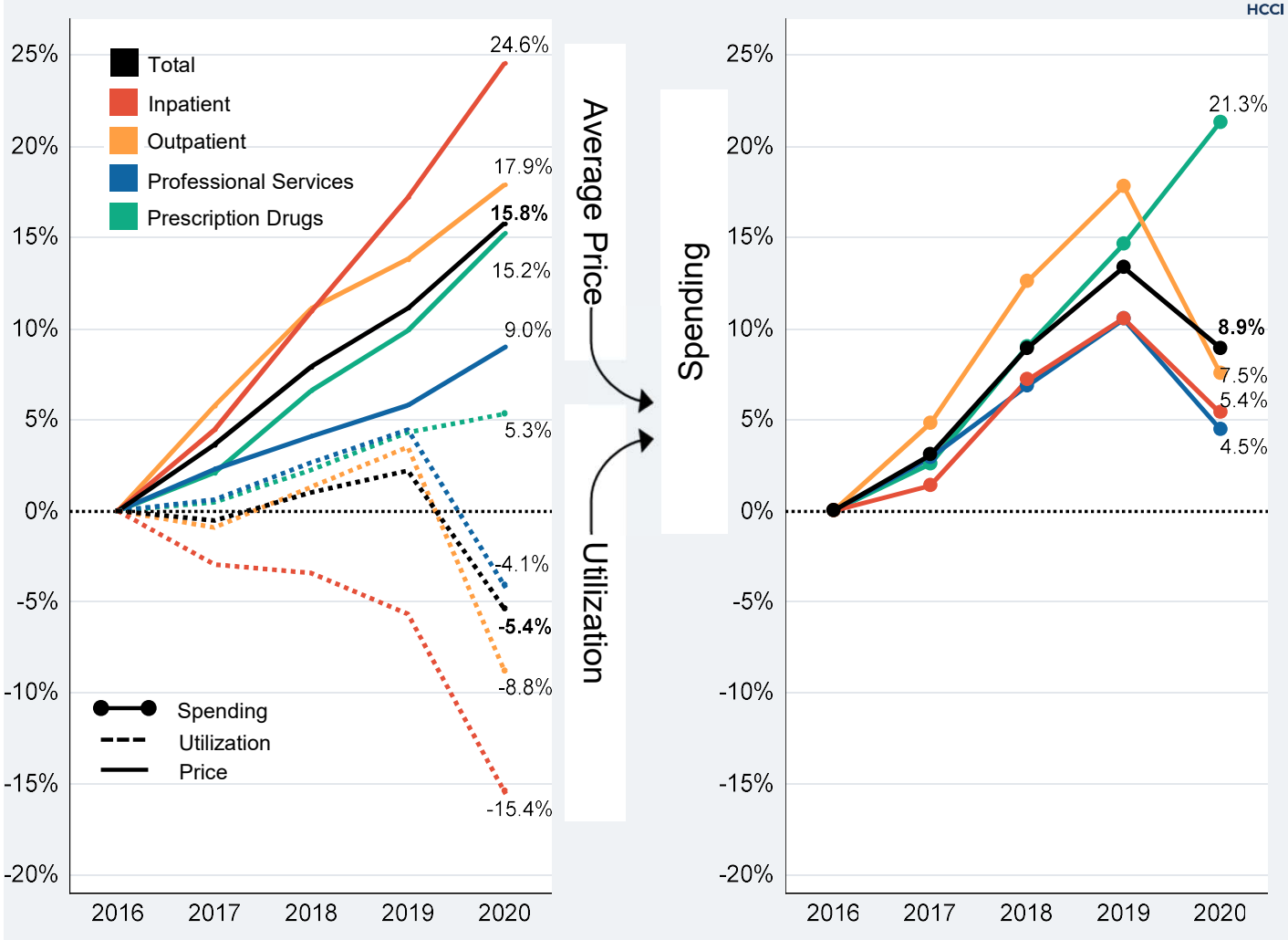
In all service categories, growth in spending was driven by increasing prices. Between 2016 and 2020, utilization decreased a cumulative 5.4%. Over the same period, prices increased 15.8% [Figure 4]. Across the four service categories, the contribution of average prices and utilization to the change in spending varied. Prescription drugs was the only category of services with a cumulative increase in utilization over the 2016–20 period (5.3%). Inpatient utilization had the biggest decline (15.4%).

Figure 3: Share of Spending per Person in 2020



In all categories, prices grew between 2016 and 2020. Inpatient prices had the greatest cumulative increase (24.6%) while the smallest cumulative increase in prices was for professional services (9.0%). Rising prices drove cumulative increases in spending across all service categories, with the largest growth being prescription drug spending (21.3%).

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



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

Changes in Service Category Spending

Annual spending per person increased year-over-year from 2016 through 2019, and then decreased in 2020, the first year of the COVID-19 pandemic [Figure 5]. Over the five-year period, spending increased $460 per person, an average increase of $229 each year from 2016–2019, followed by a $227 decrease in 2020 [Figures 5 and 6].

Spending declined in all medical service categories from 2019 to 2020.

Outpatient and professional services had the largest decreases in spending per person in 2020 [Figure 6].

- Per-person spending on facility payments for outpatient visits and procedures decreased $144 in 2020.
- Professional service spending per person decreased $101 in 2020.
- Per-person spending on facility payments for inpatient admissions decreased $53 in 2020.
- These changes are consistent with other evidence that use of health services dropped dramatically during the initial phases of the COVID-19 pandemic.

In contrast to declines in spending on medical services, spending on prescription drugs rose $71 in 2020, similar to increases in 2018 and 2019. As noted earlier, this total does not reflect manufacturer rebates.

Figure 5: Annual Spending per Person, 2016–2020

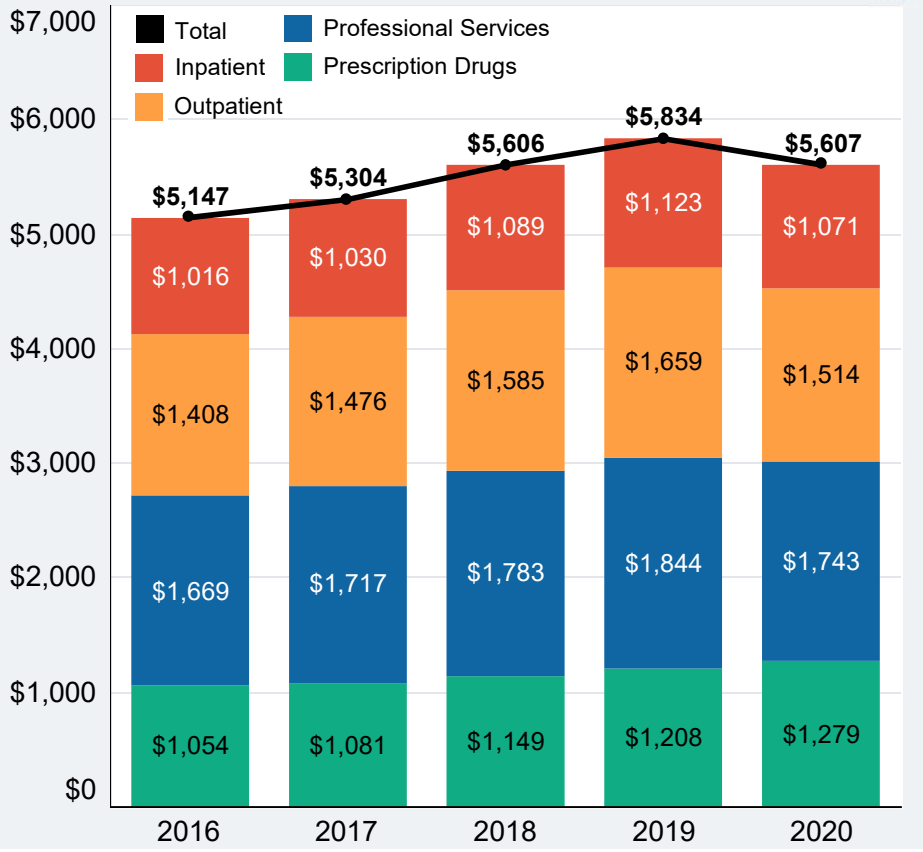
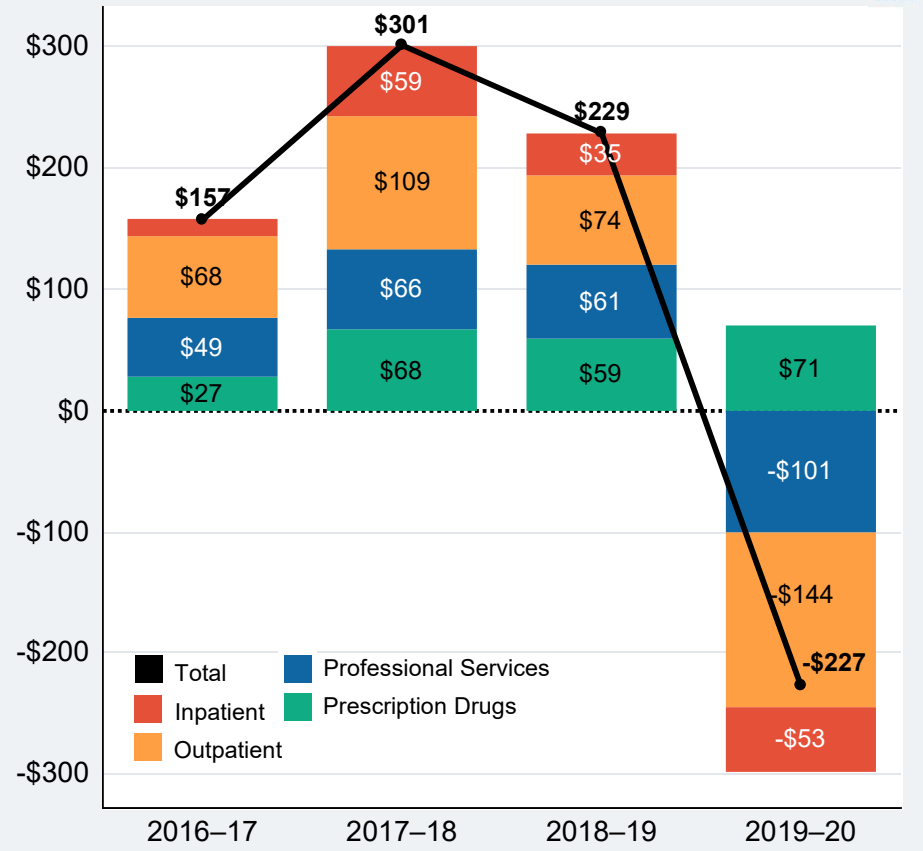
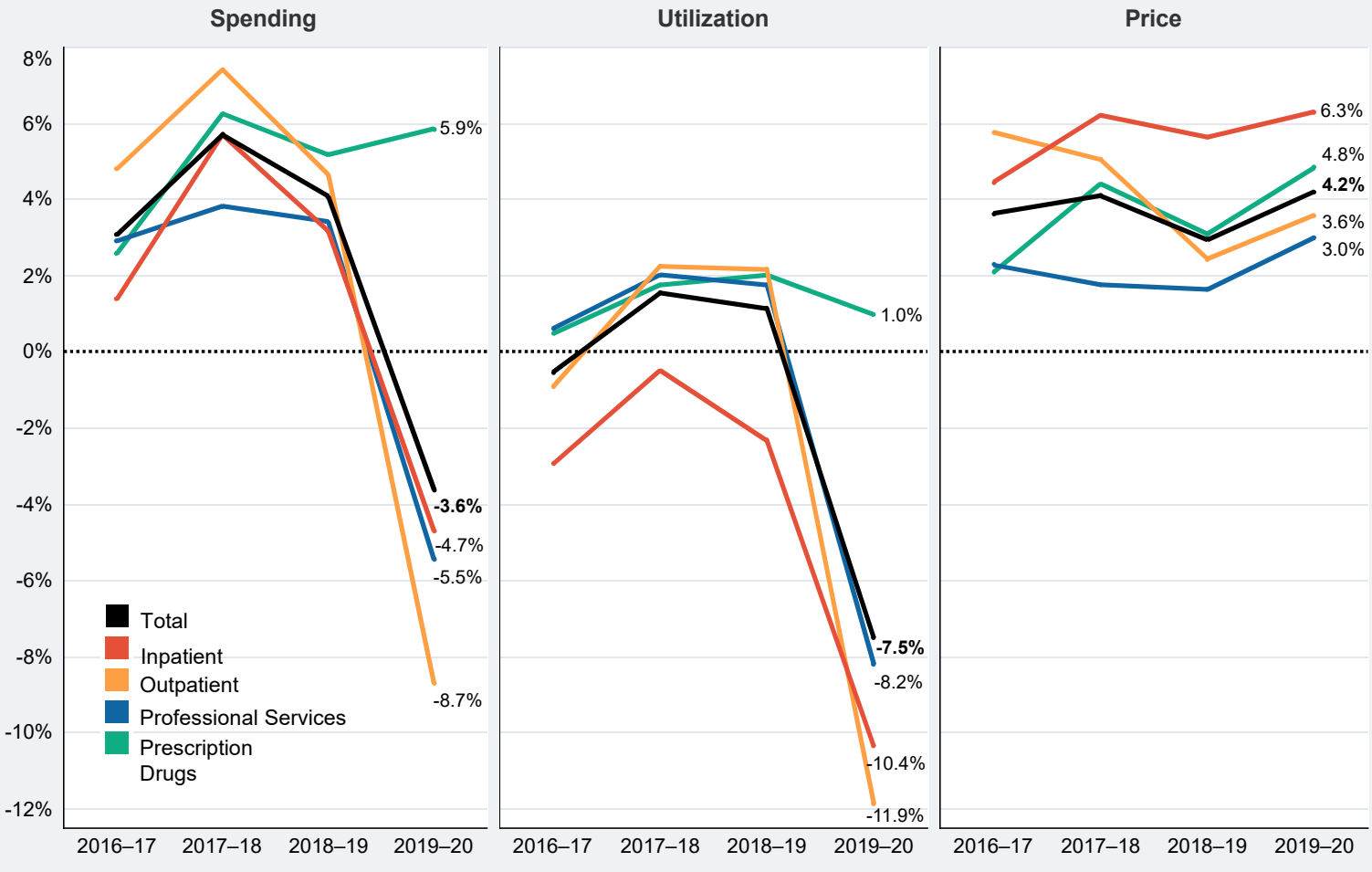


Figure 6: Annual Change in Spending per Person, 2016–2020



Annual Changes in Spending, Utilization, and Price

Figure 7: Annual Percent Change in Spending per Person, Utilization, and Price by Service



Year-to-year changes in spending are the product of changes in utilization and changes in prices. Between 2016 and 2019, increases in spending closely tracked changes in prices. Over the same period, changes in utilization were much smaller. In 2020, the substantial drop in utilization was the main factor driving a reduction in spending.

