Policy Research Perspectives

National Health Expenditures, 2021: Decline in Pandemic-Related Government Spending Results in 8-Percentage Point Decrease in Total Spending Growth

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Introduction

The Centers for Medicare & Medicaid Services (CMS) released the 2021 U.S. National Health Expenditures (NHE) data and revised estimates for previous years in December 2022. This Policy Research Perspective (PRP) report from the American Medical Association (AMA) examines the breakdown of health care spending in 2021 and how its various subcomponents were affected after the substantial changes in spending that occurred due to the COVID-19 pandemic.

NHE spending was $4.3 trillion or $12,914 per capita in 2021. This health spending was 18.3 percent of GDP in 2021, less than the unprecedented 19.7 percent of GDP in 2020 but still not as low as 17.6 percent in 2019 and 2018. Spending growth was 2.7 percent in 2021, a substantial drop from 10.3 percent in 2020, and still lower than the steady pre-pandemic growth rates (4.2 percent in 2019 and 4.6 percent in 2018). The substantial acceleration in spending in 2020 can be attributed to increases in federal government spending to manage the unprecedented COVID-19 pandemic. By 2021, pandemic-related federal government expenditures substantially declined, resulting in the low spending growth. Although the 2021 federal government spending is still well above pre-pandemic levels, its decline offset the increased utilization of medical goods and services that rebounded due to delayed care and pent-up demand from 2020.

This report examines these various components in 2021, and compares with 2020 and 2019, to develop an understanding of health spending around the pandemic. To illustrate the pandemic driven changes in utilization of medical goods and services (decrease in 2020, increase in 2021) and subsequent impact on spending, this report also examines the levels of health care spending that would have resulted *in the absence of* pandemic-related government expenditures. For these modified estimates, the increases in personal health care expenditures (which includes hospital care and physician services) in 2021 compensated for decreases in 2020 which suggest spending is tracking towards what would have been had the pandemic not occurred.

What are national health expenditures?

The NHE are the official estimates of U.S total health care spending (Centers for Medicare & Medicaid Services, 2022) that incorporate the main components of the health care system to exhaustively encompass the finances of the health care system. NHE differentiates itself from other data sources because it not only includes expenditures for medical goods and services, but also both the origin and final payer of these expenditures. Further, since CMS has released data as early as 1960, there are common definitions and methods that allow for comparisons over time and across

categorization schemes. The following are the three categorization schemes of the NHE (i.e., methods through which the data can be decomposed):

1. *Type of expenditure*: health care spending is divided into what was invested (e.g., research, structures and equipment) and what was spent on health consumption expenditures. The primary component of the latter is "personal health care spending," which includes spending on hospital care, physician services, and prescription drugs, while the remainder goes towards public health, government administration, and net costs for insurers (i.e., administration, taxes, fees, and profits of private health insurers). This breakdown answers the question, "where does the money go?"
2. *Source of funds*: health care spending is divided into what was invested and what was spent under different payers. The primary component of the latter is spending by health insurance programs (private health insurance, Medicare, Medicaid, and other), while the remainder includes out-of-pocket spending and spending by other (non-insurance) third-party payers (e.g., workers compensation and other federal programs). This breakdown addresses the question, "who pays the bill?" for health consumption expenditures.
3. *Sponsor:* health care spending is divided by the financiers (i.e. "sponsors") of health spending. This includes households, private businesses, other private revenues, the federal government, and state and local governments. Sponsors reflect the original financing source of the spending, different from source of funds, which reflects the final payer. For example, employees and employers pay premiums which private health insurers spend for covered patients. Thus, households and private businesses would be the sponsors as they are the original financing source of the spending whereas private health insurance would be the source of funds since they are the final payer of the medical goods and services. This breakdown addresses the question, "how is the spending financed?"

For each breakdown of the NHE (by type of expenditure, source of funds, or sponsor), the sum of the components will be $4.3 trillion. This report will examine spending decomposed by each of these categorization schemes and, in some cases, examine the cross section between two breakout types, such as the source of funding for a particular type of expenditure (e.g., the amount of spending on physician services that was from other federal programs, i.e., federal relief programs).

Along with the 2021 NHE estimates released in December 2022, CMS also released revisions of estimates for prior years. There were notable differences between the original 2020 NHE estimates (released in December 2021) and the revised estimates. For example, 2020 NHE spending was originally reported to have grown 9.7 percent from 2019 but this was revised to 10.3 percent. These revisions were primarily driven by adjustments to government spending related to managing the pandemic as well as revisions in the data sources that underly the NHE estimates (e.g., Census Bureau's Services Annual Survey).[1]

[1] The 2020 NHE estimate was revised from $4,124.0 billion to $4,144.1 billion – a $20.1 billion difference. A large factor in this is the upward revisions of $14.6 billion in government public health activities (a category which is primarily composed of government spending related to managing the pandemic).

Spending by type of expenditure: where does the money go?

Spending shares

The breakdown of spending by type of expenditure in 2021 can be seen in Exhibit 1. The data show 4.9 percent of total health spending (or $207.0 billion) went towards investment and 95.1 percent (or $4,048.1 billion) went to health consumption expenditures. The latter is composed of government public health activities (4.4 percent of total health spending or $187.6 billion in 2021), government administration (1.2 percent or $51.5 billion), net cost of health insurance (6.0 percent or $255.7 billion), and personal health care spending (83.5 percent or $3,553.4billion).

Government public health activities refers to spending by federal, state, and local governments related to public health concerns and organizing/delivering publicly provided health services (Centers for Medicare & Medicaid Services, 2022). During the COVID-19 pandemic, this included spending on vaccination services, epidemiological surveillance, disease prevention programs, and the operation of public health laboratories.

Government administration includes the administrative cost of running government health care programs (e.g., Medicare and Medicaid). The net cost of health insurance is the difference between what insurers incur in premiums and the amount paid in benefits, essentially encompassing dollars that go towards insurers' administrative costs, taxes, fees, and net profits/losses. The government administration and net cost of health insurance categories together reflect insurer dollars outside of payment of benefits.

