

Recent Trends in Patient out-of-Pocket Cost Sharing

Jake Spiegel, Employee Benefit Research Institute, and Paul Fronstin, Ph.D., Employee Benefit Research Institute

AT A GLANCE

- Employers are increasingly concerned with their workers' financial wellbeing. At the same time, employers are seeking to control rising health care costs and often do so by increasing health plan deductibles, causing workers to pay more out of pocket for their health care. To the extent that higher deductibles negatively impact workers' financial wellbeing, these goals may be at odds with each other.
- Our analysis reveals that the share of out-of-pocket costs paid by patients with employer-sponsored health plans increased from 17.4 percent in 2013 to 19 percent in 2019, before a pandemic-related decline to 16.4 percent in 2020.
- However, disaggregating by health plan type reveals a different story: For most plan types, the share of expenses paid by patients out of pocket has either been stable or decreased modestly. The increase in the share of expenses paid out of pocket observed between 2013 and 2019 appears to be driven by an increase in the number of workers enrolling in plans with higher deductibles.
- Out-of-pocket expenditures for outpatient services grew faster between 2013 and 2019 (\$470 to \$631) than out-of-pocket expenditures for inpatient services (\$109 to \$127), while prescription drug costs decreased (\$158 to \$148).
- Patients' health conditions affect how much they spend out of pocket. For instance, the median patient with high cholesterol had higher expenditures than patients in general (\$882 vs. \$205) and paid a higher share of their expenditures out of pocket (16.9 percent vs. 16.2 percent).

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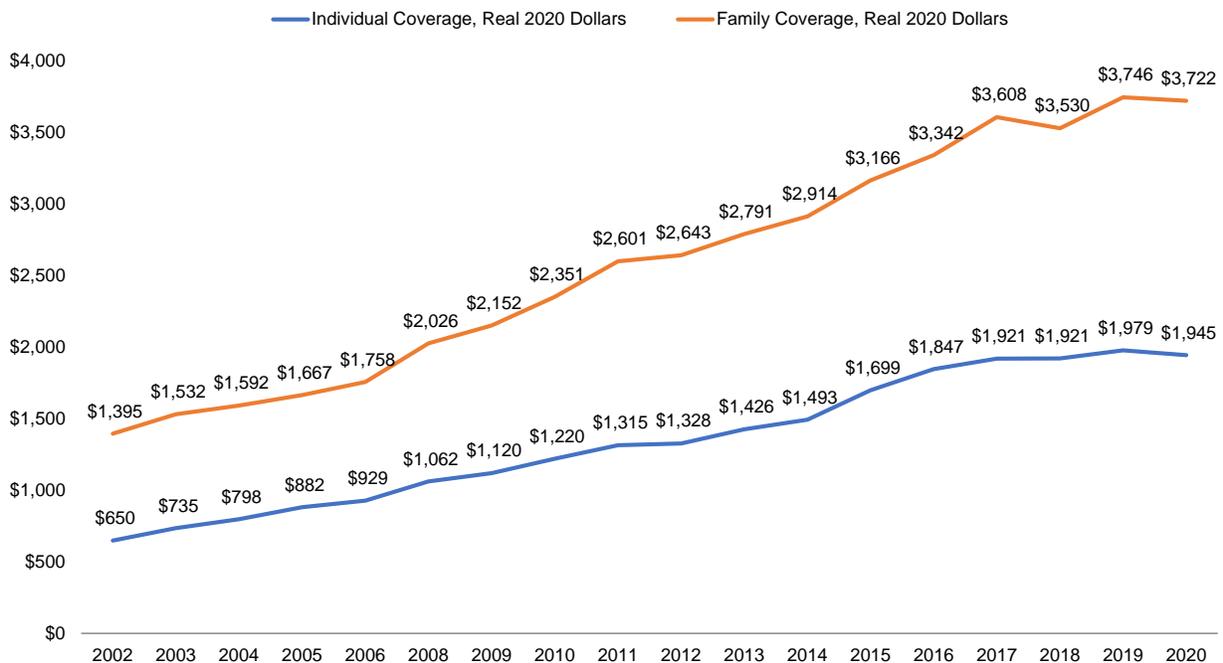
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Introduction

Rising health care costs are a concern for many people in the United States. In a 2020 poll, the Pew Research Center found that 68 percent of voters prioritized health care as part of their voting decisions (Pew 2020). Additionally, there is ample evidence that spending on health care goods and services has outpaced other types of spending; as a share of gross domestic product (GDP), health care spending increased from 5 percent in 1960 to 19.7 percent in 2020 (Centers for Medicare and Medicaid Services 2020). Patients may be feeling the squeeze of rising deductibles, which have increased significantly in recent years as employers attempt to wrangle rising health care costs of their own. For employers, raising plan deductibles may very well be a path of least resistance. Employers may find that increasing plan deductibles proves easier than changing insurance carriers, seeking higher-quality and lower-cost health care providers, changing prescription drug formularies, and other commonly used strategies for keeping costs in check.

Regardless of the root cause, deductibles for workers in employer-sponsored health plans have risen dramatically in recent years. Those with individual coverage saw average deductibles rise from an inflation-adjusted \$650 in 2002 to \$1,945 in 2020, an increase of 336 percent, shown below in Figure 1. Those with family coverage saw average deductibles increase markedly as well, rising 289 percent from an inflation-adjusted \$1,395 in 2002 to \$3,722 in 2020. The Consumer Price Index for All Urban Consumers (CPI-U), a commonly used measure of price levels and inflation, rose only 47 percent during that same time frame.

Figure 1
Inflation-Adjusted Average Deductibles for Individual and Family Coverage, Among Private-Sector Workers, 2002–2020



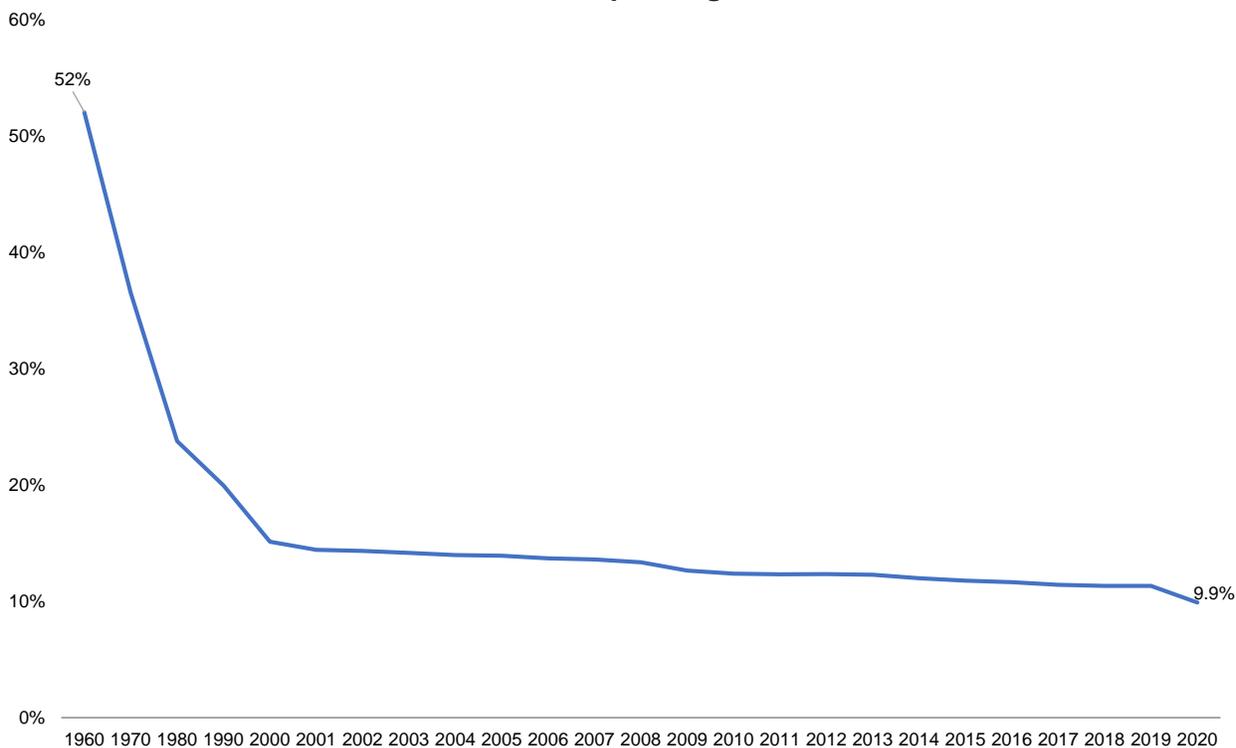
Source: IBM® MarketScan® Commercial Claims and Encounters Database (CCAЕ).