Utilization decreased across all service categories other than prescription drugs from 2019 to 2020, an overall decrease of 7.5% [Figure 7].

- **Outpatient** visits and procedures experienced the biggest decline, 11.9%, from 2019 to 2020.
- **Inpatient** admissions dropped 10.4% from 2019 to 2020.
- After several years of relatively small increases, utilization of **professional services** declined 8.2% from 2019 to 2020.
- Utilization of **prescription drugs** was the only category where utilization rose from 2019 to 2020, a modest 1.0%.

Prices grew 4.0% from 2019 to 2020, comparable to price growth from 2017 to 2018.

- **Inpatient** admissions was the category with the highest growth in average prices, 6.3% in 2020, similar to annual price changes in 2018 and 2019.
- The average price for **outpatient** visits and procedures rose 3.6% in 2020, below the 2017 and 2018 increases, which were approximately 6% and 5%, respectively.
- Though the average price of **professional services** had the lowest growth among the four categories, rising 3.0% in 2020, this was the highest annual percent change in price for this category between 2016 and 2020.
- **Prescription drug** prices increased 4.8% in 2020, following growth of approximately 3% in 2019.

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

Annual Spending by Age and Sex

The ESI population includes individuals who receive health insurance coverage from their employer, as well as their dependents, such as spouses and eligible children. In the HCCI data in 2020, one-quarter of this group was 18 years old or younger [Figure 8]. The age distribution of the ESI population in our data (i.e., the share of people in each age group) stayed consistent over the 2016 to 2020 period. The sex distribution was also consistent over time, with the population evenly divided between females and males.

Per-person spending in the HCCI data was highest for those between 55 and 64 years old. In general, per-person spending increased with age [Figure 9]. One exception was males under 18, who have higher spending ($3,114) than males ages 18 to 24 ($2,535) and males ages 25 to 34 ($2,849).

The comparison of spending across men and women varies with age. Among children, males had slightly higher average spending than females, while average spending among females was consistently higher than that of males between the ages of 18 and 54. Spending was similar between women ($10,305) and men ($10,639) among those in the 55–64 age range.

Figure 8: 2020 ESI Age Distribution

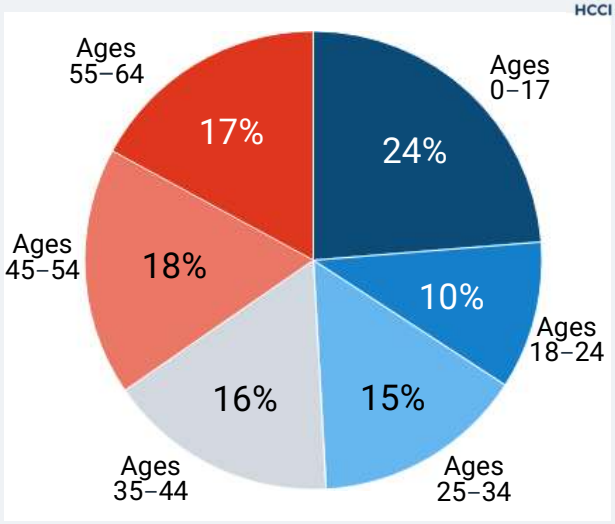
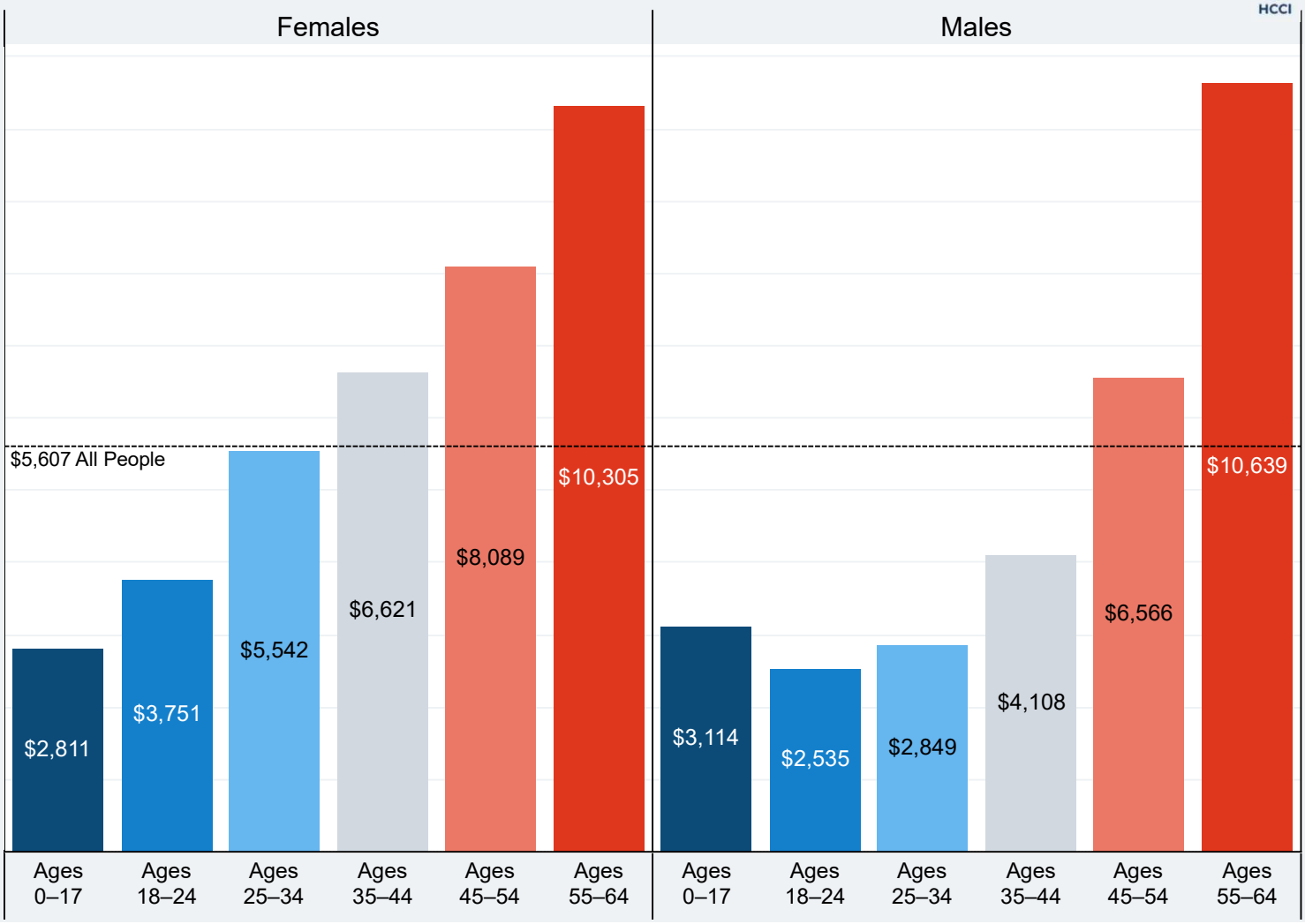


Figure 9: Spending per Person in 2020 by Age and Sex



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 estimates 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 year-over-year each year between 2016 and 2019. The cumulative increase over this period was $63 (7.7%). The growth in OOP spending was lower than the growth in total spending over 2016–19 (11.8%). Both total and OOP spending declined in 2020. Out-of-pocket spending had a steeper drop in 2020, since it is more closely tied to utilization of services through copay and coinsurance design than total spending. The cumulative decrease in OOP spending over the five-year period was $30 (4.9%) [Figure 10].

Out-of-pocket spending was $724 in 2020 [Figure 11]. The share of OOP spending attributable to each service category remained constant over the full five years, with the highest percentage of OOP spending–close to half–on professional services [Figure 12].

Figure 10: Cumulative Change in **Spending per Person** and **Out-of-Pocket Spending per Person** since 2016

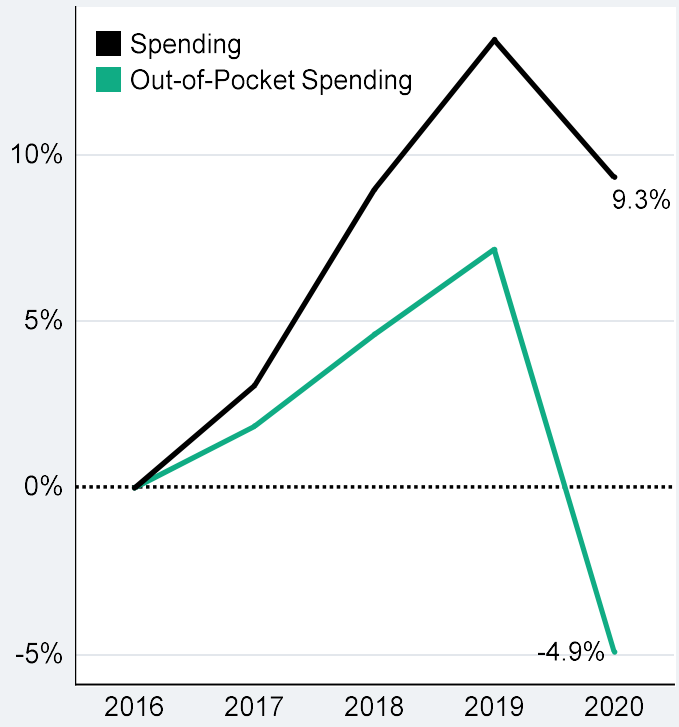


Figure 11: **Total** and **Out-of-Pocket** Spending per Person

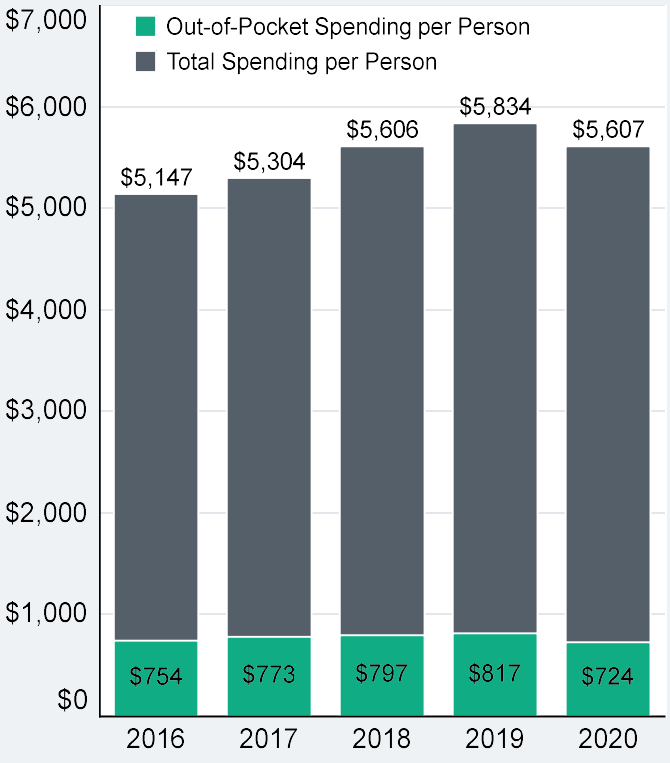
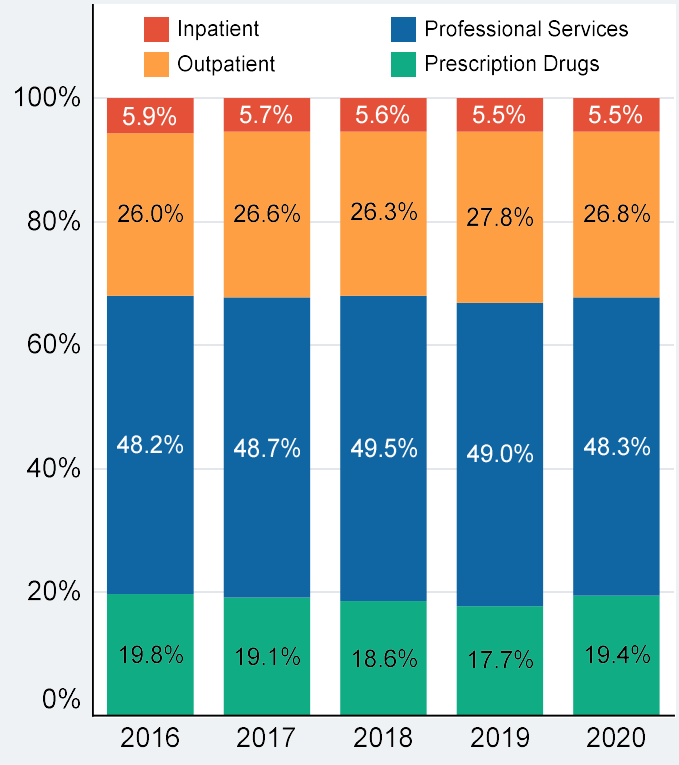


Figure 12: Share of Out-of-Pocket Spending by Service



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

Service Category and Subcategory Trends

The health care claims in the underlying data were categorized into four service categories: inpatient facility, outpatient facility, professional services, and prescription drugs. This classification reflects the way claims were processed and paid, and not necessarily how patients interacted with health care providers. In many cases, a single episode of care will have claims in multiple categories. It is also possible that the classification of claims for similar types of episodes vary by provider, or groups of providers, depending on how claims were submitted. Such variation can also occur across years within the same provider. Physician services that occur in facility settings are captured in the professional services category. See the methodology document for further detail.