Personal health care expenditures include spending on hospital care (31.1 percent or $1,323.9 billion), prescription drugs (8.9 percent or $378.0 billion), physician services (14.9 percent or $633.4 billion), and clinical services (5.4 percent or $231.2 billion). Physician and clinical services are generally presented as a combined category by CMS, but they are examined separately in this report because of notable differences in spending level and growth between the two categories.[2] Also included in personal health care expenditures are spending on nursing care facilities (4.3 percent or $181.3 billion), home health care (2.9 percent or $125.2 billion), and other personal health care services (16.0 percent or $680.4 billion).[3]

Prior to the pandemic, the shares of spending for each category generally remained within half a percentage point of the previous year. However, in 2020, the pandemic led to substantial shifts in spending and, subsequently, shares in spending. Personal health care decreased from 84.4 percent of total spending in 2019 to 81.2 percent in 2020, while government public health activities shifted from 2.8 percent in 2019 to 5.7 percent in 2020 and the combined government administration and net cost of health insurance categories increased from 7.5 percent in 2019 to 8.3 percent in 2020.

[2]Physician services spending is defined as spending in establishments where physician services are the primary activity while clinical services spending is defined as spending made in establishments classified as outpatient care centers. Under the North American Industry Classification System (NAICS), establishments are classified based on the primary activity performed at the location and spending in the establishment consists of payments to the establishment (including payments to employees of the establishment).

[3]In this report, other personal health care services include dental and other professional services, durable medical equipment, other non-durable medical products, and other health, residential, and personal care.

The data in 2021 shows that the spending shares have shifted closer to, but not quite reached, pre-pandemic levels.

Spending growth

The previous section discussed the share of spending for each type of expenditure category, noting the stability in these shares prior to the pandemic and substantial changes in 2020 and 2021. To better understand factors underlying these shares, this section examines the year-to-year spending growth in each type of expenditure category for the 10-year period ending in 2021. Different from the spending shares, there has been variation in spending growth. Prior to the pandemic, fluctuations in spending growth coexisted with the stability of the spending shares because highly variable categories tended to account for a relatively small share of total health spending and, while the peaks for such categories reflected high spending growth in the short term, they were not marked enough to shift the shares (e.g., clinical services and, especially, prescription drugs). In 2020 and 2021, a substantial change in shares of spending is observed because some smaller categories (e.g., government public health activities) increased more than twofold and some larger categories (e.g., physician services) saw unprecedented, sharp changes in spending growth.

Exhibit 2 presents the annual spending growth rates over the 10-year period ending in 2021 for personal health care spending and its four major components (hospital care, physician services, clinical services, and prescription drugs). The average annual growth rate for the 10-year period ending in 2021 was 4.7 percent with the subcomponent clinical services (6.7 percent) having a notably higher rate than physician services (4.3 percent), prescription drugs (4.0 percent), and hospital care (4.7 percent). Despite the similarities in the aforementioned average growth rates, there is important variation in the underlying year-to-year spending growth over the last decade that differs across categories.

In 2013, spending growth across these type of expenditure categories was generally low but spiked in 2014 and 2015 during the Affordable Care Act (ACA) implementation and decreased after. During this period, prescription drug spending had greater fluctuation (peaking at 12.1 percent in 2014 before plummeting to 0.4 percent in 2016) compared to physician services (which peaked at 5.8 percent in 2015 and dropped to 3.2 percent in 2018) and hospital care (which peaked at 5.2 percent in 2015 and dropped to 4.1 percent in 2017). In 2019, growth in the use and intensity of hospital care and physician services along with prescription drugs outpaced changes in pricing, resulting in acceleration in personal health care expenditures (Martin et al., 2021). Notably, hospital care spending grew 6.3 percent in 2019.

During the pandemic, in 2020, personal health care spending growth spiked again to 6.1 percent – even higher than during ACA implementation. Subcomponents hospital care (6.2 percent) and clinical services (5.4 percent) had notably high growth rates in 2020, although these rates were consistent with that of 2019. In contrast, spending growth for physician services spiked from 3.9 percent in 2019 to 7.0 percent in 2020. This was primarily driven by federal government spending on relief programs, which offset the decline in use of medical goods and services from restricted access to care (discussed further in the next section). Only prescription drugs maintained a low growth rate (3.7 percent in 2020) as this category did not include any funding from federal relief programs.

The data in 2021 generally show the start of recovery from the pandemic. Personal health care spending growth was 5.5 percent – although there was still federal relief spending, it declined sufficiently to outweigh the increased use of goods and services during this year. For similar reasons, physician services and hospital care saw a drop in spending growth to 5.1 percent and 4.4 percent, respectively. Only prescription drugs (7.8 percent) and clinical services (7.0 percent) had an acceleration in spending. Prescription drug growth was influenced by an increase in new prescriptions being dispensed (as doctor visits rebounded) and growth in newer (higher-priced) brand-name medications (Martin et al., 2023). While spending in "other federal programs" declined for physician services, it increased for clinical services (from $15.8 billion in 2020 to $17.8 billion in 2021). The role of this "other federal programs" category in health care spending is further discussed in the next section.

Reassessing pandemic spending growth

The spending growth rates discussed above for 2020 and 2021 provide the big picture of spending patterns around the time of the pandemic. Much of the spending was driven by the federal government managing the pandemic, making it challenging to discern changes in utilization of medical goods and services.