Some of this increase may be attributable to patients increasingly enrolling in high-deductible health plans (HDHPs). High-deductible health plans have exploded in popularity over the past decade, with enrollment in these plans rising from 17.4 percent in 2007 to 46 percent in 2018 (Fronstin and Spiegel 2020). These plans feature a higher deductible

in exchange for lower premiums relative to traditional health care plans and often allow access to health savings accounts (HSAs), which offer powerful tax incentives. However, since one of the defining features of HDHPs is higher deductibles, a higher share of total expenditures incurred by patients in these plans might be paid out of pocket.

However, some evidence on health care spending runs contrary to the narrative that patients are increasingly squeezed by rising health care costs. According to estimates produced by the Centers for Medicare and Medicaid Services (CMS), out-of-pocket spending on health care comprises 9.9 percent of total national health expenditures, decreasing from 11.3 percent in 2019. This continues a decades-long steady decline in the share of total health care spending paid out of pocket and represents an all-time low since CMS started tracking this data.

Figure 2
Share of All Health Care Spending Paid out of Pocket



Source: National Health Expenditures, Centers for Medicare and Medicaid Services.

While at first blush this seems at odds with the evidence that deductibles have risen significantly, there may be several explanations. First, the CMS data track *all* health care spending, including spending by Medicare and Medicaid beneficiaries and Children’s Health Insurance Program (CHIP) beneficiaries, whose out-of-pocket spending may represent a smaller share of their overall health care expenditures than patients enrolled in private employer-sponsored health plans. Also, if the prices insurers pay providers are rising faster than the prices patients pay, then it is possible that out-of-pocket spending could increase *while also* representing a smaller share of total health care spending.

In this paper, we examine the extent to which out-of-pocket spending has increased, if at all, for people with employer-sponsored health plans. In particular, we analyze whether cost increases, if any, are a result of secular trends (e.g., rising costs of prescription drugs and health care services, a market-wide trend of shifting more costs onto workers, etc.), or if the costs patients pay increased because workers increasingly enrolled in health care plans with higher deductibles. We also seek to examine whether out-of-pocket costs are increasing disproportionately for certain types of health care services, such as inpatient care (typically defined as care provided in a hospital and requiring an overnight stay), outpatient care (typically defined as care that does not require an overnight stay in a hospital), or prescription

drug spending, and whether out-of-pocket costs are increasing for patients with certain health conditions, such as diabetes, that tend to be expensive to address and maintain.

The answers to these questions have important implications for employers. In an effort to improve worker outcomes, such as reduced absenteeism, boosted productivity, and reduced stress, employers are increasingly focused on their workers’ financial wellbeing (Copeland 2021). Previous research indicates that workers are sometimes distracted by their personal finances at work, which may hamper productivity and result in lower-quality work (Fronstin 2021). To the extent that out-of-pocket expenditures are rising for workers and their dependents, workers’ overall financial wellbeing may be at risk. And if employers raise deductibles, copays, or coinsurance, loading a higher share of health care spending on the shoulders of their workers, this may actually be counterproductive in the context of their financial wellbeing efforts.

Methodology

This study makes use of the IBM® Marketscan® Commercial Claims and Encounters Database (CCAE). The Marketscan database contains member enrollment information as well as adjudicated medical (inpatient and outpatient) and pharmacy claims.¹

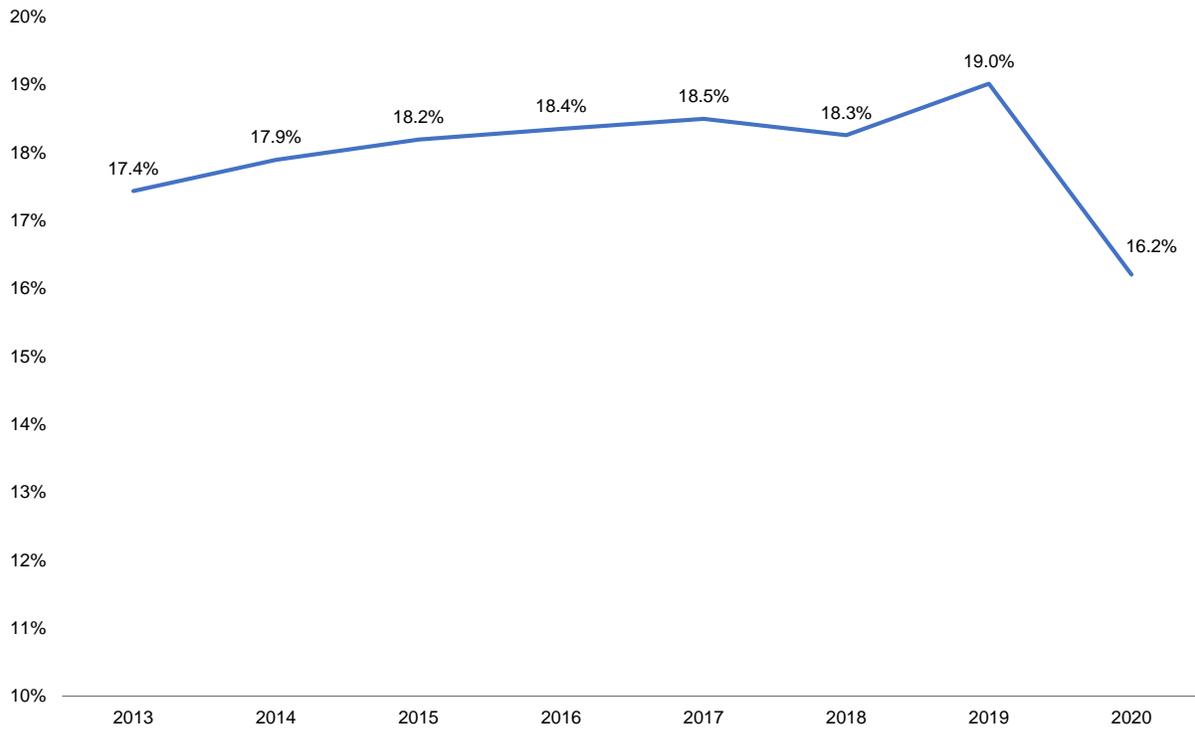
For this analysis, we examined claims data ranging from 2013 through 2020. In total, the analytical dataset contains data on over 45 million patients who were continuously enrolled in an employer-sponsored health plan at least one year between 2013 and 2020.² In total, patients in the database accounted for \$998 billion in claims between 2013 and 2020, covering inpatient and outpatient encounters as well as prescription drug claims. Further descriptive statistics are found below, in Figure 3.