Year-to-year changes in spending, use, and average price for each service category can reflect changes in the site of service for certain procedures. For example, if mammograms that had previously been performed in a physician's office, and therefore classified as a professional service, are shifted to an outpatient facility, the trends in spending, use, and price for the radiology subcategory in outpatient facility and professional services categories will be affected. These service category-level shifts were not examined, but their possibility should be noted when interpreting the findings presented in the remainder of this report.

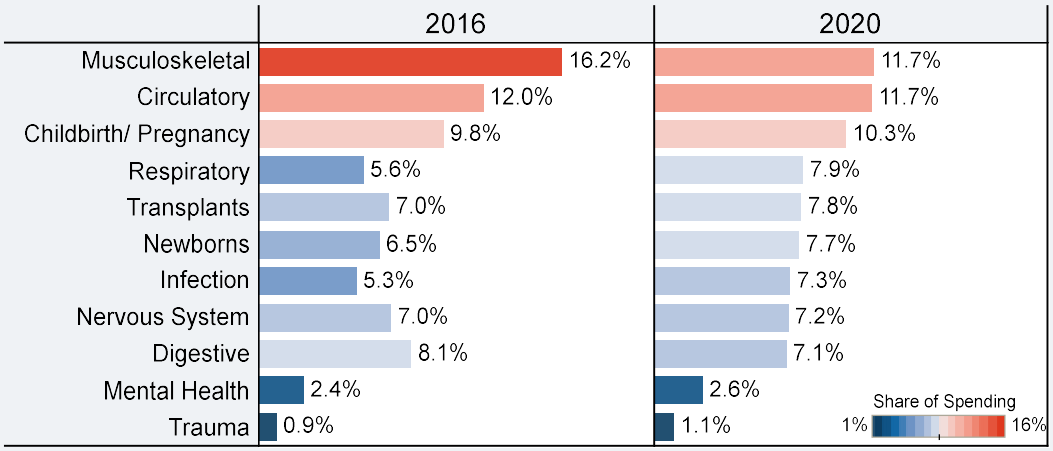
Spending on drugs includes spending on administered drugs (e.g., injections or infusions), generally paid under the medical benefit, and prescription drugs covered by the pharmacy benefit. Administered drug spending, use, and prices is captured in the professional and outpatient facility categories. Prescription drug spending includes the amount paid for pharmacy claims. These point-of-sale prices reflect discounts from the wholesale or list prices of prescription drugs, but do not account for manufacturer rebates that occur in separate transactions.

Inpatient Spending Trends

Inpatient spending includes payments to facilities (e.g., hospitals) for services delivered during an admission or other overnight stay. In many cases, this spending does not include payments to the physician or other clinicians, which are instead captured in the professional services category.

Per-person spending on inpatient admissions increased $54 (5.4%) between 2016 and 2020 [Figure 14]. That reflects an increase of $107 from 2016–2019, followed by a sizable drop ($52) in 2020, the first year of the COVID-19 pandemic.

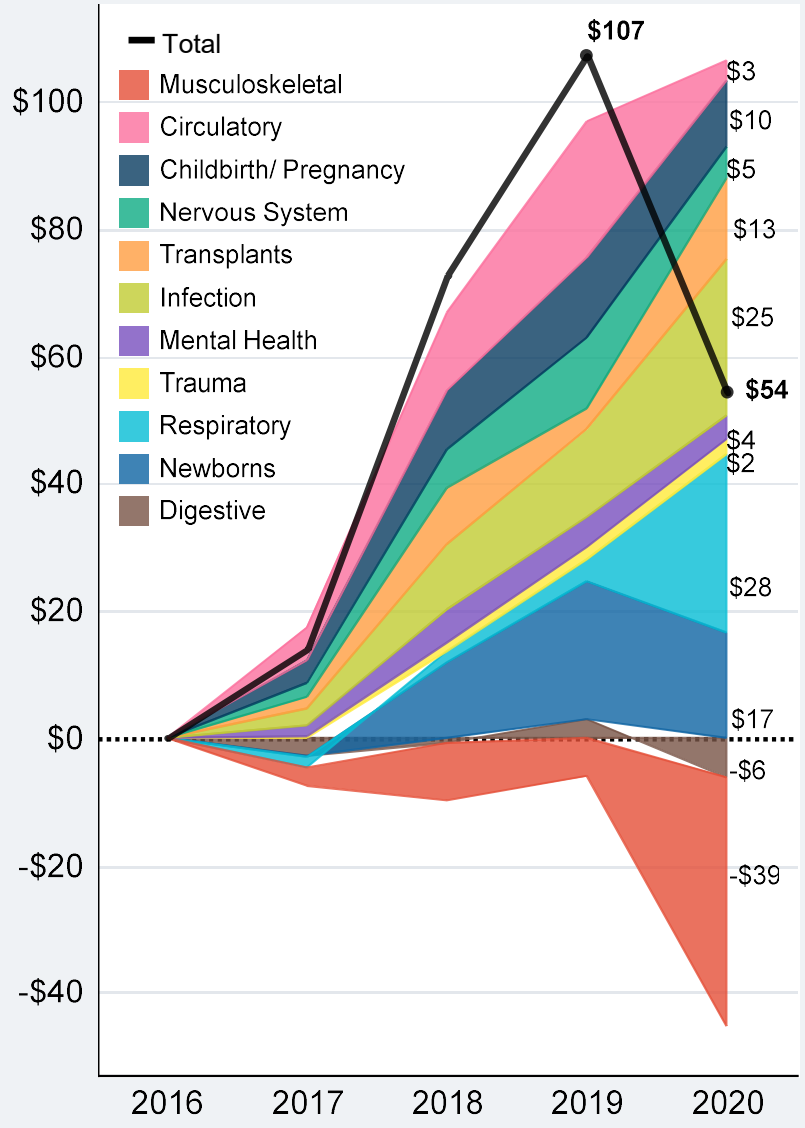
Figure 13: Share of Inpatient Facility Spending



Together, **Musculoskeletal, Circulatory,** and **Childbirth/Pregnancy** admissions accounted for one-third of inpatient spending in 2020 [Figure 13]. Between 2016 and 2020, spending on childbirth/pregnancy admissions increased moderately and spending on circulatory admissions increased from 2016–2019 but then dropped in 2020, for a cumulative change of $3 [Figure 14]. Spending on musculoskeletal admissions declined, particularly in 2020 (-$39); declining spending on musculoskeletal admissions over this period is at least partly due to a shift in some of these services into outpatient settings.

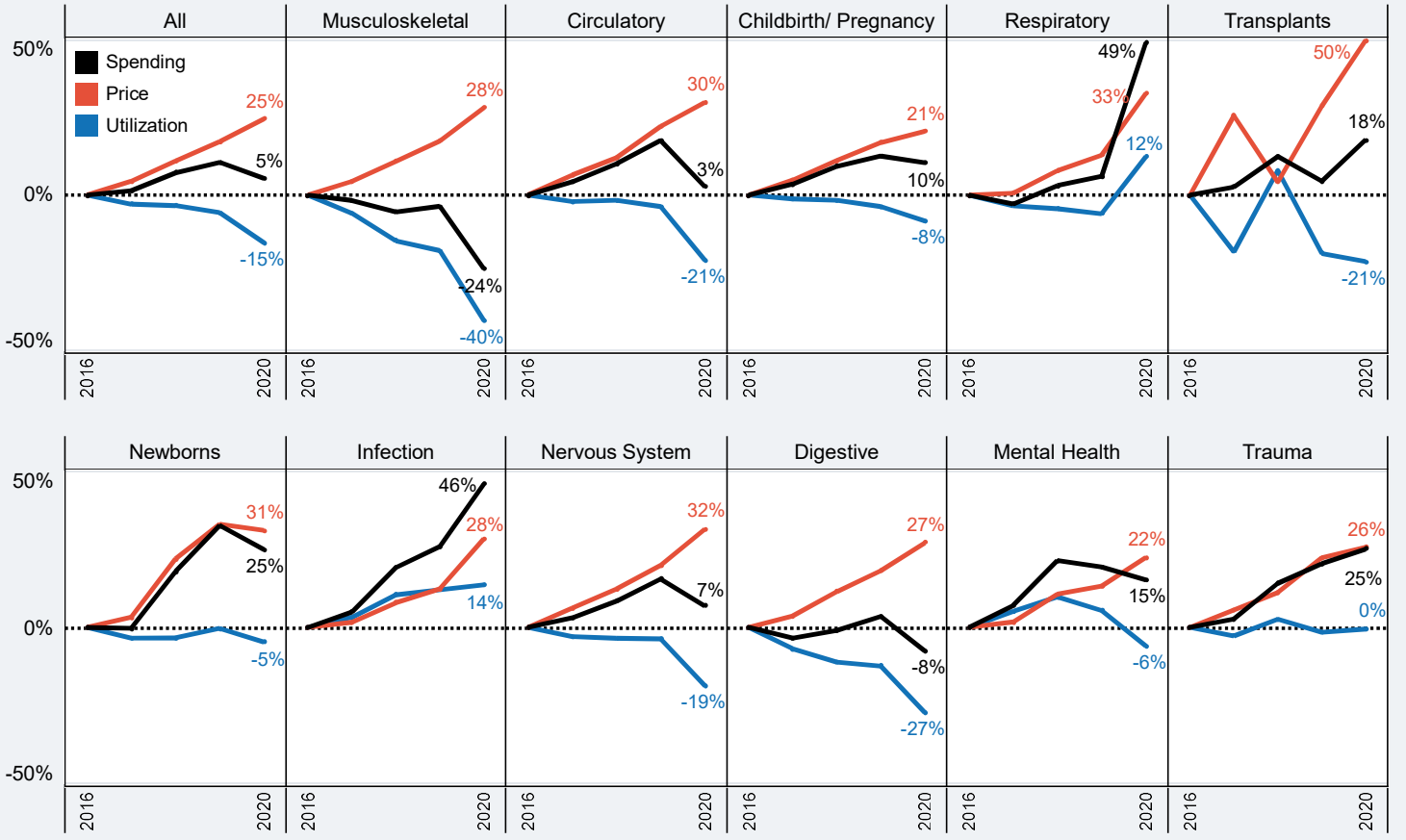
Respiratory admissions (including for COVID-19 in 2020) made up close to 8% of inpatient spending in 2020, up from 5.6% in 2016. Spending on respiratory admissions had the largest cumulative increase, $28 (49%) between 2016 and 2020, driven by a large increase from 2019–2020.

Figure 14: Cumulative Change in Inpatient Spending 2016 to 2020



Note: All numbers presented in charts are available as downloadable data tables. Data in charts do not total to 100% since selected categories are shown. Data for all detailed subcategories of inpatient services are available to download and explore.

Figure 15: Cumulative Change in Inpatient **Spending per Person**, **Utilization**, and **Price** from 2016 to 2020 for Select Services

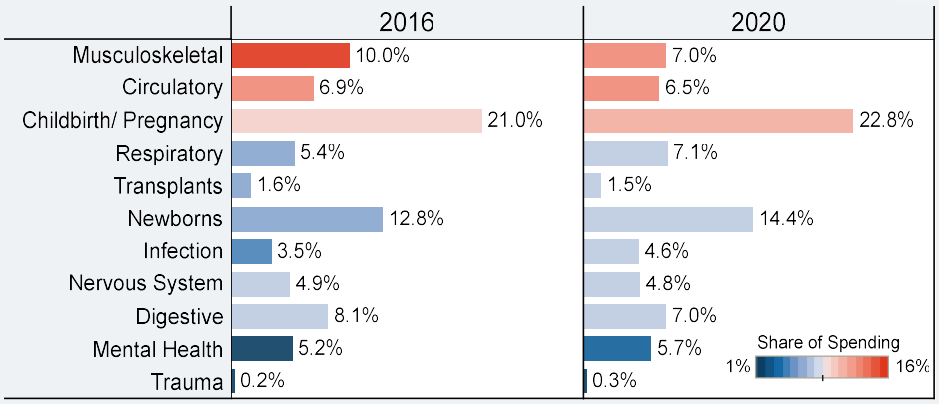


Overall, growth in the average price of an inpatient admission more than offset declines in the number of admissions between 2016 and 2020, leading to cumulative **spending** growth of 5% over the five-year period [Figure 15]. Among the top sub-categories of inpatient spending, spending growth over this period was highest for respiratory admissions (49%). Unlike other subcategories of inpatient care, there was an increase in use (as well as price) for respiratory admissions, consistent with admissions related to COVID-19. In most other sub-categories, spending declined in 2020 but the cumulative five-year growth remained positive. Cumulative spending growth was negative for musculoskeletal (-24%) and digestive (-8%) admissions, reflecting substantial declines in utilization.