Government spending related to the pandemic was generally classified under two categories. The first, government public health activities, was discussed earlier and described as spending by the government to prevent or control public health concerns and to organize/deliver publicly provided health services. Government efforts to control the pandemic through public health activity resulted in spending in that category increasing from $107.1 billion in 2019 to $238.3 billion in 2020. In 2021, spending was $187.6 billion, less than the unprecedented levels in 2020, but still higher than before the pandemic. The second category is other federal programs, and this includes funding provided through the Provider Relief Fund (i.e., relief for health care organizations and providers that had expenses or revenue loss from the pandemic) and the Paycheck Protection Program (i.e., loans backed by the U.S. Small Business Administration so that small businesses, including physician practices, could keep their workforce employed during the pandemic) (Health Resources and Services Administration, 2021 and U.S. Small Business Administration, 2022).[4,5] As such, other federal programs contributes to spending of select type of expenditure categories, notably, hospital care and physician services. Government sponsored pandemic relief resulted in other federal programs spending increasing from only $14.0 billion in 2019 to $193.1 billion in 2020. In 2021, spending was $71.9 billion. As with spending on government public health activities, this was less than the unprecedented level in 2020, but still substantially more than before the pandemic.

To better illustrate the impact of these two categories of pandemic-related government expenditures, Exhibit 3 presents spending levels and growth rates where spending on government public health activities and other federal programs are both included and excluded for 2019, 2020, and 2021.

[4]Other federal programs also include federal general hospital/medical expenditures (i.e., federal health care funds and grants budgeted to federal agencies) as well as the defunct Office of Economic Opportunity and Non-XIX Federal programs.

[5]Both programs functioned as subsidies, with the Provider Relief Fund providing federal subsidies to providers and the Paycheck Protection Program allowing for loans to be forgiven if used for qualifying expenses (roughly 99 percent have been forgiven to date) (Hartman et al., 2022)

NHE had a lower growth rate in 2021 (2.7 percent) than in 2020 (10.3 percent). However, after removing spending on government public health activities and other federal programs, this modified NHE had a higher growth rate in 2021 (7.6 percent) than in 2020 (2.1 percent). This illustrates the extent to which pandemic-related government expenditures drove much of the spending growth in 2020. In contrast, 2021 spending growth was driven by increases in the utilization of goods and services. Considering the modified estimates, the average annual growth for these two years is 4.8 percent and the annual growth for 2019 is 4.1 percent. This may suggest spending levels related to the utilization of medical goods and services as well as operations and insurer costs is tracking towards what spending would have been had the pandemic not occurred.

Personal health care spending grew 5.5 percent in 2020 compared to 6.1 percent in 2021. Within that category, hospital care spending grew 6.2 percent in 2020 compared to 4.4 percent in 2021 and physician services spending grew 7.0 percent in 2020 compared to 5.1 percent in 2021. Growth in 2020 for hospital care and physician services was driven primarily by other federal programs. Exhibit 3 shows that other federal programs increased between 2019 and 2020 from $1.9 billion to $86.6 billion for hospital care services and from $0 to $35.5 billion for physician services. In 2021, other federal programs was $19.4 billion for hospital care and $10.4 billion for physician services – although less than that of 2020, these levels are still higher than pre-pandemic.

When removing other federal programs from personal health care spending, its growth rate drops substantially to 0.5 percent in 2020 and increases to 9.7 percent in 2021. For hospital services, the growth rate becomes -0.9 percent in 2020 and increases to 10.4 percent in 2021. Likewise, for physician services spending, the growth rate becomes 0.7 percent in 2020 and increases to 9.9 percent in 2021. The acceleration in personal health care, hospital care, and physician services spending from 2020 to 2021 that results after removing other federal programs from the estimates better reflects the substantial drop in use of medical goods and services in 2020 and the increased utilization in 2021 as care became more accessible. Considering the modified estimates, the average annual growth for these two years for personal health care expenditures is 5.0 percent and the growth rate for 2019 is 5.1 percent. As such, the increases in personal health care expenditures in 2021 compensated for decreases in 2020 which may suggest spending levels related to the utilization of medical goods and services is tracking towards what may have been had the pandemic not occurred.

Spending by source of funds: who pays the bill?

Spending shares

Health care spending can also be broken down by source of funds (i.e., spending by different health insurance programs, out-of-pocket, and other third-party payers). In 2021, private health insurance (PHI) spending was 28.5 percent of NHE (or $1,211.4 billion). PHI has had the largest share of spending for the past four decades and, since as early as 1990, PHI consistently made up over 30 percent of health spending. However, the share of PHI spending decreased from 30.8 percent in 2019 to 27.6 percent in 2020. This was both due to the other federal programs and government public health activities categories becoming a larger share of spending because of the pandemic while spending in PHI decreased (discussed further in the next section).

In 2021, Medicare made up 21.1 percent of total health spending ($900.8 billion), Medicaid made up 17.2 percent ($734.0 billion), and out-of-pocket spending made up 10.3 percent ($433.2 billion). The latter includes any payments made directly by patients regardless of insurance status (e.g., pre-deductible spending, copayment and coinsurance payments of insured patients, as well as payments made by uninsured patients). Other health insurance programs accounted for 4.0 percent of total health spending ($172.1 billion) and spending by other third-party payers and programs was 7.9 percent ($337.1 billion).[6] Government public health activities was 4.4 percent ($187.6 billion) and other federal programs was 1.7 percent ($71.9 billion) – as discussed earlier, these two categories reflect government spending related to the pandemic. Other federal programs had a near zero share in spending for decades, increasing in 2020 to 4.7 percent of total spending due to spending on federal relief programs. Although lesser than in 2020, the share continues to be notable in 2021, as some funding continues.

Spending growth

This section examines the annual spending growth for the four main sources of health care funding (private health insurance, Medicare, Medicaid, and out-of-pocket spending) over the 10-year period ending in 2021 (Exhibit 5). There were minor fluctuations in annual spending growth throughout this period, with the ACA implementation and COVID-19 pandemic resulting in more substantial changes.