Figure 3 Selected Descriptive Statistics	
Number of Patients in Study Sample	45,284,200
Total Health Care Spending, 2013–2020	\$998,476,211,576
Median Age	33 years
Share Male	48.50%
Share Named Policyholder	46.10%
Share Spouse of Named Policyholder	19.60%
Share Child/Dependent of Named Policyholder	34.30%
Enrolled in an EPO (Exclusive Provider Organization) / HMO (Health Maintenance Organization) Plan at Any Point Between 2013 and 2020	14.40%
Enrolled in a PPO (Preferred Provider Organization) / POS (Point-of-Service) Plan at Any Point Between 2013 and 2020	70.70%
Enrolled in a CDHP (Consumer-Directed Health Plan) / HDHP (High-Deductible Health Plan) at Any Point Between 2013 and 2020	23.50%
Source: IBM® Marketscan® Commercial Claims and Encounters Database (CCAE).	

Out-of-Pocket Spending Has Ticked Up

After analyzing all patients in aggregate, our analysis finds a clear upward trajectory in patients’ out-of-pocket spending on health care, at least until the COVID-19 pandemic struck the United States in early 2020. Specifically, out-of-pocket costs for people enrolled in employer-sponsored health plans rose from 17.4 percent in 2013 to 19 percent in 2019, before declining to 16.2 percent in 2020, shown below in Figure 4. Despite the decrease observed from 2019 to 2020, there is a clear upward trajectory in the share of medical expenditures borne by patients. This may have a deleterious impact on workers’ personal finances, particularly given that workers’ premiums have increased over the past two decades.

Figure 4
Share of Medical Expenses Paid out of Pocket



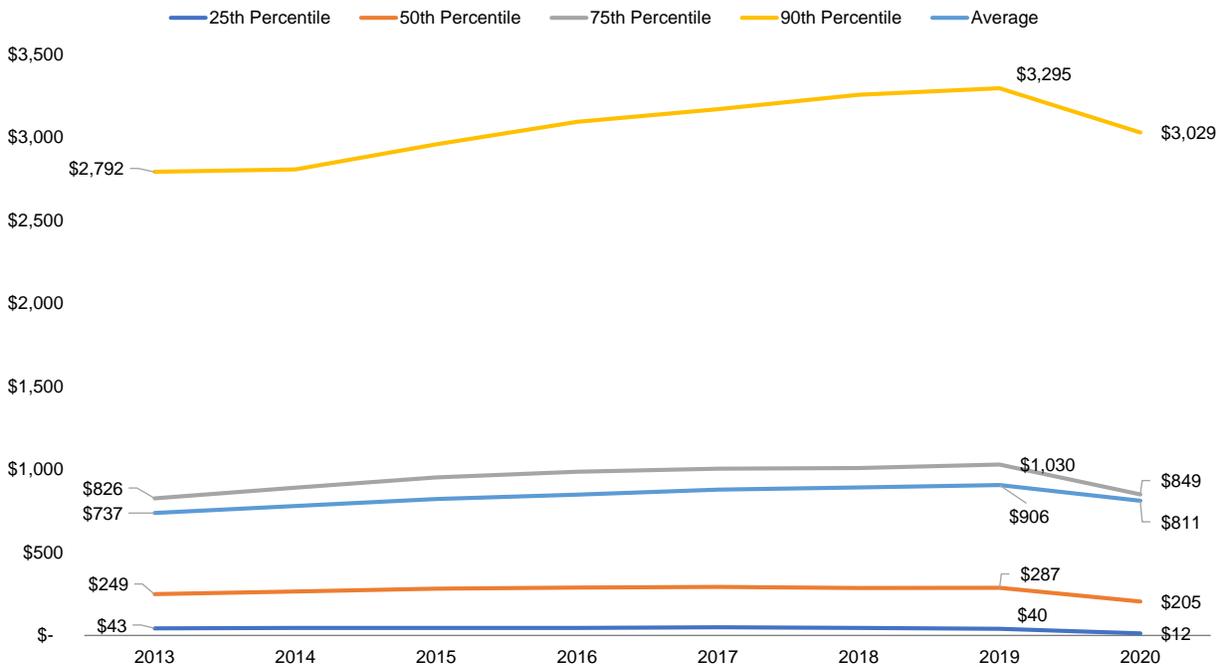
Source: IBM® MarketScan® Commercial Claims and Encounters Database (CCAE).

The 2013–2019 trend we observe among those with employer-sponsored health plans initially seems as though it lies directly at odds with CMS’s estimation that patients’ out-of-pocket spending as a share of all health care spending is at an all-time low. However, both can be true; the share of health care expenditures paid by other payers (e.g., Medicare, Medicaid, Department of Veterans Affairs, etc.) may simply be rising at a faster rate than the share paid out of pocket by patients with workplace-sponsored health care. Unfortunately, since the MarketScan database only contains data on patients covered by an employer-sponsored health plan, we cannot analyze trends in out-of-pocket spending for patients enrolled in Medicare, Medicaid, CHIP, or other insurance programs.

Simply examining the share of out-of-pocket costs borne by patients tells an incomplete story, however. The share of out-of-pocket costs paid by patients may be increasing, but if out-of-pocket obligations are simply growing at a faster pace than total health care expenditures, then the threat to workers’ financial wellbeing posed by rising out-of-pocket costs may be overstated. We analyze the absolute amount of out-of-pocket spending borne by patients to evaluate the extent to which these rising costs threaten financial wellbeing.