Utilization declined 15% overall and in all sub-categories other than infection and respiratory admissions over the 2016–2020 period. The number of respiratory admissions declined each year from 2016–2019 but increased in 2020 due to COVID-19 hospitalizations. The number of admissions for infections grew each year, for a cumulative change of 14%.

The cumulative growth in the average **price** of an inpatient admission was 25% between 2016 and 2020. Average price grew in each sub-category of inpatient admissions over this period. The smallest cumulative price growth was for childbirth/pregnancy admissions (21%) while the largest growth was for transplant admissions (50%). The average price of a respiratory admission, including those for COVID-19 in 2020, rose 33% over the five-year period, with the sharpest increase in 2020.

Figure 16: Share of Inpatient Admissions



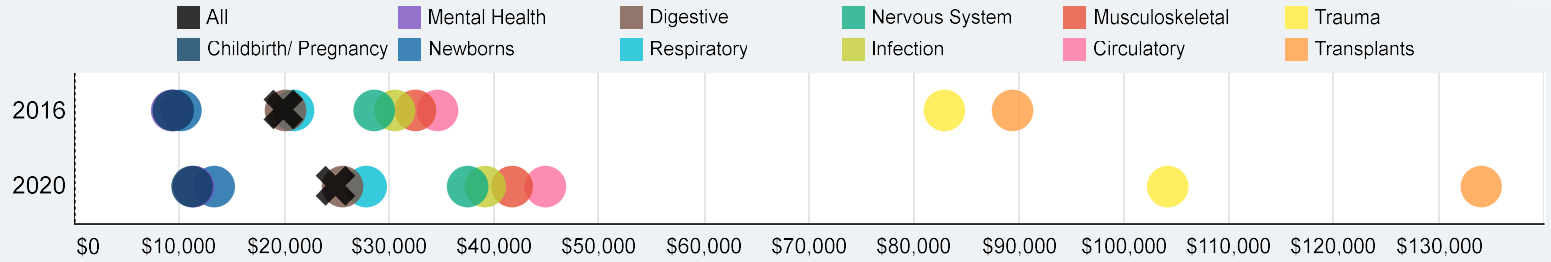
Note: All numbers presented in charts are available as downloadable data tables. Data in charts do not total to 100% since selected categories are shown. Data for all detailed subcategories of inpatient services are available to download and explore.

Inpatient Admission Prices and Out-of-Pocket Payments

The average price of an inpatient admission varied across subcategories and increased year-over-year within each subcategory [Figure 17].

- **Transplants** had the highest average price, increasing from $89,415 in 2016 to $134,105 in 2020. That is more than 30% higher than the average price of **trauma** admissions, the subcategory with the second highest average price, which grew from $82,844 in 2016 to $104,193 in 2020.
- The price of **musculoskeletal** admissions and **circulatory** admissions, which make up the largest shares of inpatient spending, grew from $32,546 to $41,698 and $34,612 to $44,954, respectively between 2016 and 2020.
- The average price of **childbirth/pregnancy** admissions, which make up over 20% of inpatient admissions in 2020, was $9,357 in 2016 and $11,277 in 2020.
- The average price of a **respiratory** admission was $27,773, up from $20,923 in 2016.

Figure 17: Average Prices of Inpatient Admissions in 2016 and 2020 for Select Services

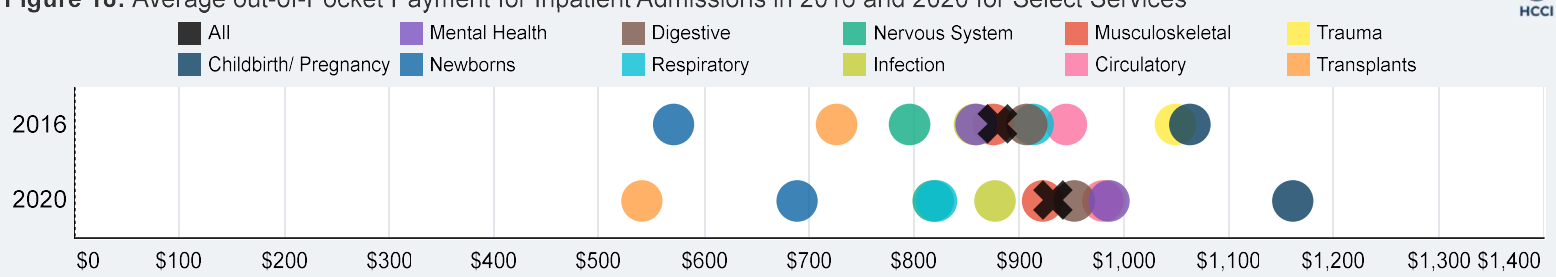


Average out-of-pocket payments for inpatient admissions grew between 2016 and 2020 for 19 out of 26 (8 of the 11 shown) sub-categories of inpatient admissions [Figure 18]. Between 2016 and 2020, the average out-of-pocket payment for an inpatient admission rose 6% from $881 to $933. While the out-of-pocket payment for an admission is high and may be a financial obstacle for many patients, deductibles and out-of-pocket maximums of most health insurance plans mitigate the effects of inpatient care price increases on patients to a certain extent.

Note that these amounts capture only the out-of-pocket payments for facility costs; out-of-pocket payments associated with professional services received during an inpatient stay are in the professional spending category.

- **Childbirth/pregnancy** inpatient admissions accounted for the plurality of admissions and had among the highest average out-of-pocket payment, $1,161 in 2020. On average, patients paid almost $100 more out of pocket for these admissions in 2020 compared to 2016.
- For a **musculoskeletal** admission, patients were responsible for $922 on average, up from an average of $876 in 2016. For a **circulatory** admission, the average out-of-pocket payment in 2020 was $979, up from $945 in 2016.
- Patients were responsible for $821 for an average **respiratory** admission in 2020; this was a decrease from 2016, when the average out-of-pocket payment was $913.
- The average out-of-pocket payment for a **mental health** admission rose over $100 between 2016 and 2020, from $860 to $985.

Figure 18: Average out-of-Pocket Payment for Inpatient Admissions in 2016 and 2020 for Select Services

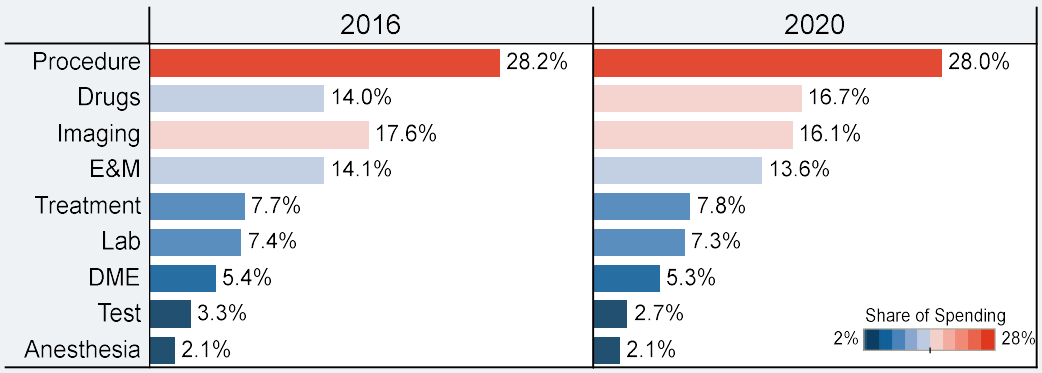


Note: All numbers presented in charts are available as downloadable data tables. Data for all detailed subcategories of inpatient services are available to download and explore.

Outpatient Spending Trends

Outpatient spending includes payments to outpatient facilities, which include sections of a hospital, as well as standalone facilities that provide services that do not require an overnight stay. Payments for the services provided by physicians at outpatient facilities are generally not included in the outpatient facility category, depending on how these services are billed. As with inpatient admissions, these services are often captured in the professional services category.

Figure 19: Share of Outpatient Facility Spending



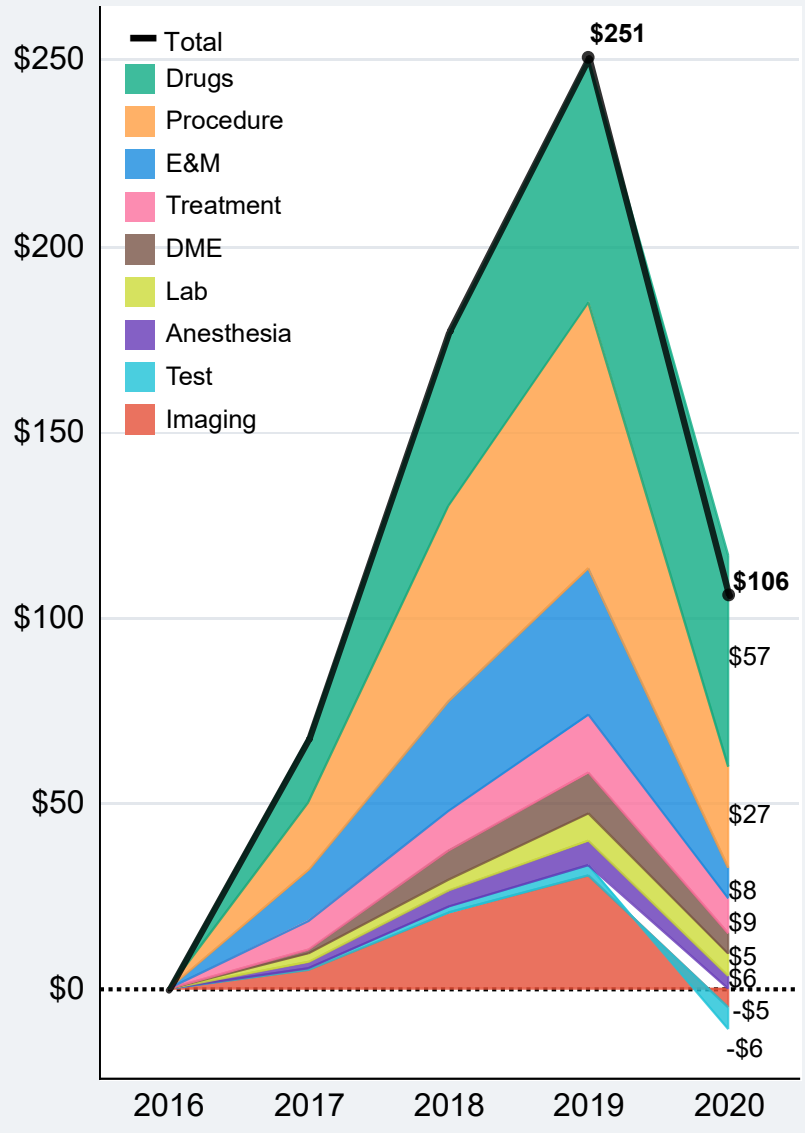
Between 2016 and 2019, spending per person on outpatient services grew faster than any other service category, rising an average of 6% year-over-year. In 2020, outpatient spending experienced the biggest decline of all categories (-9%), resulting in a cumulative $106 (8%) change over the five-year period [Figure 20].

Close to 45% of outpatient spending fell into two subcategories: **procedures** (28.0%) and **drugs** (16.7%) [Figure 19]. These subcategories also saw the largest growth in spending between 2016 and 2020, though all categories experienced a decline in spending in 2020.

Imaging procedures was the next largest subcategory of outpatient spending, accounting for 16.1% of spending in 2020. The cumulative change in spending on imaging was negative between 2016 and 2020, due to a large decline in spending in 2020. Evaluation and Management (**E&M**) visits (including in the emergency room), accounted for 13.6% of spending in 2020.

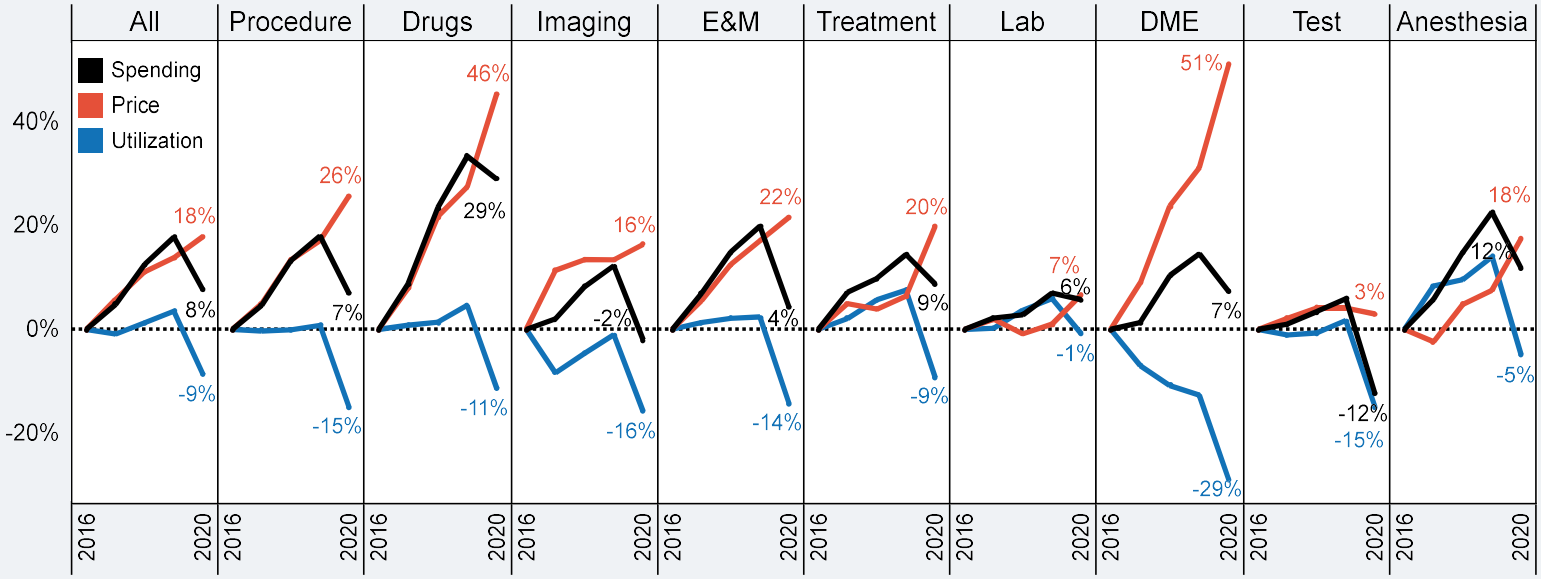
The remaining subcategories, including treatments, laboratory procedures, durable medical equipment (DME), and tests, and anesthesia services, account for about one-quarter of outpatient facility spending.