Exhibit 5 shows that spending accelerated across all four main sources in 2014 during the implementation of the ACA. Private health insurance growth reached a high of 5.8 percent in 2015 but later dropped to a low of 2.5 percent in 2019 as different components offset each other over this period (notably fluctuations in the ACA health insurance fee counterbalancing changes in medical benefits, use of medical goods and services, and/or enrollment rates).[7] In 2020, spending decreased by 1.1 percent. Private health insurers had to balance the unexpected decrease in utilization of medical goods and services from the pandemic with the ACA medical loss ratio (MLR) provision that requires insurers to spend at least 80 percent (85 percent for larger group insurers) of their premium income on health care claims and quality improvement (Ortaliza et al., 2022). Private health insurers were partly able to mitigate the situation by waving cost-sharing related to COVID-19 and increasing the scope of telehealth. Nonetheless, MLR for 2020 was lower than past years (see Ortaliza et al., 2022 and McDermott and Cox, 2021). In 2021, spending grew 5.8 percent as enrollment increased with the economy recovering and per enrollee spending increased as individuals were able to access more medical goods and services.

From 2010 to 2017, Medicare spending growth remained stable (around 4 percent) but spiked to 6.3 percent in 2018 and 7.0 percent in 2019 related to acceleration in Medicare private plan spending for both years and the reintroduction of the ACA health insurance fee in 2018. In 2020, the pandemic led to deceleration in Medicare spending (3.6 percent) as decreased utilization offset the reintroduction of the ACA fee that year. By 2021, Medicare spending accelerated to 8.4 percent. This

[6] In the NHE tables, other third party payers and programs includes other federal programs. For this report, other federal programs was made a separate category.

[7] The ACA health insurance fee is an annual fee levied on private insurers that was suspended in 2017 and 2019, and completely repealed in 2021. See Rama (2021) for details. Private insurers include those that contract with government organizations (e.g., Medicare Advantage Part C, Medicare prescription drug plans Part D, or Medicaid managed care plans).

was driven by increased utilization of medical goods and services from the fee-for-service plan (i.e., per enrollee spending in fee-for-service accelerated from -2.0 percent growth in 2020 to 8.0 percent growth in 2021).

Patterns in Medicaid were heavily impacted by the economy (i.e., recession) and government policies (i.e., expansion of provider reimbursement rates and state benefits). Medicaid spending growth – which had initially spiked to 12.0 percent in 2014 and 9.0 percent in 2015 during ACA implementation – remained below 4 percent through 2019. This post-implementation consistency in growth, however, masks underlying differences since enrollment growth outpaced per enrollee spending growth in 2016 whereas there were decreases in enrollment but acceleration in per enrollee spending in both 2018 and 2019. Unlike the other sources, Medicaid spending substantially accelerated in 2020 (9.2 percent growth). This was driven by an acceleration in enrollment growth (from -0.9 percent in 2019 to 4.8 percent in 2020) as the Families First Coronavirus Response Act included the continuous enrollment requirement that incentivized states to retain Medicaid beneficiaries (Martin et al., 2023). In 2021, enrollment continued to accelerate (11.2 percent growth) but per enrollee spending decreased (-1.8 percent growth) because new enrollees were mainly qualifying children and adults that have lower per enrollee expenditures than disabled and elderly enrollees (Martin et al., 2023). As such, Medicaid spending growth remained stable, at 9.2 percent, in 2021.

From 2012 through 2019, out-of-pocket spending was generally impacted by government policies (e.g., ACA) and growth in plans requiring higher cost-sharing or changes in health insurance coverage. Prior to the pandemic, out-of-pocket spending growth remained around 3 or 4 percent, only 2013 (2.4 percent) and 2017 (1.9 percent) had lower growth rates. In 2020, out-of-pocket spending decreased by 2.6 percent (from $403 billion to $392.3 billion) when access to care was limited due to the pandemic. However, by 2021, in tandem with increased utilization of medical goods and services, there was a 10.4 percent increase in spending (to $433.2 billion). Martin et al. (2023) note that this acceleration was driven by out-of-pocket spending growth for dental services, durable medical equipment, other nondurable medical products, and physician and clinical services.

Spending by sponsor: how is all that financed?

Finally, this section examines how health care spending is sponsored (i.e., the origin of the funding or the initial financing of the spending). For 2020 and 2021, Exhibit 6 presents the shares of health care spending by the five sponsors: private businesses, households, other private revenues, the federal government, and state and local governments.

In 2021, the federal government financed $1,457.2 billion or 34.3 percent of total spending. Although Exhibit 6 shows the federal government as the largest financier, this was not always the case. Households were generally the largest financier until 2015 and, even after the federal government surpassed households that year, the two financiers generally remained within a percentage point of each other until the pandemic. The unparalleled uptick in federal government spending from managing the pandemic resulted in the federal government share increasing from 29.4 percent in 2019 (data not shown) to 36.4 percent – a 7 percentage point increase. The 2021 level and share dropped from 2020 but, because pandemic-related spending continues albeit at a lower level, it is still substantially higher than pre-pandemic levels and shares.

In 2021, the 3.5 percent decrease in federal government financing was primarily driven by decreases in spending related to managing the pandemic. Other federal programs spending decreased by 62.7 percent (from $193.1 billion to $71.9 billion) and the federal portion of government public health activity spending decreased by 41.9 percent (from $135.8 billion in 2020 to $78.8 billion in 2021). Also a contributing factor, the federal portion of Medicaid payments decelerated (growing 18.8 percent in 2020 but only 10.8 percent in 2021). The federal government had taken an increasing role in Medicaid in 2020 due to the Families First Coronavirus Response Act and state expansions of Medicaid coverage (Hartman et al., 2022) – much of this abated by 2021. A small, but notable, offset is the acceleration of Federal general revenue and Medicare Net Trust Fund expenditures which increased by only 3.2 percent in 2020 but 10.8 percent in 2021, the latter approaching the 10.1 percent growth rate in 2019 (data not shown). The $410.9 billion level in 2021 reflects funds from general tax revenue that were not initially appropriated for Medicare. In essence, this financing reflects excess spending the federal government must engage in to finance Medicare. This subcategory previously made up less than 6 percent of total health spending but since the implementation of Medicare Part D (2006) it has steadily grown to be 10 percent of total health spending.