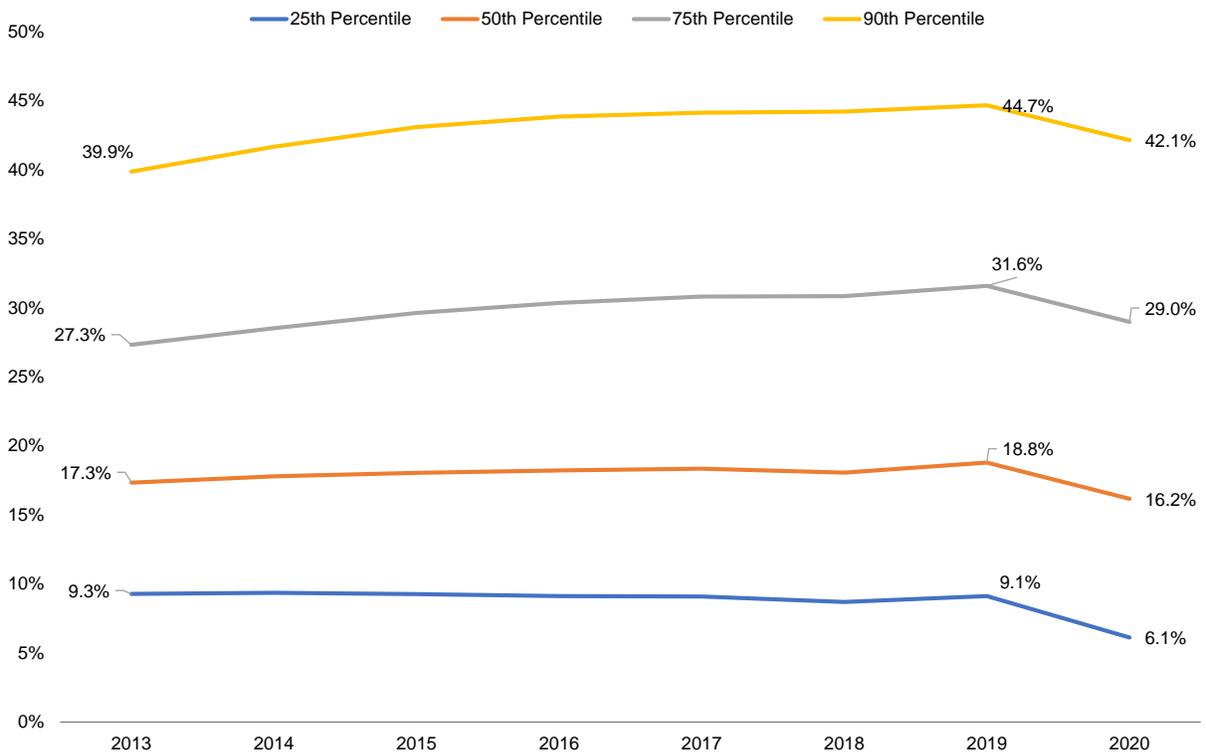
Much like the share of out-of-pocket spending, patients’ absolute out-of-pocket spending has increased as well. The median patient covered by an employer-sponsored health plan spent \$249 out of pocket in 2013, rising to \$287 in 2019 before dropping to \$205 in 2020. To capture expenses faced by the typical person covered by an employer-sponsored plan, this includes people who had no medical expenditures over the course of the year. However, examining only medians may obfuscate trends if the underlying distribution above or below the median changes drastically. Thus, the absolute amounts of out-of-pocket spending at the 25th, 50th, 75th, and 90th percentiles are shown below, in Figure 5, and the share of out-of-pocket spending by percentile is shown below in Figure 6.

Figure 5
**Absolute Amounts of out-of-Pocket Spending,
 by Percentile, 2013–2020**



Source: IBM® MarketScan® Commercial Claims and Encounters Database (CCAE).

Figure 6
Share of out-of-Pocket Spending, by Percentile, 2013–2020



Source: IBM® MarketScan® Commercial Claims and Encounters Database (CCAE).

While the median patient did not see out-of-pocket expenditures rise significantly between 2013 and 2019, patients at the 75th and 90th percentiles did. Patients at the 75th percentile spent \$826 on out-of-pocket costs in 2013, rising to \$1,030 in 2019 before falling to \$849 during the pandemic. Patients at the 90th percentile, meanwhile, spent \$2,792 out of pocket in 2013, rising to \$3,295 in 2019 before dropping to \$3,029 in 2020. The costs paid by particularly high health care spenders — those at the 75th percentile, 90th percentile, and above — have seen their costs rise faster than patients at the 25th and 50th percentiles, at least prior to the start of the pandemic. While the 75th and 90th percentiles definitionally represent a minority of patients, these high spenders have seen their out-of-pocket obligations increase significantly since 2013, which could potentially threaten their financial wellbeing.

A Quick Analysis of 2020 and COVID-19

The COVID-19 pandemic significantly impacted the delivery of health care. There was a widely documented sharp decrease in services sought at the onset of the pandemic when stay-at-home orders were issued by cities and states. These orders also closed many doctors' offices and caused hospitals to postpone all but the most essential care. One cross-sectional analysis of five states found, for instance, that visits to emergency departments plummeted between 42 and 64 percent when states issued stay-at-home orders (Jeffrey et al. 2020). Another study examining visits to ambulatory care providers found that patient visits were 60 percent lower in April 2020 than in a typical pre-pandemic year (Mehrota et al. 2021). Even after cities and states lifted stay-at-home orders and hospitals and doctors' offices reopened, patients still exhibited some degree of hesitancy to seek out care. In December 2020, well after the termination of stay-at-home orders, patients visited hospitals and doctor's offices less frequently. Pulmonology visits decreased 11 percent, behavioral health visits decreased 10 percent, and cardiology visits decreased 6 percent relative to a typical pre-pandemic year (Mehrota et al. 2021). Some health care needs have gone completely unaddressed during the pandemic.

Visits conducted via telemedicine filled a portion of the gap. Previous work has established that visits conducted via telemedicine increased significantly at the onset of the COVID-19 pandemic, with telemedicine visits in general rising over 12 percent and rising even higher for care such as mental health (Mehrota et al. 2021, Spiegel 2021). Even including telemedicine visits, however, there was a "deficit" of care delivered in 2020. The decrease in the share of out-of-pocket expenditures we observe may very well be a result of that; care that was deemed inessential was postponed and, in some cases, put off entirely. Providers *did* deliver essential care, however, during the height of the pandemic, and this care may be systematically more expensive than the types of care that hospitals and doctors' offices postponed or canceled. This could result in patients having a lower share of out-of-pocket expenditures in 2020.

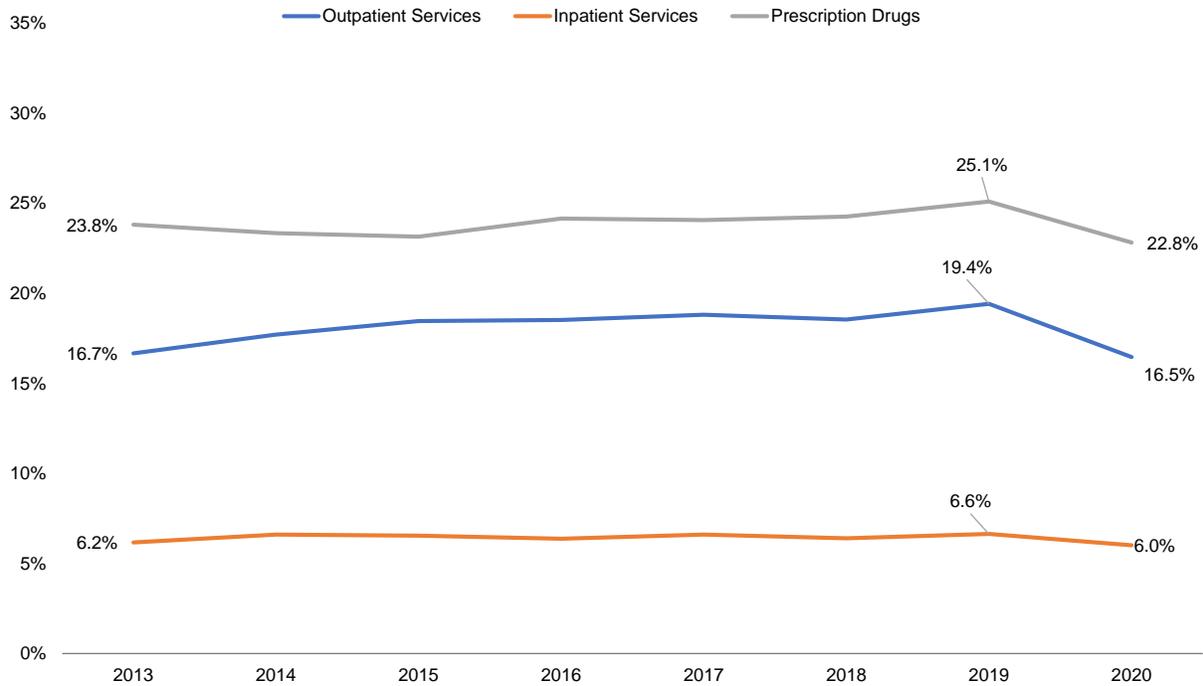
Also, during the pandemic, legislative and regulatory changes may have altered the share of health care spending borne by patients. Some barriers to accessing health care services via telemedicine were lowered on account of the pandemic, for instance. Some insurers allowed for employers to waive cost sharing entirely for visits conducted via telemedicine, which would manifest in patients' share of out-of-pocket spending decreasing.³ Provisions in the Coronavirus Aid, Relief, and Economic Security (CARES) Act allowed certain expenses to be covered for patients enrolled in HDHPs prior to satisfying their plan's deductible.⁴ These changes, too, could manifest in patients paying a relatively smaller share of their medical expenses out of pocket. Additionally, many insurers waived cost-sharing for patients seeking testing and care for visits related to COVID-19, which would further drive down the share of expenditures patients paid out of pocket. The COVID-19 pandemic altered the delivery of health care in the United States, and it appears that its effects transmitted to patients' out-of-pocket spending as well.