Figure 20: Cumulative Change in Outpatient Spending 2016 to 2020



Note: All numbers presented in charts are available as downloadable data tables. Data in charts do not total to 100% since selected categories are shown. Data for all detailed subcategories of outpatient services are available to download and explore.

Figure 21: Cumulative Change in Outpatient Facility **Spending per Person**, **Utilization**, and **Price** from 2016 to 2020 for Select Services



Rising prices drove outpatient spending growth.

In all subcategories of outpatient services, **spending** declined in 2020 due to reductions in utilization. Overall, there was an 8% cumulative increase in spending between 2016 and 2020, driven by an 18% increase in price that was somewhat offset by a 9% drop in utilization [Figure 21]. The cumulative change in spending was negative between 2016 and 2020 for two sub-categories of outpatient services: imaging (-2%) and medical tests (-12%).

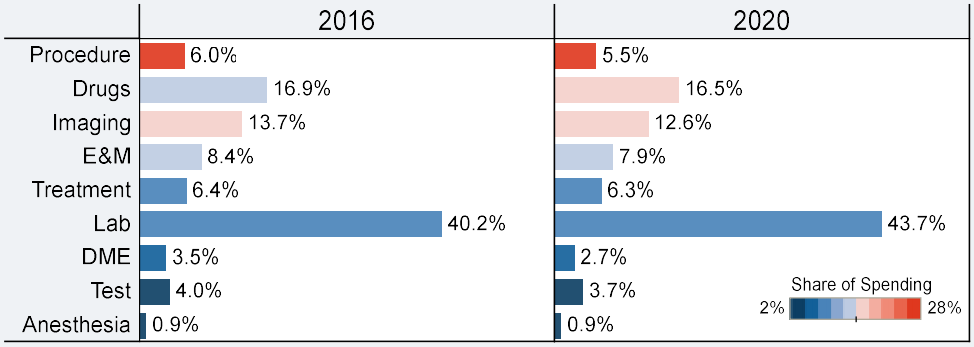
Utilization declined 9% overall and in all sub-categories over the 2016–2020 period. The biggest declines in utilization were for durable medical equipment [DME] (-29%) and imaging (-16%).

In contrast to utilization, **prices** rose between 2016 and 2020 for all outpatient services, with the biggest increases in DME (51%) and outpatient drugs (physician-administered injections/infusions) (46%).

General labs accounted for over 43.7% of outpatient services in 2020 [Figure 22].

Drugs and imaging were the next largest shares of outpatient services, 16.5% and 12.6%, respectively, in 2020. Outpatient E&M visits accounted for 7.9% of outpatient services; about half of these occurred in the emergency room. Outpatient treatments and procedures each accounted for approximately 6% of outpatient services. Tests, DME, and anesthesia each accounted for less than 5% of outpatient services.

Figure 22: Share of Outpatient Facility Services

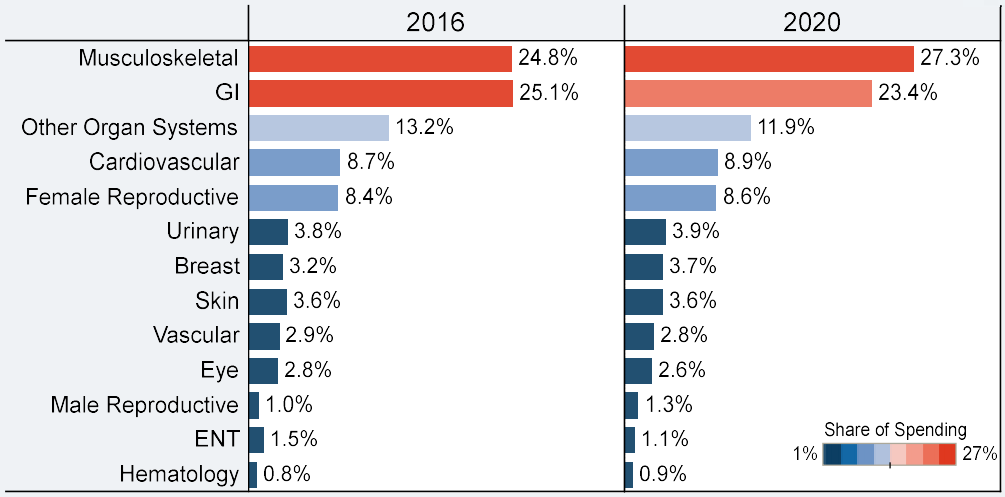


Note: All numbers presented in charts are available as downloadable data tables. Data in charts do not total to 100% since selected categories are shown. Data for all detailed subcategories of outpatient services are available to download and explore.

A Closer Look: Outpatient Procedures

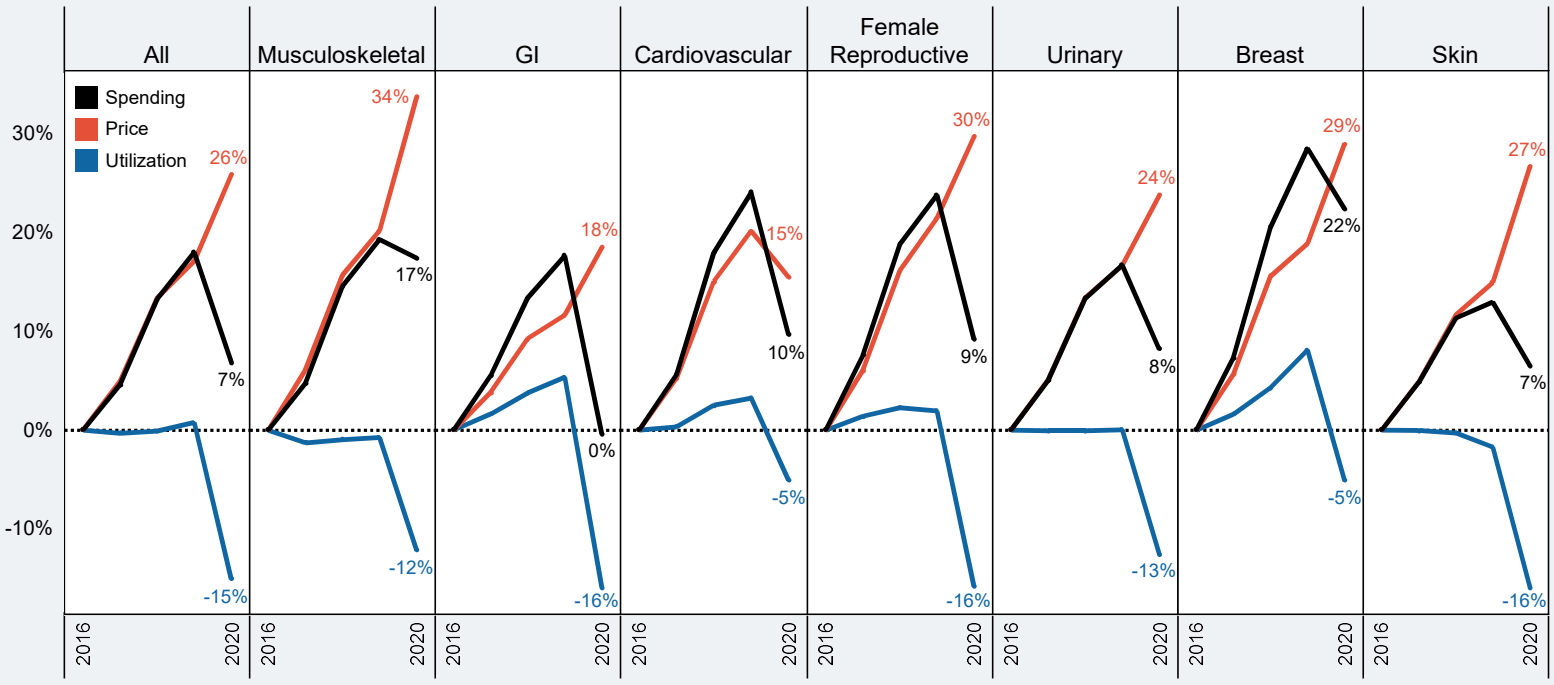
Procedures accounted for over one-quarter of spending on outpatient services. Within the procedures category, musculoskeletal procedures represent the largest share of spending, closely followed by gastrointestinal (GI) procedures (Figure 23). These two categories made up half of the spending on outpatient procedures in both 2016 and 2020.

Figure 23: Share of Outpatient Procedure Spending in 2016 and 2020



From 2019 to 2020, utilization of all subcategories of procedures declined, with a corresponding decrease in spending. Over the five-year period, 2016–2020, prices for outpatient procedures increased. Musculoskeletal procedures had the largest price growth, with a 34% increase in average prices from 2016 to 2020. Female reproductive procedures had the second highest price growth at 30%. Price growth over five years was slower for cardiovascular (15%) and GI (18%) procedures [Figure 24].

Figure 24: Cumulative Change in Outpatient Procedure **Spending per Person**, **Utilization**, and **Price** from 2016 to 2020 for Select Services



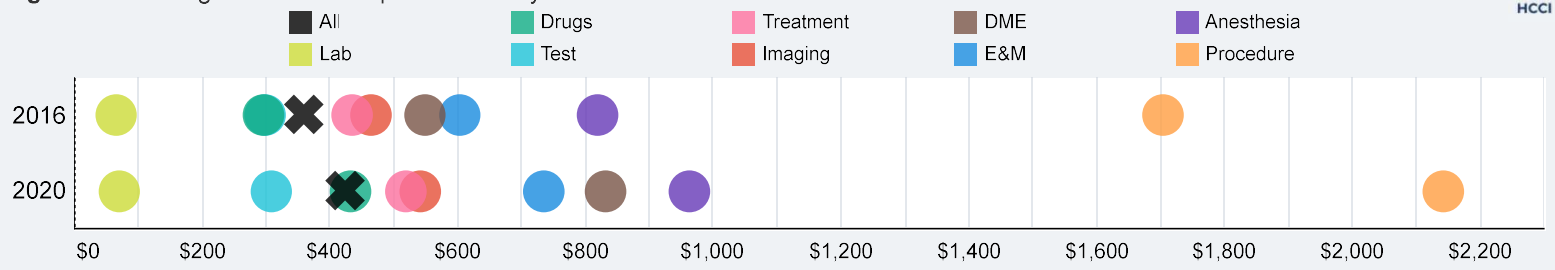
Note: All numbers presented in charts are available as downloadable data tables. Data for all detailed subcategories of outpatient services are available to download and explore.

Outpatient Visit Prices and Out-of-Pocket Payments

Average prices increased across all subcategories of outpatient visits between 2016 and 2020.

- Overall, the average price for an outpatient service was $424 in 2020, up from $360 in 2016.
- Average prices were highest for outpatient procedures ($2,143) and anesthesia ($962).
- The increase in average price was largest for **outpatient procedures**, rising from $1,704 in 2016 to $2,143 in 2020.
- **Durable medical equipment [DME]** had the next highest average price increase during the period, rising from $550 in 2016 to $832 in 2020.
- The average price of **outpatient administered drugs** increased from $297 in 2016 to $432 in 2020 [Figure 25].

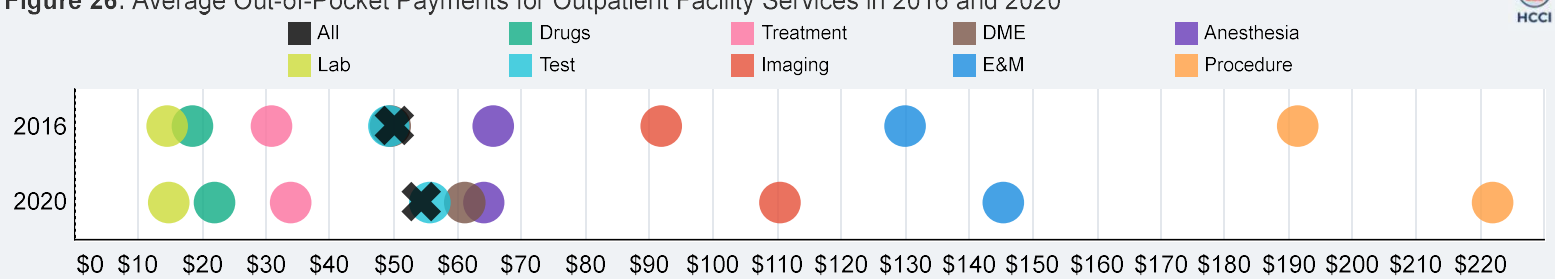
Figure 25: Average Prices of Outpatient Facility Services in 2016 and 2020



Average out-of-pocket payments increased for nearly all subcategories of outpatient services.