Households financed $1,143.6 billion, or 26.9 percent of health care spending in 2021. This reflects an increase in both the level and share of financing from 2020 ($1,077.7 billion or 26.0 percent). This change was primarily driven by the spike in out-of-pocket spending discussed earlier. Further, as the economy pulled out of the recession and employment increased in 2021, employee contributions to the Medicare hospital trust fund also grew (6.5 percent in 2021 compared to 3.8 percent in 2020) while employee contribution to employer-sponsored insurance remained stable (2.8 percent growth in both 2021 and 2020).

Private businesses financed $734.0 billion or 17.2 percent of health care spending in 2021. Whereas in 2020 private business financing decreased by 2.9 percent, by 2021 growth was 6.5 percent. Similar to households, this was primarily driven by changes in employment due to the economy recovering from the pandemic-driven recession. Notably, in 2020, there was a 3.0 percent decrease in employer contributions to employer sponsored health insurance premiums but, by 2021, spending in this category increased by 6.5 percent. Likewise, employer Medicare hospital insurance trust fund payroll financing increased by 9.0 percent in 2021 but only 1.5 percent in 2020.

Finally, the smallest sponsors in 2021 were state and local governments (14.8 percent or $629.0 billion) and then other private revenues (6.8 percent or $291.3 billion). In 2020, financing by state and local governments decreased by 1.9 percent – this was driven by decreased contributions related to the state's role as an employer (i.e., decrease in employer contributions to employer sponsored premiums and slower growth in Medicare hospital insurance trust fund payroll) as well as the federal government taking on a greater level of Medicaid financing. By 2021, financing accelerated to 5.8 percent due to increased contributions related to employer-sponsored insurance as the economy recovered from the recession and shift away from federal medical assistance in Medicaid payments (Martin et al., 2023).

Conclusion

In 2021, U.S. health care spending increased by 2.7 percent to $4,255.1 billion or $12,914 per capita. In comparison, spending grew 10.3 percent in 2020 during the pandemic. Health spending was 18.3 percent of GDP in 2021, down from 19.7 percent in 2020 but still up from 17.6 percent in 2019 and 2018. The deceleration in spending was driven by decreases in federal government spending to manage the pandemic outpacing increases in utilization of medical goods and services.

Personal health care spending made up 83.5 percent of total health spending (or $3,553.4 billion). The main components of personal health care spending are spending on hospital care (31.1 percent of total health spending or $1,323.9 billion), physician services (14.9 percent or $633.4 billion), clinical services (5.4 percent or $231.2 billion), and prescription drugs (8.9 percent or $378.0 billion). Personal health care spending growth was 5.5 percent in 2021, with subcomponents clinical services (7.0 percent) and prescription drugs (7.8 percent) having higher spending growth rates than physician services (5.1 percent) and hospital care (4.4 percent). While spending in physician services and hospital care was driven by federal relief program expenditures in 2020, increased utilization of medical goods and services was the driving factor in 2021.

Because of the pandemic, from 2019 to 2020, there were substantial increases in government public health activities (i.e., government expenditures to prevent or control public health concerns and to organize and deliver publicly provided health services) – from $107.1 billion to $238.3 billion – and other federal programs (i.e., pandemic-related relief from the Provider Relief Fund and the Paycheck Protection Program) – from $14.0 billion to $193.1 billion. In 2021, there was a decrease in this spending (to $187.6 billion for public health activities and $71.8 billion for other federal programs), but this drop was not substantial enough to allow either category to reach pre-pandemic levels. Without these expenditures (i.e., considering only spending related to utilization of medical goods and services as well as operations and insurer cost), NHE would have increased 2.1 percent in 2020 and 7.6 percent in 2021. Likewise, personal health care expenditures would have increased 0.5 percent in 2020 and 9.7 percent in 2021.

Decomposing national health care spending by source of funds, the largest share of spending came from private health insurance (28.5 percent of total health spending or $1,211.4 billion), followed by Medicare (21.2 percent or $900.8 billion), Medicaid (17.2 percent or $734.0 billion), and then out-of-pocket spending (10.2 percent or $433.2 billion). Over the ten-year period ending in 2021, there have been fluctuations in spending growth across sources. Prior to the pandemic, shifts in utilization and access to care in addition to policies and provisions from the ACA played a role in spending growth across sources. Private health insurance spending decreased in 2020 (by 1.1 percent) but increased by 5.8 percent in 2021 as utilization of medical goods and services rebounded. Medicare spending decelerated in 2020 (3.6 percent growth) and accelerated in 2021 (8.4 percent growth), the latter driven by increased utilization of medical goods and services from Medicare fee-for-service. Unlike the other sources, Medicaid spending substantially accelerated in 2020 (9.2 percent growth) due to the Families First Coronavirus Response Act accelerating Medicaid enrollment. This growth remained stable in 2021 (9.2 percent) as continued acceleration in Medicaid enrollment offset decreases in per enrollee spending that resulted from less costly patients enrolling into the program. Lastly, out-of-pocket spending declined by 2.6 percent in 2020 when access to medical goods and

services were limited due to the pandemic, increasing in 2021 by 10.4 percent when utilization rebounded.

Finally, with regard to sponsors, the largest share of spending, 34.2 percent, came from the federal government ($1,457.2 billion). Federal government spending was less than 30 percent of health spending prior to the pandemic but expenditures from public health activities and other federal programs during the pandemic increased the share to 36.4 percent in 2020. Although such expenditures have decreased, they are still substantial enough to keep federal government spending to over a third of health care spending. Households financed 26.9 percent of health spending (or $1,143.6 billion), private businesses financed 17.3 percent (or $734.0 billion), and state and local governments financed 14.8 percent (or $629.0 billion).