Disaggregating by Type of Spending

Next, we examine whether the steady pre-pandemic increase in medical expenditures paid out of pocket was driven by any particular type of health care spending. For example, due to secular trends in the health care market, we may find that out-of-pocket spending on outpatient services increased at a faster rate than spending on inpatient services. The Marketscan database we leverage for this analysis contains patient-level spending on inpatient services, outpatient services, and pharmacy claims, and we disaggregate out-of-pocket spending accordingly.

When disaggregating out-of-pocket spending by the type of service rendered, we find a clear trend that appears to drive the results from the previous section. Pre-pandemic, the share of medical spending paid out of pocket by patients increased the most for outpatient services. On average, patients paid 16.7 percent out of pocket for outpatient services, rising to 19.4 percent in 2019, shown below in Figure 7. Patients’ share of out-of-pocket spending on prescription drugs rose a smaller amount, from 23.8 percent in 2013 to 25.1 percent in 2019. Finally, the share of out-of-pocket spending paid by patients on inpatient services remained relatively constant, ranging from 6.2 percent in 2013 to 6.6 percent in 2019. All types of spending fell in 2020, likely on account of the pandemic.

Figure 7
Share of Medical Expenses Paid out of Pocket by Patients, by Type of Care, 2013–2020

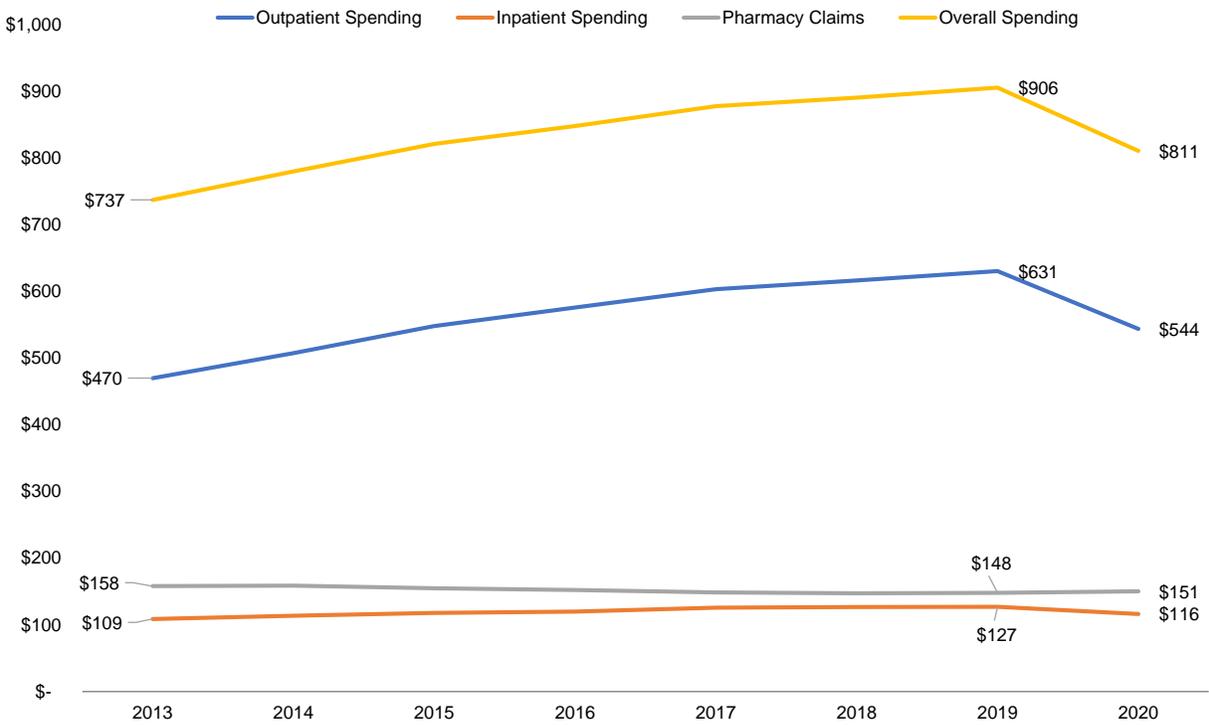


Note: Outpatient services are defined as care that does not require an overnight hospital stay (e.g., diagnostic tests, primary care physician visits, etc.). Inpatient services are defined as care that requires an overnight stay in a hospital (e.g., surgeries, childbirth, etc.). Source: IBM® MarketScan® Commercial Claims and Encounters Database (CCAE).

The share of outpatient spending paid out of pocket fell the most, decreasing by 2.9 percentage points between 2019 and 2020, conforming to expectations given the well-documented fall in medical services sought during the pandemic. Out-of-pocket spending on inpatient services, on the other hand, fell by only six-tenths of a percentage point. Again, this aligns with expectations, as hospitals and doctors’ offices still delivered essential care during the pandemic. Out-of-pocket spending on prescription drugs fell by 2.3 percentage points, perhaps because prescription drug spending is downstream of other types of visits, and possibly due to an additional hesitancy to visit pharmacies in the midst of a pandemic.

The absolute amount of spending by patients on outpatient services, inpatient services, and pharmacy claims increased between 2013 and 2019 as well. As with the share of out-of-pocket spending, we observe a similar decrease in the absolute amount of out-of-pocket spending in 2020 on account of the pandemic. Average spending on outpatient services saw the largest increase, growing from \$470 in 2013 to \$631 in 2019, before decreasing to \$544 in 2020, shown below in Figure 8. The rise in spending on inpatient services was more muted, increasing from \$109 in 2013 to \$127 in 2019 and falling to \$116 in 2020. Prescription drug spending, meanwhile, dropped slightly between 2013 and 2019 before increasing slightly in 2020 to \$151.