- Overall, patients paid $54 on average out-of-pocket for an outpatient service in 2020, up from $50 in 2016.
- The average out-of-pocket payment varied substantially across outpatient services, including relatively low-cost services such as **labs** ($15) as well as high-cost services such as **outpatient procedures** ($222).
- The average out-of-pocket payment increased most for **outpatient procedures**, rising from $191 in 2016 to $222 in 2020.
- In general, outpatient services with higher average prices [Figure 25] had higher out-of-pocket payments [Figure 26].

Figure 26: Average Out-of-Pocket Payments for Outpatient Facility Services in 2016 and 2020

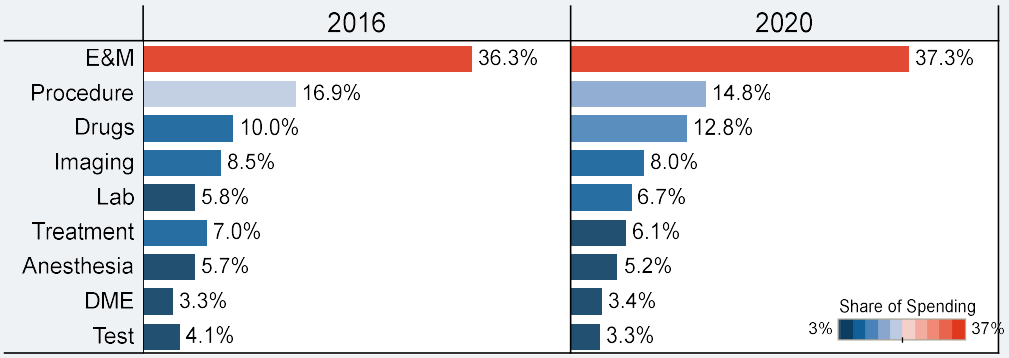


Note: All numbers presented in charts are available as downloadable data tables. Data for all detailed subcategories of outpatient services are available to download and explore.

Professional Services Spending Trends

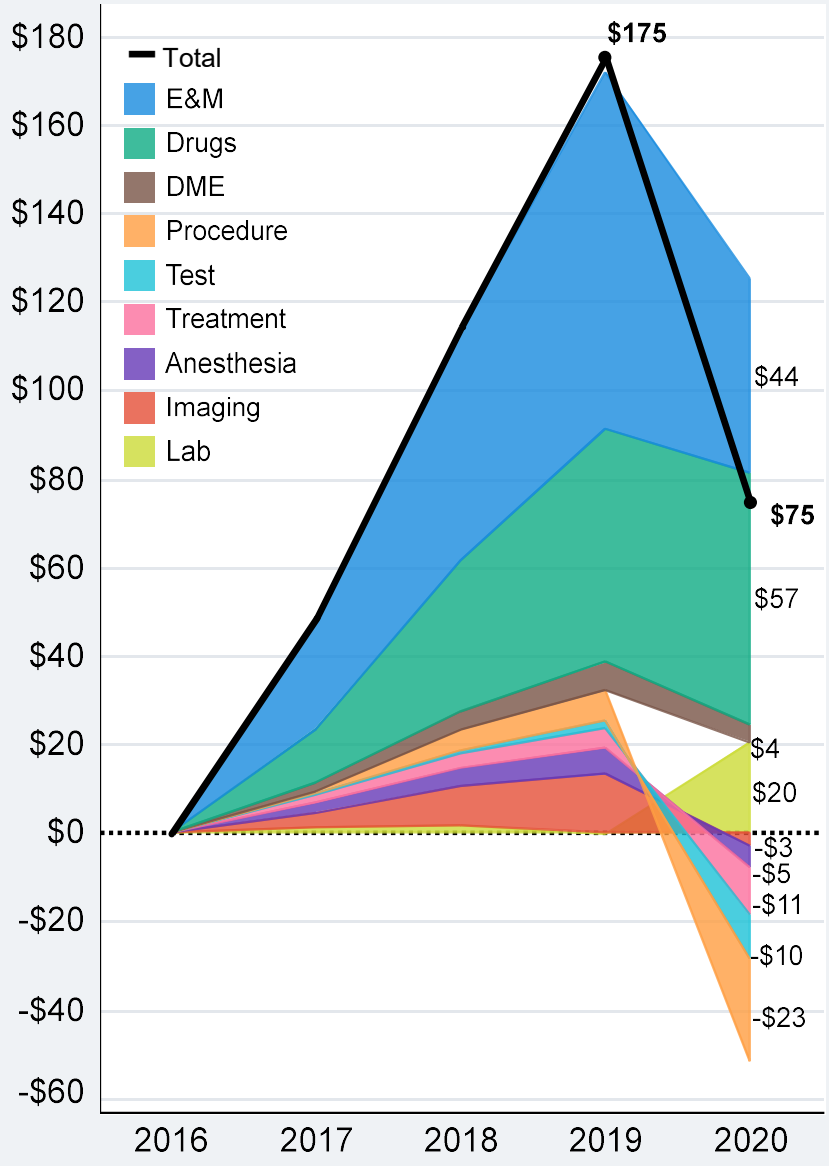
Professional services spending includes payments to physicians and other members of a clinical care team, as well as payments for certain things these providers sell as part of their services, such as drugs that are administered by a physician. Often, professional services occur in a doctor's office. However, this category also includes services provided by physicians in hospitals during an inpatient admission, as well as in the emergency room and other outpatient settings.

Figure 27: Share of Professional Services Spending



Spending on professional services rose steadily between 2016 and 2019 and then declined in 2020, resulting in a cumulative 4% increase ($75) over the 5-year period [Figure 28]. Spending growth was driven by increases in spending on E&M office visits and administered drugs.

Figure 28: Cumulative Change in Professional Services Spending 2016 to 2020



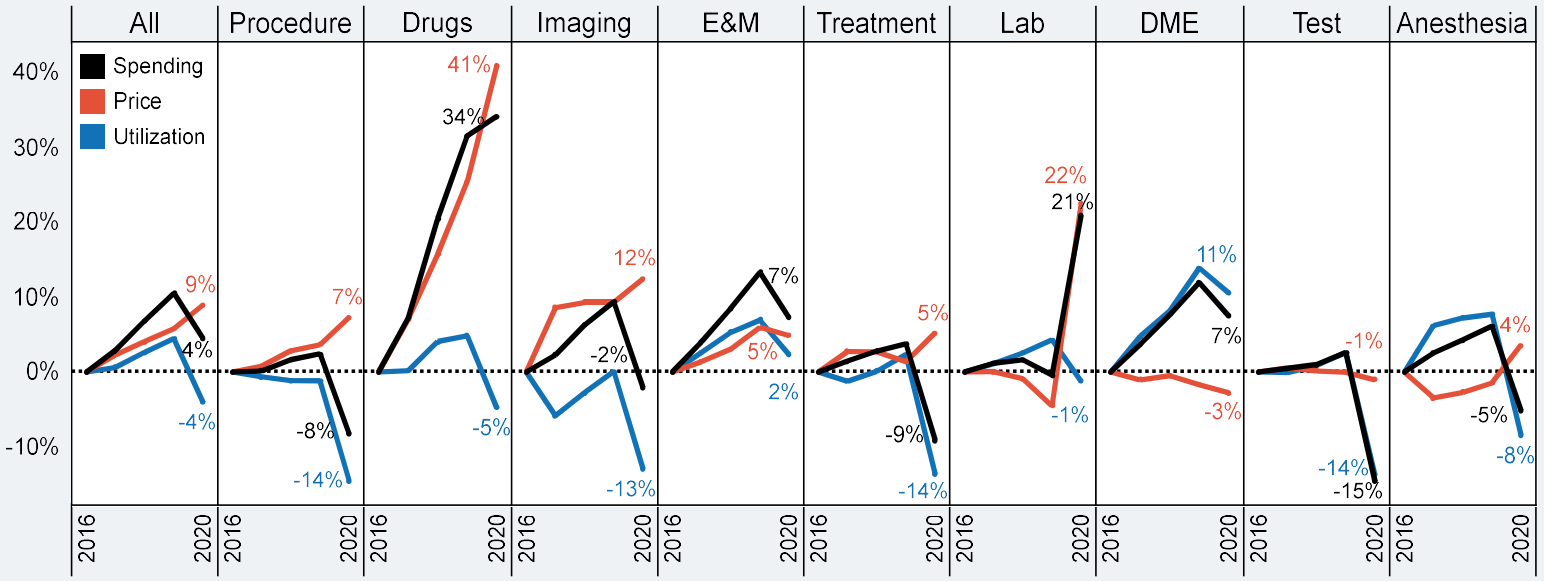
Office E&M visits accounted for the largest share of spending among professional services (37%) in 2020 [Figure 27] and increased $44, the second largest increase in spending over the 2016–2020 period.

The largest growth in spending occurred among **administered drugs**, which increased a cumulative $57 over the period. Over five years, the increase in spending on administered drugs accounted for one-third of the increase in spending on professional services.

In 2020, spending on the **professional services accompanying procedures** accounted for 15% of professional spending. Spending on these services rose between 2016 and 2019 but then declined significantly in 2020 for a cumulative decrease in spending of $23.

Note: All numbers presented in charts are available as downloadable data tables. Data in charts do not total to 100% since selected categories are shown. Data for all detailed subcategories of professional services are available to download and explore.

Figure 29: Cumulative Change in Professional Services **Spending per Person**, **Utilization**, and **Price** from 2016 to 2020 for Select Services

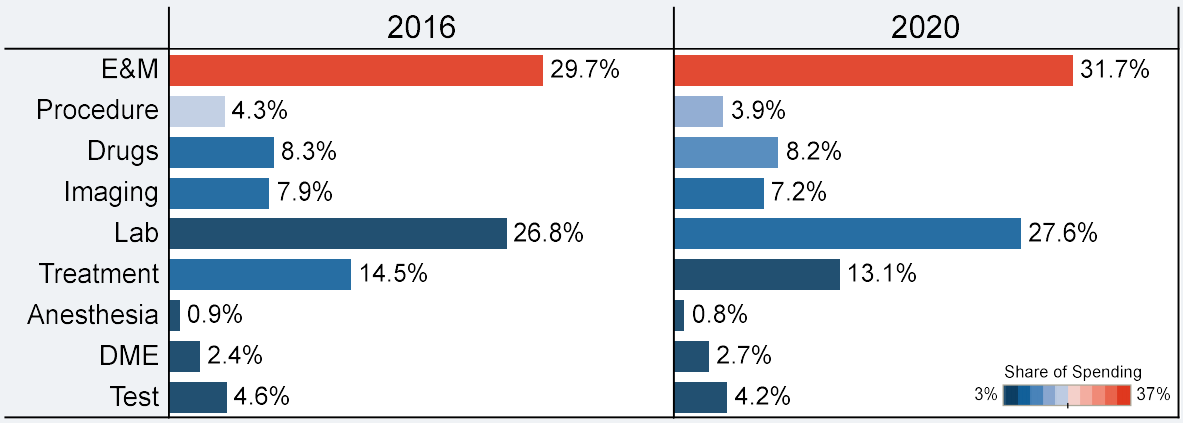


Overall, growth in the average price of professional services continued from 2016 through 2020, leading to cumulative **spending** growth of 4% over the five-year period [Figure 29]. Among sub-categories of professional services, spending rose most for physician-administered drugs (34%) and lab (21%). The increase in lab service spending was likely due at least in part to the inclusion of COVID-19 tests in this category.

Utilization declined 4% overall and in most sub-categories over the 2016–2020 period. Utilization decreased most for procedures, imaging, treatment, and tests; the largest reductions were in 2020, consistent with existing evidence that use of many health care services dropped during the COVID-19 pandemic. Utilization increased for E&M services (2%), likely due to the role of telehealth in 2020, and for DME (11%).

The cumulative growth in the average **price** of a professional service was 9% between 2016 and 2020. Average price grew in each sub-category of professional services over this period, with the exception of medical tests (-1%) and DME (-3%). The largest price increase over the five-year period was for drugs administered by a professional (41%) and general labs, which included COVID-19 tests in 2020 (22%).

Figure 30: Share of Professional Services Utilization

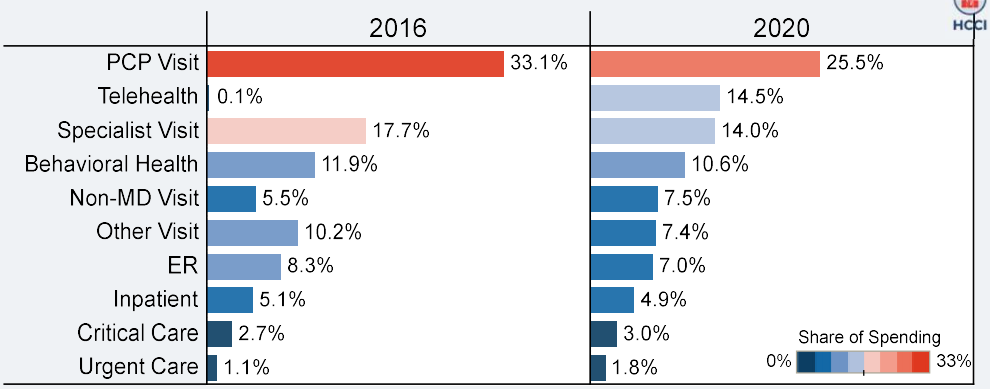


Note: All numbers presented in charts are available as downloadable data tables. Data in charts do not total to 100% since selected categories are shown. Data for all detailed subcategories of professional services are available to download and explore.