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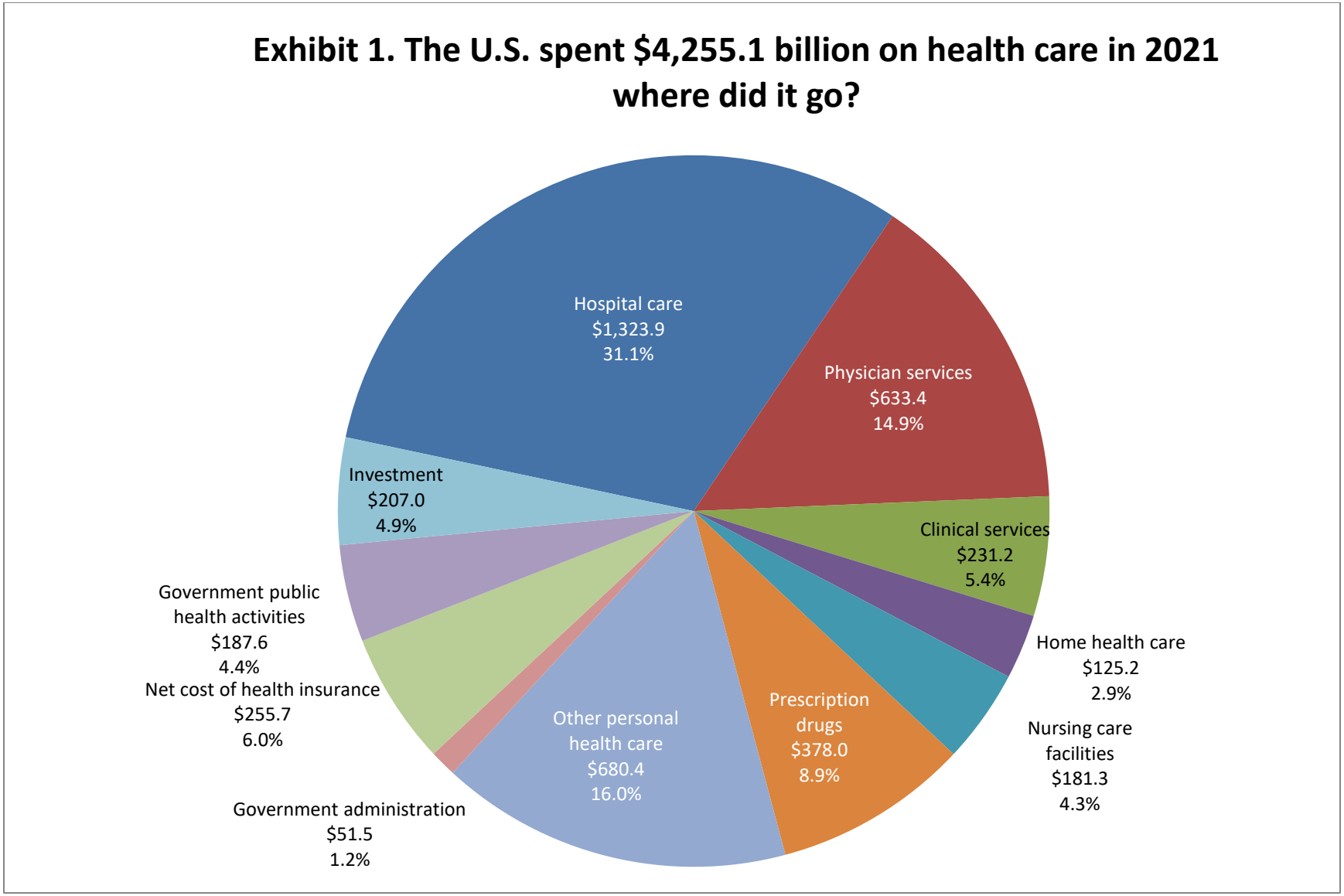
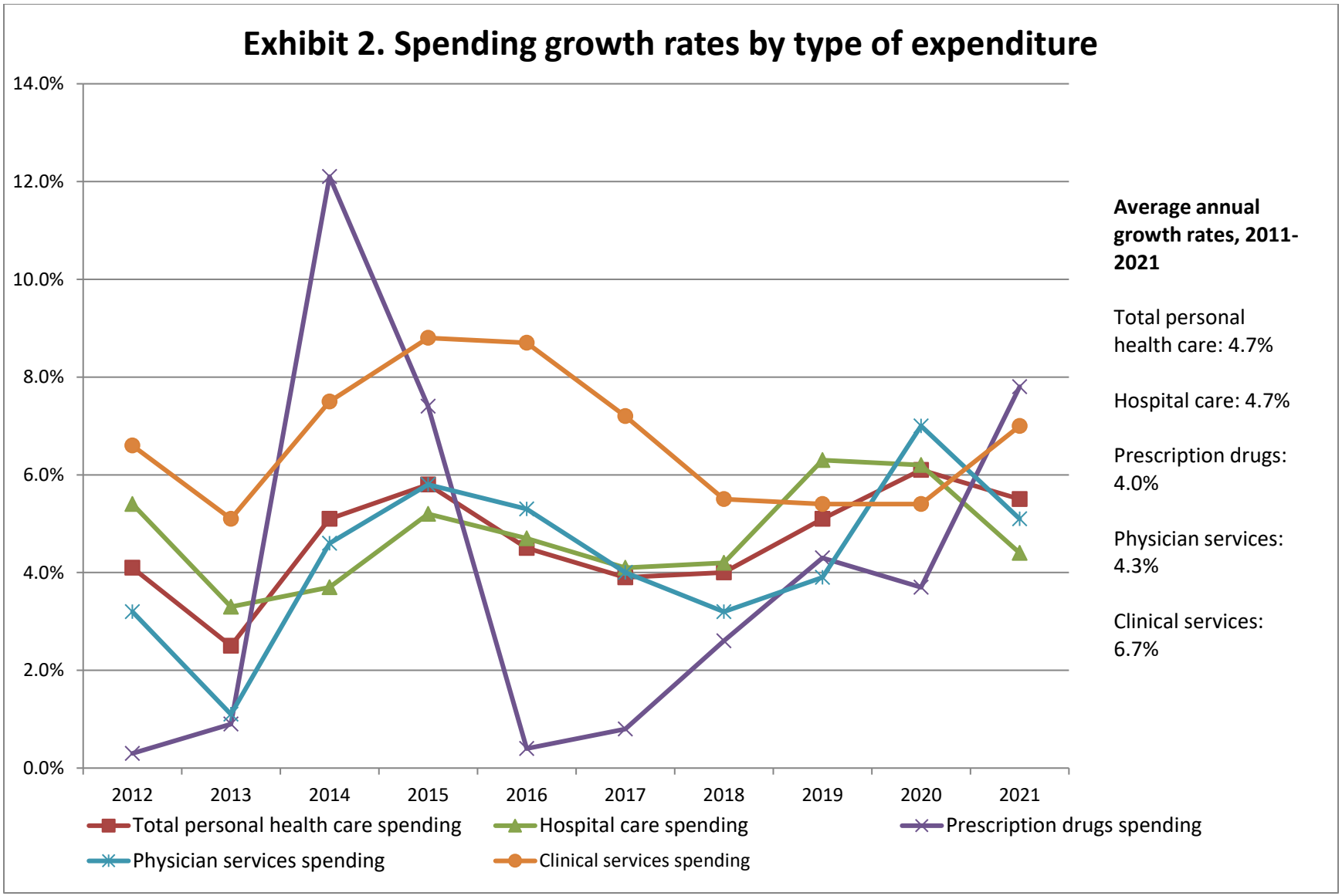