Figure 8
Average out-of-Pocket Expenditures, by Type of Care, 2013–2020

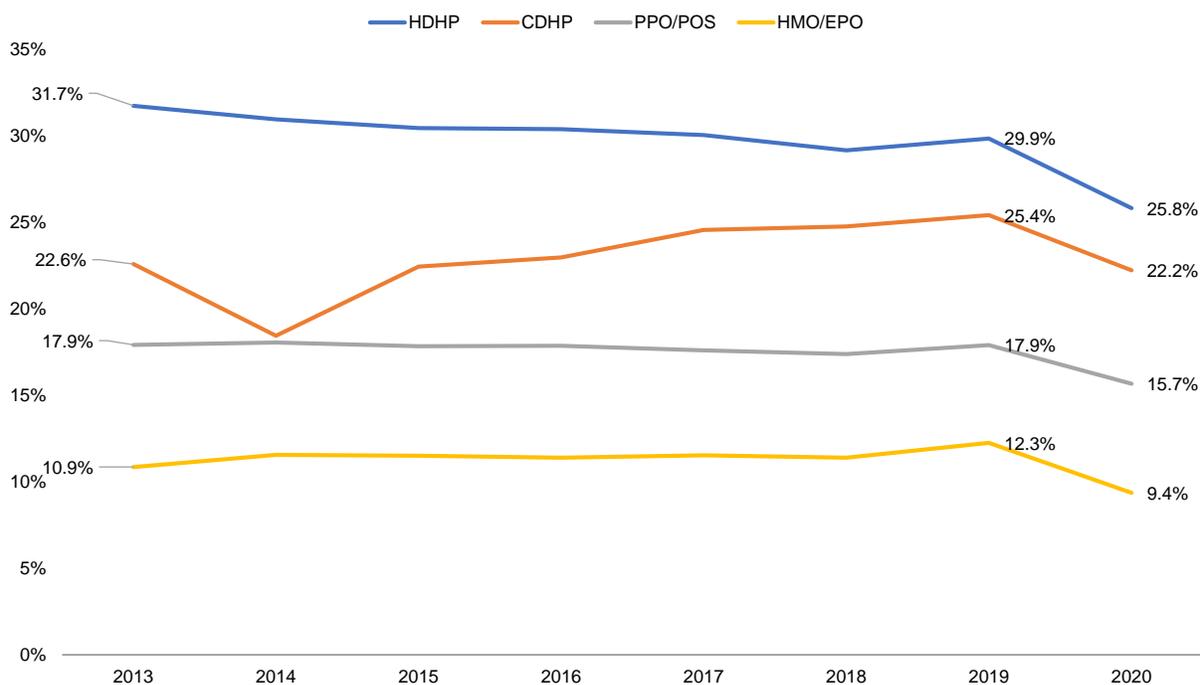


Source: IBM® MarketScan® Commercial Claims and Encounters Database (CCEA).

Disaggregating by Plan Type

To evaluate the extent to which the results observed in the previous section are driven by a change in the underlying composition of health plan types, we disaggregate out-of-pocket spending trends by plan type. Once we do so, we find markedly different results. In general, out-of-pocket obligations as a total share of health care spending has remained relatively stable for people covered by an employer-sponsored PPO/POS plan or an EPO/HMO plan, shown below in Figure 9. Patients enrolled in an HMO/EPO plan paid only a slightly higher share of their total expenditures out of pocket in 2019 (12.3 percent) compared with 2013 (10.9 percent). Patients in a PPO or POS plan paid exactly the same share out of pocket in 2013 as they did in 2019: 17.9 percent. This reflects the current trends observed in the generosity of employer-sponsored EPO, HMO, PPO, and POS plans, which remained relatively stable between 2013 and 2019 (Fronstin et al. 2021). Patients in all four plan types paid a smaller share of their expenditures out of pocket in 2020, again likely due to effects of the pandemic.

Figure 9
Share of Total Expenditures Paid out-of-Pocket,
by Health Plan Type, 2013–2020

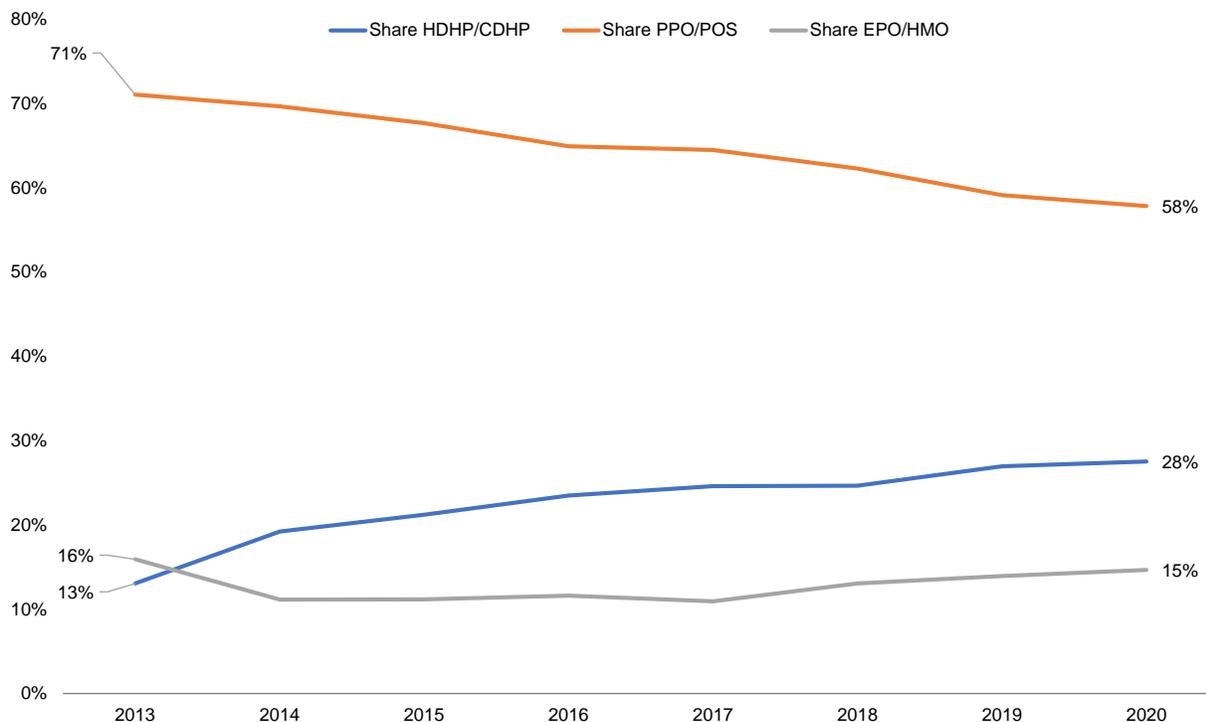


Note: Outpatient services are defined as care that does not require an overnight hospital stay (e.g., diagnostic tests, primary care physician visits, etc.). Inpatient services are defined as care that requires an overnight stay in a hospital (e.g., surgeries, childbirth, etc.). Source: IBM® MarketScan® Commercial Claims and Encounters Database (CCEAE).

Importantly, we find a different trend for patients enrolled in HDHPs. These patients saw their out-of-pocket obligations decrease slightly between 2013 and 2019, declining from 31.7 percent in 2013 to 29.9 percent in 2019 before falling further in 2020 to 25.8 percent. This, too, reflects recent trends observed in the generosity of HDHPs. Between 2013 and 2019, HDHPs became relatively more generous; the average actuarial value — a rough estimate of total costs paid by a health plan — of these plans rose from 72.7 percent to 76 percent (Fronstin et al. 2021). This provides context as to why patients’ share of out-of-pocket costs decreased. Additionally, in 2019 the IRS released guidelines expanding the list of medical goods and services that could be covered at no expense to the patient prior to satisfying their deductible, which might have further reduced the share of spending incurred by patients in 2019 and 2020 (Fronstin and Fendrick 2021).

At first, it may seem counterintuitive that we observe an increasing share of out-of-pocket spending borne by patients overall and a stable or even *decreasing* share of out-of-pocket spending based on plan type. However, much of the increase in the out-of-pocket spending can be attributed to more people enrolling in HSA-eligible health plans. Indeed, the share of patients enrolled in HDHPs and CDHPs more than doubled between 2013 in 2020, from 13 percent to 28 percent, shown below in Figure 10. The share of patients enrolled in PPO or POS plans, meanwhile, fell from 71 percent in 2013 to 58 percent in 2020.