A Closer Look: Professional E&M Services

Evaluation and Management (E&M) visits accounted for over one-third of spending on professional services [Figure 30]. Within the E&M category, in-person primary care physician (PCP) visits represent the largest share of spending [Figure 31]. PCP visits were 33.1% of professional services E&M spending in 2016 and 25.5% in 2020. In 2020, there was a large increase in E&M spending on telehealth visits and a corresponding decrease in most in-person visits.

Figure 31: Share of Professional Services E&M Spending in 2016 and 2020



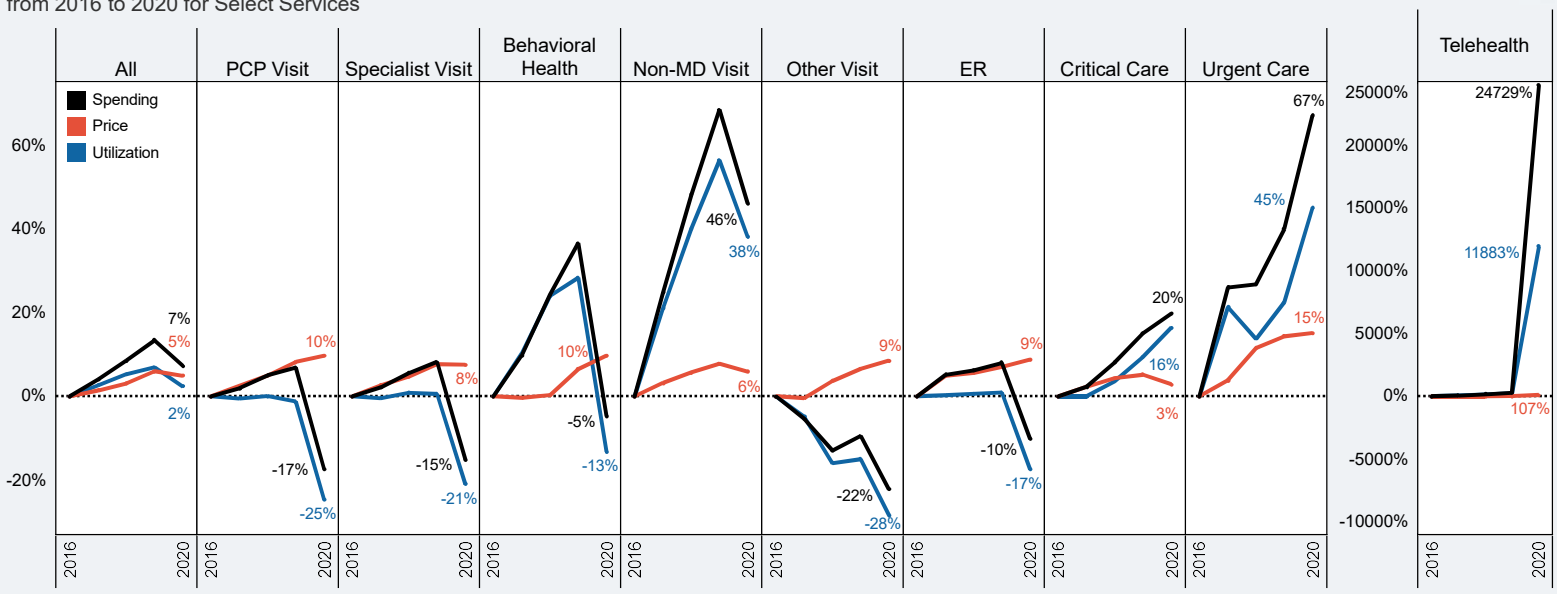
Spending on telehealth E&M visits increased 250-fold between 2016 and 2020 (Figure 32), with most of the growth occurring in 2020. This growth reflects changes in reimbursement, coverage, and other regulatory policies related to telehealth during the COVID-19 pandemic and resulting shifts in demand and access. While most of the telehealth spending growth is due to the increase in utilization, the price of a telehealth visit more than doubled between 2016 and 2020.

Spending on in-person E&M visits to non-physician providers (Non-MD) increased 46% from 2016 to 2020 despite a decline in 2020. The spending growth for non-MD visits was driven primarily by increased utilization.

Utilization of in-person PCP visits declined slightly (1%) from 2016 to 2019, followed by a significant decrease in 2020 (24%).

Behavioral Health E&M visits (in person) had the biggest drop in utilization in 2020, decreasing 34% from 2019. This drop followed a period of growth (28%) in the utilization of behavioral health services from 2016 to 2019.

Figure 32: Cumulative Change in Professional Services E&M **Spending per Person**, **Utilization**, and **Price** from 2016 to 2020 for Select Services



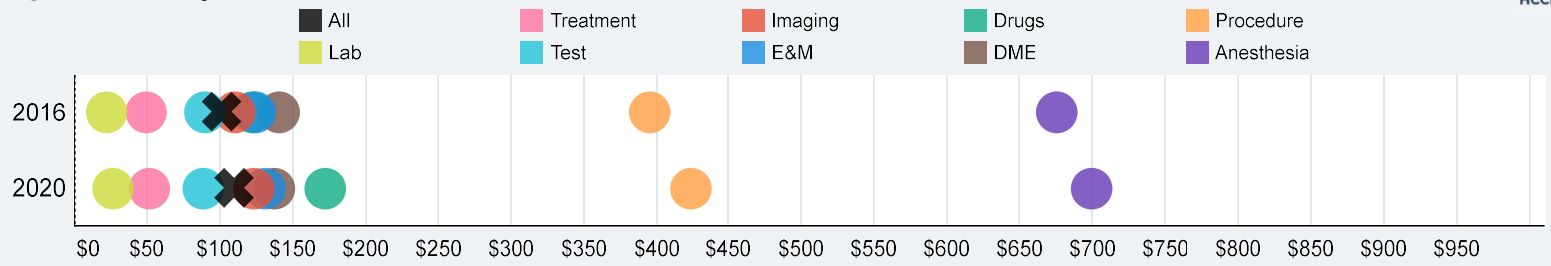
Note: All numbers presented in charts are available as downloadable data tables. Data for all detailed subcategories of all professional services are available to download and explore.

Professional Services Prices and Out-of-Pocket Payments

The trend in average prices for professional services varied by type of procedure [Figure 33]. Across most subcategories, the average price increased slightly between 2016 and 2020, rising less than $30 within each subcategory except administered drugs and anesthesia.

- The largest increases in average price occurred for **administered drugs**, which increased about $50 in average price between 2016 and 2020.
- **Anesthesia** was the highest priced subcategory within professional services in both 2016 and 2020, with an average price of $675 in 2016 and $700 in 2020.
- Professional services associated with **procedures** were the second highest priced subcategory in both 2016 and 2020, with an average price of $395 in 2016 and $424 in 2020.
- **Administered drugs** were the third highest priced professional service, with an average price of $173 in 2020.

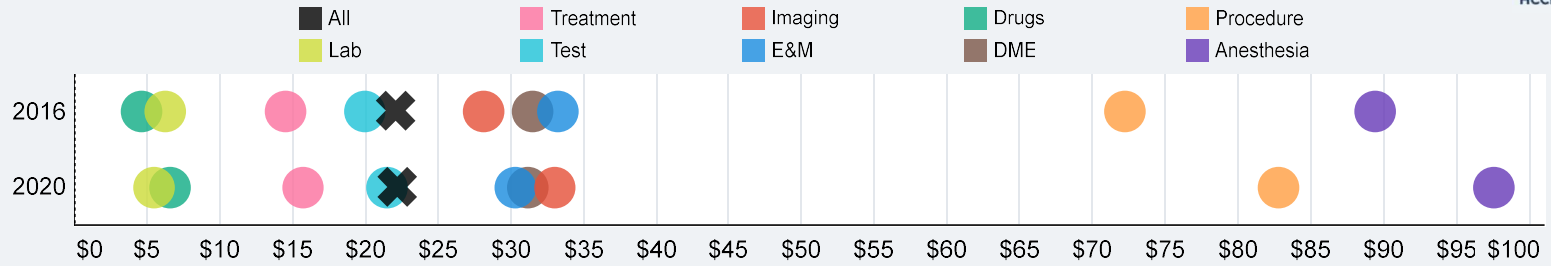
Figure 33: Average Prices of Professional Services in 2016 and 2020



The average out-of-pocket payment for professional services was $22 in 2020, consistent with the average in 2016, however the average out-of-pocket payment ranged from $6 for **labs** to $98 for **anesthesia** procedures in 2020. Changes in average out-of-pocket payments varied across subcategories but were generally small [Figure 34].

- The largest increase in out-of-pocket payments occurred for **procedures**, which rose from $72 in 2016 to $83 in 2020, and for **anesthesia**, which rose from $89 to $98 over this five-year period. These costs may include payments to physicians who bill separately for services provided during an outpatient (e.g., ER) visit and are in addition to any outpatient facility payments.
- The next largest increase in average out-of-pocket payments was for **imaging** which rose $5. Again, these reflect the payments to physicians and are often associated with either an inpatient admission or outpatient visit.

Figure 34: Average Out-of-Pocket Payments for Professional Services in 2016 and 2020

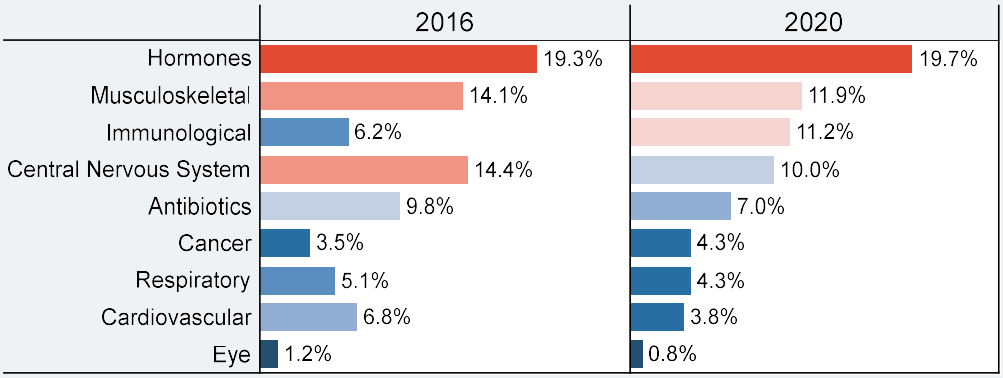


Note: All numbers presented in charts are available as downloadable data tables. Data in charts do not total to 100% since selected categories are shown. Data for all detailed subcategories of professional services are available to download and explore.

Prescription Drug Spending Trends

Prescription drug spending includes payments made for drugs dispensed by retail and mail-order pharmacies. This does not include certain drugs administered by physicians or other health care providers during inpatient admissions, in outpatient facilities, or in doctors' offices. Additionally, estimates of prescription drug spending reflect amounts on pharmacy claims, which do not include manufacturer rebates, coupons, or other discount programs.

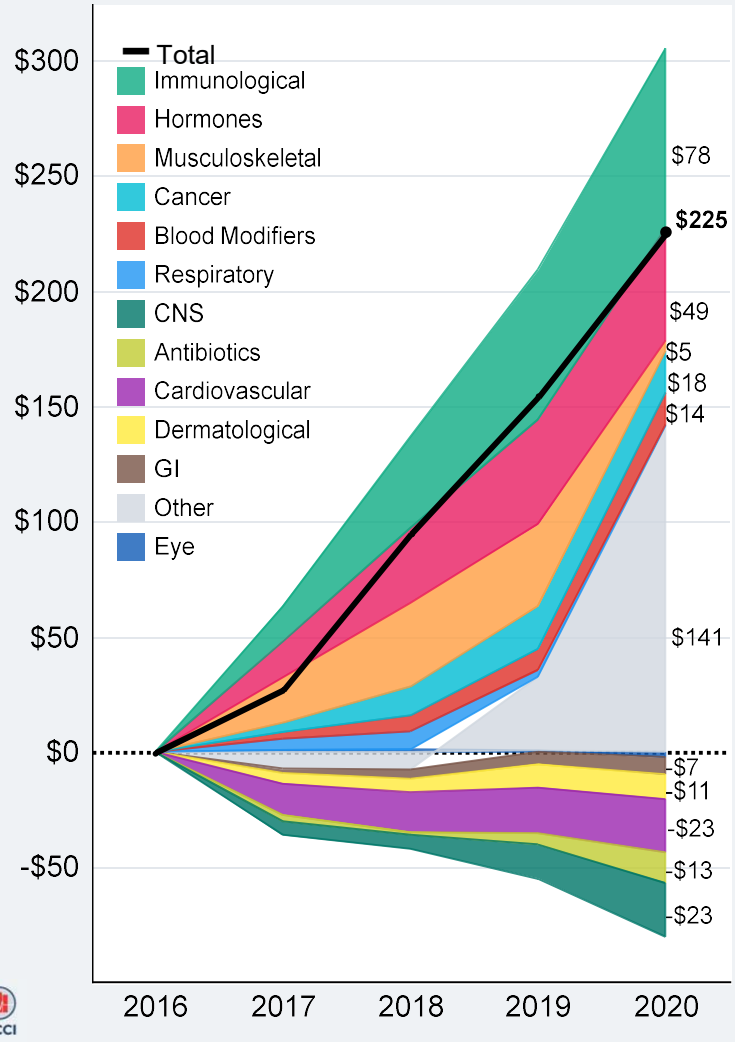
Figure 35: Share of Prescription Drug Spending



As shown earlier, per-person spending on prescription drugs, based on point-of-sale payments, totaled $1,279 in 2020; prescription drugs was the only category of services on which spending increased from 2019 to 2020. Compared to 2016, spending was 21% higher. That increase includes both increases in expenditures for the same drugs, as well as increases in expenditures for newly approved medications.