Source: https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical. Table 2, 9, and 10 in NHE Tables [ZIP].

Exhibit 2. Spending growth rates by type of expenditure



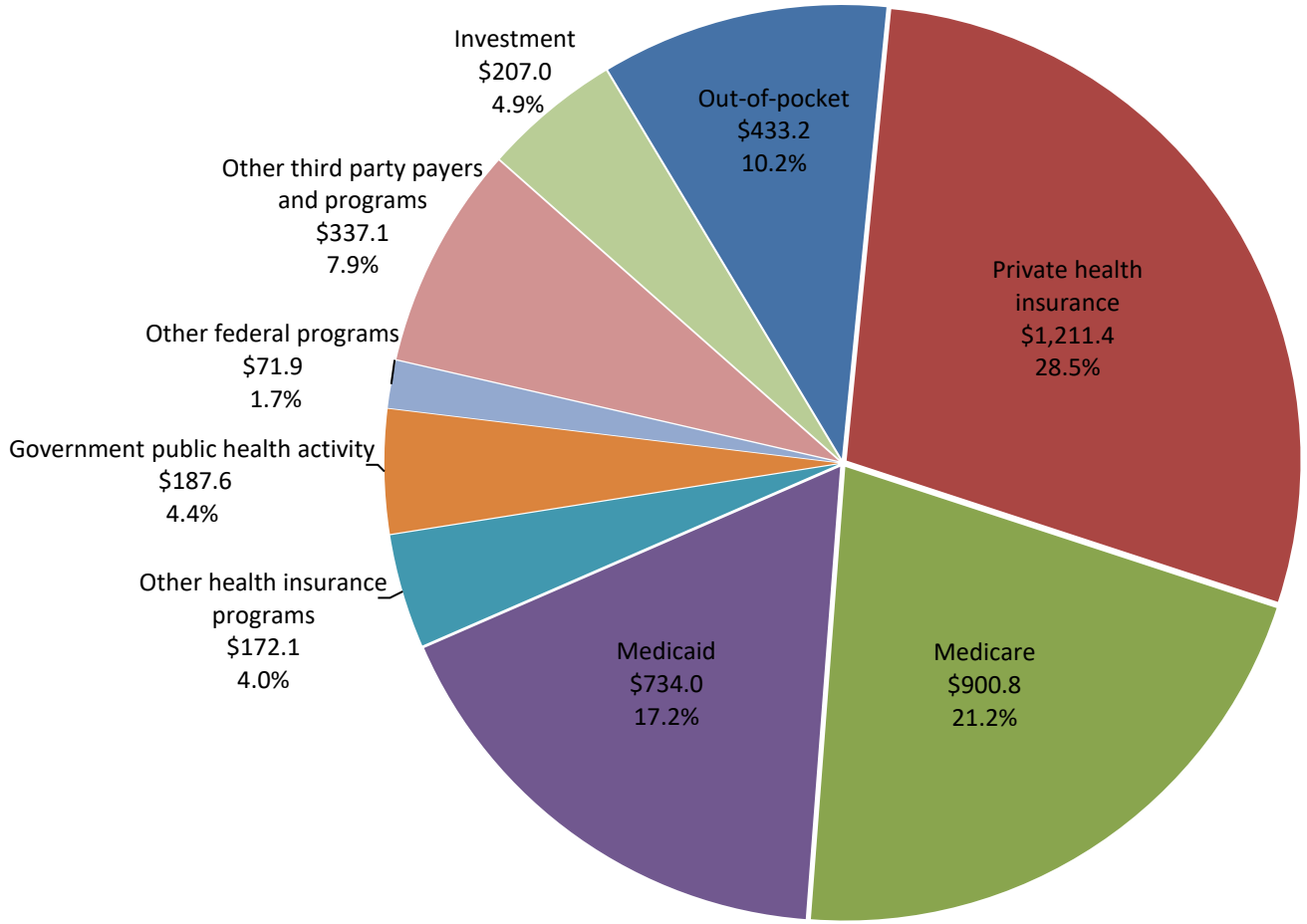
Source: https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical. Table 6,7,9,10, and 16 in NHE Tables [ZIP].