Figure 10
Share of Patients in Analytical Dataset, by Plan Type, 2013–2020



Source: IBM® MarketScan® Commercial Claims and Encounters Database (CCAE).

We employ a further analysis to quantify the impact of enrollment in HDHPs on out-of-pocket spending trends.⁵ Changes in aggregate out-of-pocket spending can be split into two components: changes in out-of-pocket spending in the plans themselves, and changes in the share of patients enrolled in each plan. Notably, enrollment shifts toward HDHPs and CDHPs, in which patients tended to have higher out-of-pocket costs, and enrollment shifts away from PPO and POS plans, in which patients tended to have lower out-of-pocket costs, explain 58 percent of the variation observed in patients' share of out-of-pocket spending.

Health Conditions Affect out-of-Pocket Spending

Unsurprisingly, we find differences in out-of-pocket spending trends conditional on the patient being diagnosed with certain health conditions that can be expensive to address and maintain. For example, previous research has found that persistently high health care spenders are disproportionately diagnosed with cancer, diabetes, chronic obstructive pulmonary disease (COPD), or cerebrovascular disease (Fronstin and Roebuck 2019). Previous work has estimated that the top 20 percent of health care spenders accounted for 84 percent of total health care spending. However, not all of this spending is paid out of pocket, so specifically examining out-of-pocket trends may tell an entirely different story.

We examine several conditions that comprise the Charlson Comorbidity Index (CCI). The CCI is a commonly used predictor of short-term mortality rates (Charlson et al. 1987). Comprising 17 different conditions, the CCI is often used by researchers as a proxy for health. We derive flags indicating conditions contained in the CCI annually using diagnosis codes from claims. Notably, we find that for many conditions, the share of total expenditures borne out of pocket by patients is lower than in the population that had not received a diagnosis of a condition in the CCI. This is despite patients with a diagnosis of a condition in the CCI spending more on their care. For instance, the average patient diagnosed with moderate or severe liver disease paid only 7.1 percent of their expenditures out of pocket in 2020 but paid an average of \$3,319 out of pocket.

Because certain conditions are expensive to address, those patients may be more likely to satisfy their deductible and perhaps even out-of-pocket maximum, thereby resulting in a smaller share of their expenses being paid out of pocket. Previous research has indicated that between 50 and 60 percent of very high spenders — those in the top 10 percent of total health care spending — reach their plan’s out-of-pocket maximum (Fronstin and Roebuck 2021). While the dataset used for this analysis does not contain data on features of plan design, such as the plan’s out-of-pocket maximum, we can explore trends in out-of-pocket spending for several conditions. Patients who had been diagnosed with asthma, metastatic cancer, and diabetes paid a lower share of their total expenditures out of pocket, as shown below in Figure 11, than all patients in general. Results for all conditions comprising the CCI are in Appendix Figure 1.

For several conditions, we observe an interesting interplay between the absolute amount of out-of-pocket spending and the share of out-of-pocket spending of total medical expenditures. For instance, patients diagnosed with metastatic cancer paid only 3.5 percent of their total health expenditures out of pocket but had very high out-of-pocket expenditures, with the median patient spending \$3,500 in 2020. Meanwhile, patients afflicted with asthma paid 15.7 percent of their total health expenditures out of pocket but had much lower average expenditures, with the median patient spending \$1,615 in 2020. Patients diagnosed with *any* condition from the CCI paid an average of \$924 in 2020, representing 14.8 percent of their total health care expenses.

Figure 11
Absolute and Share of out-of-Pocket Costs for Selected Conditions, 2013–2020

Year	Asthma		Metastatic Cancer		Depression		Dyslipidemia		Diabetes		Any CCI Condition	
	Median Out-of-Pocket Spending	Out-of-Pocket Share										
2013	\$684	17.9%	\$2,906	3.9%	\$1,009	17.8%	\$792	18.4%	\$1,712	15.7%	\$838	16.6%
2014	\$741	18.9%	\$2,922	3.9%	\$1,081	18.4%	\$852	18.9%	\$1,792	15.6%	\$870	17.0%
2015	\$782	19.1%	\$2,917	3.9%	\$1,123	18.7%	\$897	19.0%	\$1,821	15.3%	\$938	16.6%
2016	\$813	19.3%	\$2,999	3.5%	\$1,119	19.1%	\$931	19.2%	\$1,894	14.8%	\$897	18.6%
2017	\$828	19.3%	\$3,251	3.5%	\$1,123	19.3%	\$934	19.4%	\$1,967	14.7%	\$937	18.6%
2018	\$833	19.1%	\$3,405	3.3%	\$1,112	19.4%	\$921	19.1%	\$2,006	14.4%	\$937	17.9%
2019	\$872	19.3%	\$3,501	3.6%	\$1,121	19.9%	\$975	19.6%	\$2,032	14.8%	\$1,003	17.0%
2020	\$756	17.9%	\$3,500	3.5%	\$925	18.4%	\$882	18.9%	\$1,964	13.8%	\$924	14.8%

Source: IBM® Marketscan® Commercial Claims and Encounters Database (CCAE).

Conclusion

Employers face a tension between controlling the bottom-line impact of rising health care costs and helping workers improve their financial wellbeing. On the one hand, employers are more frequently implementing financial wellness programs as a means to improve their employees’ financial wellbeing, with the goal of reducing absenteeism and increasing productivity. Workers who are preoccupied with their personal finances may be less productive and more prone to taking time off work to address their needs. On the other hand, to wrangle health care cost increases, employers often turn to raising their health plan’s deductible. Raising deductibles offers a path of lesser resistance relative to more intensive ways of managing costs, such as changing networks or a prescription drug formulary. But there is a fundamental tension between seeking to improve workers’ financial wellbeing while also asking them to shoulder higher health care costs. To the extent that these higher costs have a negative impact on workers’ financial wellbeing, raising deductibles as a means to control health care cost inflation may be counterproductive.

Overall, we find mixed evidence on trends in out-of-pocket spending. In the aggregate, out-of-pocket spending by patients on health care rose between 2013 and 2019, in both absolute terms as well as the share of total expenditures. In 2013, patients paid an average of 17.4 percent of their health care expenditures out of pocket, and the median patient paid \$249 out of pocket. By 2019, those figures increased to 19 percent and \$287, respectively.

This seems at odds with statistics produced by the CMS, which show the share of out-of-pocket expenditures paid by patients is at an all-time low. The decrease in the share of out-of-pocket spending observed by CMS does not appear to be driven by employer-sponsored health plans. The decrease CMS observes may be driven instead by out-of-pocket spending trends by patients enrolled in Medicare, Medicaid, CHIP, or other insurance programs outside the scope of this analysis.

Additionally, we find evidence that the pandemic changed the demand and delivery of health care. For enrollees of all plan types, both their share of expenditures paid out of pocket as well as their absolute out-of-pocket spending fell in 2020 relative to 2019. While further study is necessary, the decrease in the share of medical expenditures paid out of pocket by patients we observe in 2020 is more likely attributable to the pandemic rather than the start of a secular trend.