The largest subcategory of prescription drug spending was **hormones** (19.7%), followed by **musculoskeletal** (11.9%), and **immunological** (11.2%) [Figure 35]. Since 2016, spending per person in each of these categories increased. Spending increased most for immunological drugs ($78), which includes drugs used to treat rheumatoid arthritis and other autoimmune diseases. The second largest spending increase was for hormones ($49), this includes insulin, contraceptives, and drugs used to treat thyroid conditions. Spending on musculoskeletal drugs increased $5 over this period. Between 2016 and 2020, spending decreased for several classes of drugs. The biggest decreases were for antibiotics (-$13), cardiovascular drugs (-$23), and central nervous system agents (CNS) drugs (-$23) [Figure 36]. Central nervous system agents include most mental health medications such as antidepressants.

Figure 36: Cumulative Change in Prescription Drug Spending 2016 to 2020



Methods Note:
These estimates do not reflect manufacturer rebates, coupons, or other discount programs, because those data are not available. They do, however, include negotiated discounts from the wholesale or "list" price, and are the amounts that appear on the pharmacy claim. Thus, the term, "point-of-sale" price is used to describe the spending per filled day. Any additional manufacturer rebates occur through separate transactions. The degree to which rebates offset point-of-sale spending varies across types of drugs, as well as across specific products, depending on details of the negotiations between manufacturers and pharmacy benefit managers (PBM). Further, how the value of the rebates is distributed across PBMs, insurers, and consumers also varies. Information on these aspects of manufacturer rebates are not available in pharmacy claims data. The change in point-of-sale prices estimated in this report reflects a combination of higher point-of-sale prices for the same drugs and shifts in use to more expensive products, including those introduced during the period.

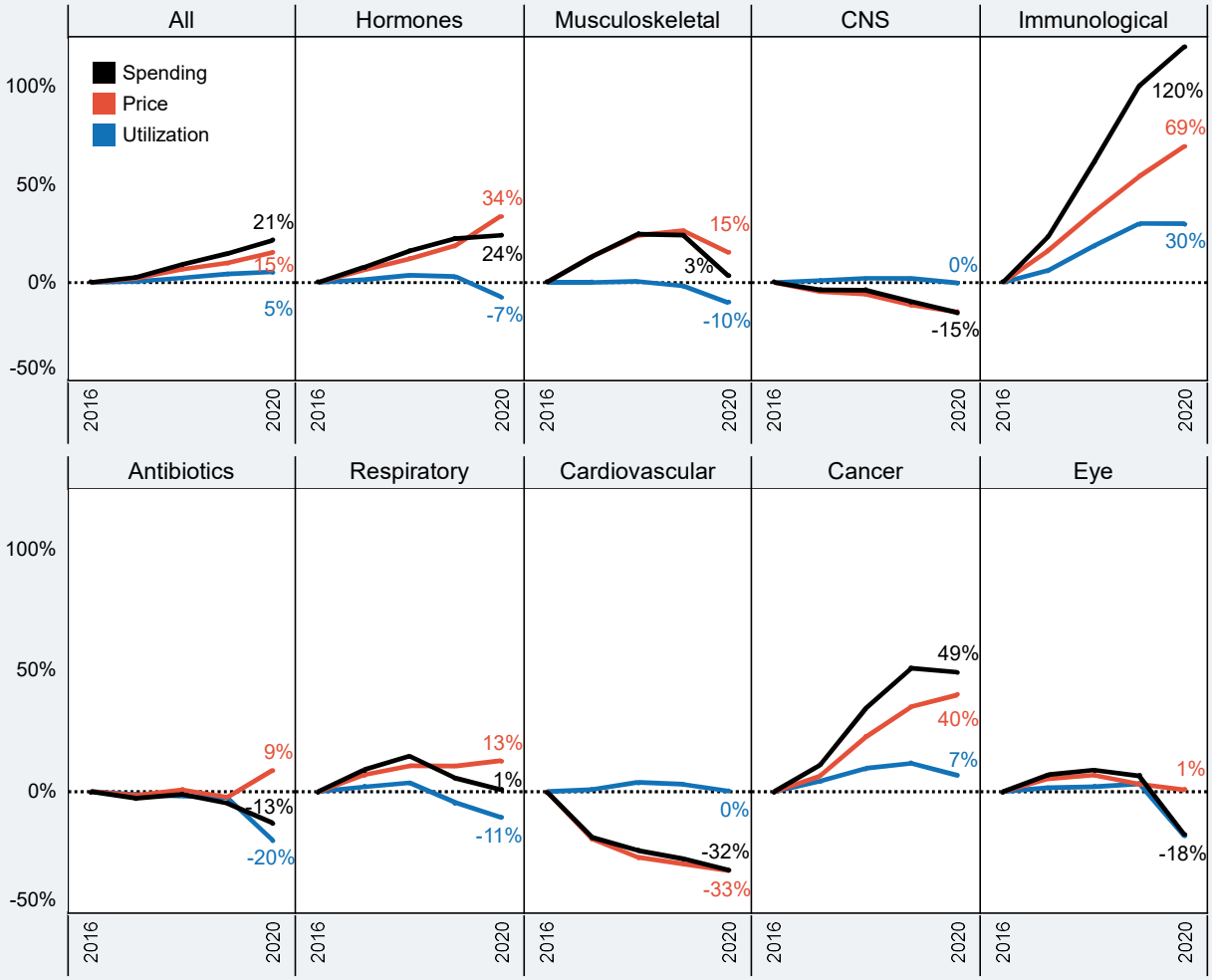
Note: All numbers presented in charts are available as downloadable data tables. Data in charts do not total to 100% since selected categories are shown. Data for all detailed subcategories of prescription drugs are available to download and explore.

Trends in Prescription Drug Spending, Utilization, and Price

Spending on prescription drugs grew steadily between 2016 and 2020 for a cumulative growth of 21%, driven by increasing utilization and prices.

Spending grew most for immunological drugs (120%), cancer drugs (49%), and hormones (24%). Cumulative spending was negative for central nervous system (CNS) agents (-15%), antibiotics (-13%) and cardiovascular drugs (-32%).

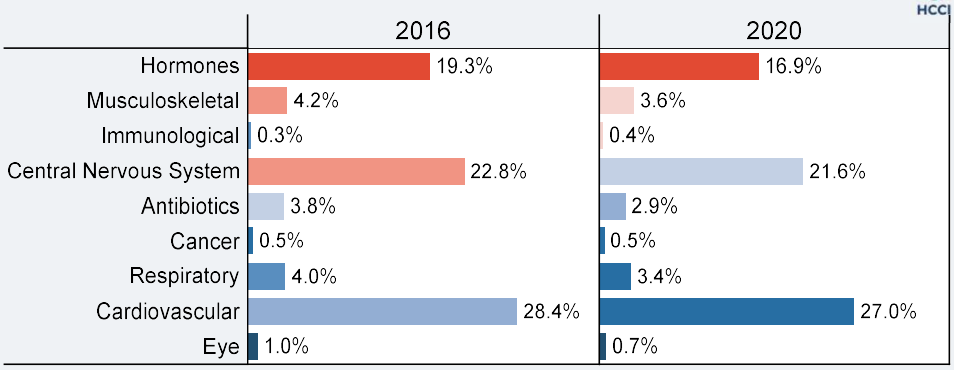
Figure 37: Cumulative Change in Prescription Drug **Spending per Person**, **Utilization**, and **Price** by Category from 2016 to 2020



Utilization is measured as the number of filled days per person; utilization rose slightly between 2016 and 2018, for a cumulative increase of 5% over the five-year period. Trends varied by subcategory [Figure 42]. For example, use of immunological medications rose 30% from 2016 to 2020. On the other hand, use of antibiotics was flat from 2016 to 2019 and then declined sharply in 2020, with a total decline of 20% between 2016 and 2020. Eye medications also had a drop in utilization in 2020. Both antibiotics and eye medications are likely to be prescribed following an office visit and the decline in use may be attributable to fewer E&M visits and a decline in the number of routine infections.

The average point-of-sale **price** for prescription drugs was 15% higher in 2020 compared to 2016. Over the five-year period, prices increased for all categories of drugs other than CNS drugs (-15%) and cardiovascular drugs (-33%). Both of these categories of prescription drugs have experienced high and increasing use of generics in recent years. The substitution of lower price generic for brand medications results in a decrease in average price and spending.

Figure 38: Share of Prescription Drug Days Supplied



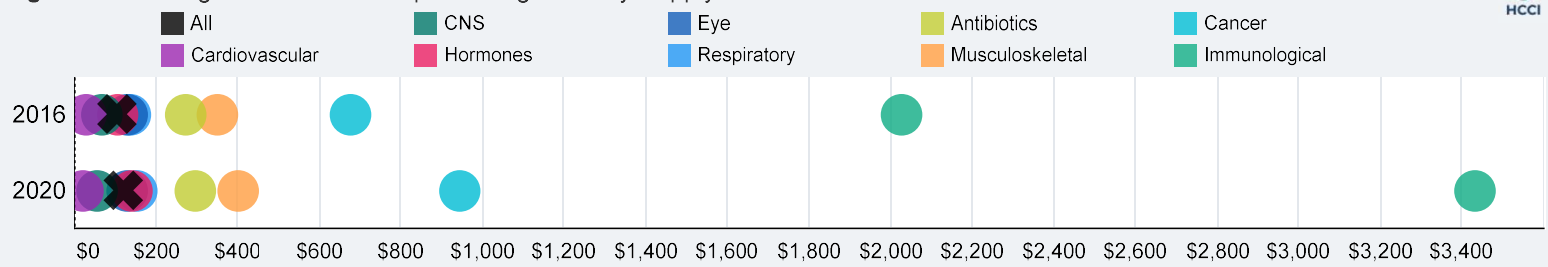
Note: All numbers presented in charts are available as downloadable data tables. Data in charts do not total to 100% since selected categories are shown. Data for all detailed subcategories of prescription drugs are available to download and explore.

Prescription Drug Prices and Out-of-Pocket Payments

Average prices and out-of-pocket payments are measured for a 30-day supply. Average prices for prescription drugs grew between 2016 and 2020 for most drugs [Figure 39]. These estimates do not reflect manufacturer rebates, coupons, or other discount programs, because those data are not available.

- The largest increase in average price occurred for **immunological** drugs. These drugs are the highest priced in both 2016 and 2020 by far, and they experienced the greatest increase in price, $1,406 between 2016 and 2020.
- **Cancer** drugs had the second highest prices in both years and experienced the second greatest increase in price between 2016 and 2020, rising almost $270.
- **Musculoskeletal** drug prices increased from $350 in 2016 to $403 in 2020.
- The average price for a 30-day supply decreased between 2016 and 2020 for **central nervous system (CNS)** and **cardiovascular** drugs.

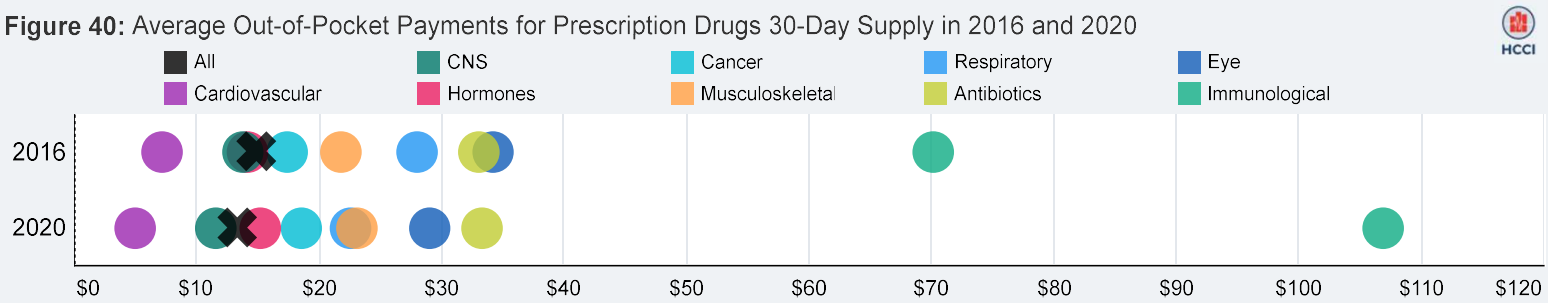
Figure 39: Average Price for Prescription Drugs 30-Day Supply in 2016 and 2020



The average out-of-pocket cost a patient faced for a 30-day supply across all drugs in our data was $13 in 2020, down from $15 in 2016 [Figure 40].

- The average out-of-pocket payment across drugs ranged from $5 for **cardiovascular** drugs to $107 for **immunological** drugs in 2020. The average out-of-pocket payment for **immunological** drugs was over three times higher than the out-of-pocket payment for the drug with the next highest out-of-pocket payment.
- Changes in average out-of-pocket payments for drugs between 2016 and 2020 were small for nearly all categories, with the exception of **immunological** drugs, which increased $37 over the five-year period.

Figure 40: Average Out-of-Pocket Payments for Prescription Drugs 30-Day Supply in 2016 and 2020



Note: All numbers presented in charts are available as downloadable data tables. Data in charts do not total to 100% since selected categories are shown. Data for all detailed subcategories of prescription drugs are available to download and explore.

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