After disaggregating by plan type, we find that the median share of spending paid out of pocket has either remained stable or decreased for all health plan types. Patients enrolled in HDHPs paid an increasingly lower share of their expenditures out of pocket, while patients in PPO, POS, HMO, and EPO plans paid roughly the same amount in 2013 as they did in 2020. We find that the increase in the share of expenditures paid out of pocket can be largely attributed to a shift in the mix of health plan enrollment. Workers are increasingly switching to HDHPs, with 13 percent of the patients in the Marketscan database enrolled in an HDHP or CDHP in 2013, rising to 27 percent in 2020. Unfortunately, our dataset does not allow us to evaluate the extent to which employers exclusively offer HDHPs in lieu of EPO, HMO, PPO, or POS plans.

In general, we find that most people covered by a workplace-sponsored health plan have not seen their out-of-pocket expenditures increase significantly. However, this is not to say that workers' total health care spending burden has not increased. There has been a significant rise in the premiums workers pay for their health care plans, which can threaten financial wellbeing. And particularly high users of health care have seen their out-of-pocket expenditures grow at a faster rate than lower-spending patients. Patients with certain medical conditions — such as metastatic cancer, diabetes, and COPD — have seen their out-of-pocket obligations increase, too. However, they do not represent a majority of people covered by an employer-sponsored health plan.

Also, there are reasons for optimism. The actuarial value — a rough measure of generosity — of HDHPs has been steadily increasing, and if that trend continues, enrollees may pay less out of pocket. While we do not have insights into patients' HSAs, many employers — about 44 percent — make contributions to HSAs on behalf of their employees (Fronstin 2021). It is possible that the increased out-of-pocket expenditures incurred by those enrolled in HSA-eligible plans could be covered by contributions made by the employer as well as the employee, who likely realizes some savings from HSA-eligible plans having lower premiums than traditional health plans. Further research is necessary to explore this area more fully.

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Appendix

Appendix Figure 1
Median out-of-Pocket Spending and Share of Total Expenditures Paid out of Pocket, by CCI Condition, 2013–2020

Year	Acute Myocardial Infarction		Congestive Heart Failure		Peripheral Vascular Disease		Cerebrovascular Disease		Dementia		COPD		Rheumatoid Disease		Peptic Ulcer		Mild Liver Disease	
	Median Out-of-Pocket Spending	Out-of-Pocket Spending Share																
2013	\$2,549	8.0%	\$2,511	8.6%	\$1,589	12.0%	\$1,670	12.2%	\$1,628	12.0%	\$708	16.3%	\$1,421	12.6%	\$1,798	12.5%	\$1,775	10.4%
2014	\$2,669	8.2%	\$2,685	8.4%	\$1,708	12.2%	\$1,786	12.2%	\$1,625	10.6%	\$777	17.0%	\$1,549	12.5%	\$1,970	12.6%	\$2,010	9.8%
2015	\$2,708	8.1%	\$2,467	9.1%	\$1,789	11.7%	\$1,861	11.9%	\$1,998	11.5%	\$820	17.1%	\$1,639	12.2%	\$2,007	12.7%	\$1,670	11.6%
2016	\$3,007	7.1%	\$2,321	9.6%	\$1,906	11.1%	\$2,000	10.9%	\$2,005	11.8%	\$856	16.9%	\$1,693	12.1%	\$2,112	11.7%	\$1,658	12.6%
2017	\$3,192	7.4%	\$2,463	9.7%	\$1,970	11.0%	\$2,099	10.9%	\$2,031	11.6%	\$877	16.9%	\$1,749	12.1%	\$2,254	12.0%	\$1,699	12.9%
2018	\$3,246	7.2%	\$2,548	9.4%	\$1,977	10.7%	\$2,126	10.7%	\$2,080	11.5%	\$908	16.8%	\$1,787	11.9%	\$2,287	11.7%	\$1,696	12.9%
2019	\$3,279	7.9%	\$2,604	10.1%	\$2,057	11.7%	\$2,299	11.9%	\$2,084	12.3%	\$937	17.4%	\$1,877	12.8%	\$2,339	12.6%	\$1,789	14.1%
2020	\$3,202	7.7%	\$2,469	10.0%	\$2,001	11.4%	\$2,211	11.5%	\$1,911	12.0%	\$836	15.7%	\$1,718	12.6%	\$2,272	12.5%	\$1,677	13.7%
Year	Diabetes		Diabetes With Complications		Paralysis		Renal Disease		Cancer		Moderate/Severe Liver Disease		Metastatic Cancer		AIDS			
	Median Out-of-Pocket Spending	Out-of-Pocket Spending Share																
2013	\$1,084	15.7%	\$1,531	12.8%	\$2,583	7.8%	\$1,639	12.2%	\$1,397	12.3%	\$2,614	7.4%	\$2,906	3.9%	\$1,520	6.2%		
2014	\$1,167	15.6%	\$1,715	12.8%	\$2,726	7.7%	\$1,754	12.3%	\$1,500	12.6%	\$2,828	6.7%	\$2,922	3.9%	\$1,655	6.0%		
2015	\$1,213	15.3%	\$1,747	12.2%	\$2,693	7.9%	\$1,791	12.0%	\$1,567	12.7%	\$2,798	6.5%	\$2,917	3.9%	\$1,747	5.6%		
2016	\$1,254	14.8%	\$1,793	11.9%	\$2,800	8.0%	\$1,864	11.7%	\$1,665	12.0%	\$2,997	6.3%	\$2,999	3.5%	\$1,918	5.5%		
2017	\$1,277	14.7%	\$1,865	11.8%	\$2,696	8.2%	\$1,908	11.9%	\$1,743	12.0%	\$3,170	6.6%	\$3,251	3.5%	\$1,988	5.3%		
2018	\$1,310	14.4%	\$1,912	11.5%	\$2,984	7.8%	\$1,918	11.7%	\$1,792	11.9%	\$3,276	6.6%	\$3,405	3.3%	\$1,997	4.9%		
2019	\$1,342	14.8%	\$1,938	11.8%	\$3,003	8.4%	\$1,896	12.6%	\$1,875	12.9%	\$3,274	7.1%	\$3,501	3.6%	\$2,088	5.2%		
2020	\$1,241	13.8%	\$1,810	11.1%	\$2,810	8.2%	\$1,758	12.2%	\$1,741	12.7%	\$3,319	7.1%	\$3,500	3.5%	\$2,001	4.7%		

Source: IBM® MarketScan® Commercial Claims and Encounters Database (CCAE).

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Endnotes

¹ MarketScan data are a convenience sample; they are not a random sample of all people covered by an employer-sponsored health plan. As such, there is a possibility that the results may not be generalizable to the United States population as a whole.

² Patients with point-of-service (POS) plans with capitation were excluded from this analysis. Capitation is a practice in which insurers pay a fixed amount to health care providers regardless of the number of services they provide. As a result, we are not able to reconstruct the costs paid for a given service the same way we can with non-capitated claims.

³ See <https://www.ahip.org/news/articles/health-insurance-providers-respond-to-coronavirus-covid-19>

⁴ See <https://www.irs.gov/newsroom/irs-outlines-changes-to-health-care-spending-available-under-cares-act>

⁵ The total share of out-of-pocket spending is expressed by $OOP_t = \sum s_t(i)oop_t(i)$, where OOP is the out-of-pocket spending in time t , $s_t(i)$ is the share of enrollees in plan i , and $oop_t(i)$ is the out-of-pocket share of plan i in time t . The change in out-of-pocket spending attributable to shifts in enrollment can be expressed as $\Delta_t = \sum_{t=t_0}^{t_1} (s_{t+1}(i) - s_t(i)) \frac{(oop_{t+1}(i) + oop_t(i))}{2}$

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