Exhibit 3. NHE Type of expenditure, official estimates for 2019, 2020, and 2021

	2019		2020		2021		Average annual
	Level	Growth from previous year	Level	Growth from previous year	Level	Growth from previous year	Growth from 2019 to 2021
Total health spending							
NHE	$3,757.4	4.2%	$4,144.1	10.3%	$4,255.1	2.7%	6.4%
Other federal programs (OFP)	$14.0	9.2%	$193.1	1276.1%	$71.9	-62.7%	126.4%
Government public health activities (GPHA)	$107.1	7.7%	$238.3	122.5%	$187.6	-21.3%	32.4%
NHE excluding GPHA and OFP	$3,636.3	4.1%	$3,712.7	2.1%	$3,995.6	7.6%	4.8%
Personal health care spending							
Personal health care spending	$3,173.1	5.1%	$3,367.0	6.1%	$3,553.4	5.5%	5.8%
Other federal programs	$13.5	9.8%	$192.6	1322.3%	$71.3	-63.0%	129.6%
Personal health care spending excluding OFP	$3,159.5	5.1%	$3,174.4	0.5%	$3,482.0	9.7%	5.0%
Hospital care spending							
Hospital care spending	$1,193.6	6.3%	$1,267.8	6.2%	$1,323.9	4.4%	5.3%
Other federal programs	$1.9	11.6%	$86.6	4449.0%	$19.4	-77.6%	219.3%
Hospital care spending excluding OFP	$1,191.7	6.3%	$1,181.3	-0.9%	$1,304.5	10.4%	4.6%
Physician services spending							
Physician services spending	$562.9	3.9%	$602.4	7.0%	$633.4	5.1%	6.1%
Other federal programs	$0.0	NA	$35.5	NA	$10.4	-70.8%	NA
Physician services spending excluding OFP	$562.9	3.9%	$566.9	0.7%	$623.0	9.9%	5.2%

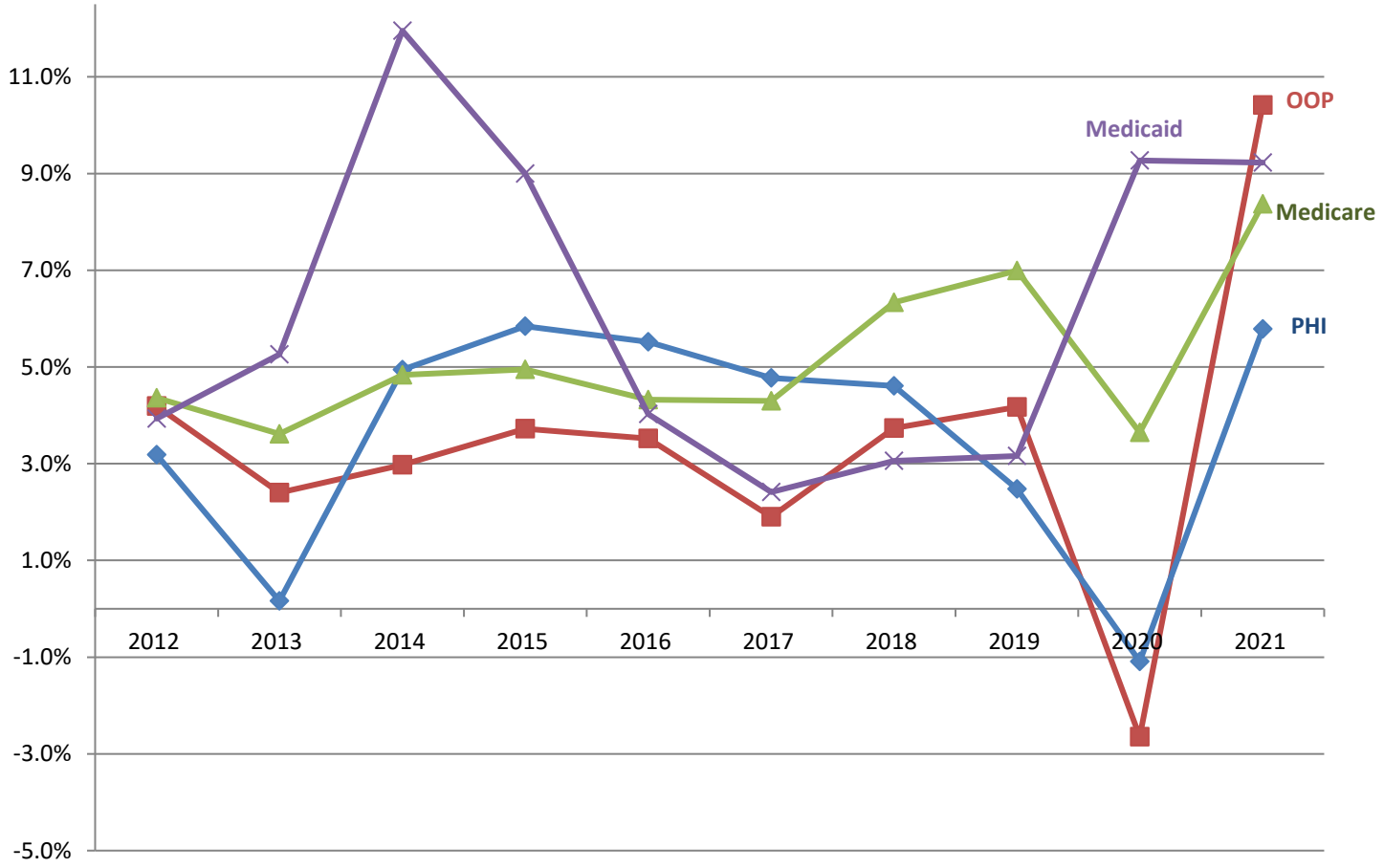
Source: https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical. Table NHE2021 in NHE Tables [ZIP] and unpublished details provided by CMS.

Exhibit 4. Who pays the bill?
2021 health care spending decomposed by source of funds



Source: https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical. Table 3 and NHE2021 in NHE Tables [ZIP].

Exhibit 5. Spending growth rates by source of funds



Average annual growth rates, 2011-2021

Out-of-pocket (OOP): 3.4%

Private health insurance (PHI): 3.6%

Medicare: 5.2%

Medicaid: 6.1%

Source: https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical. Table NHE2021 in NHE Tables [ZIP].

Exhibit 6. NHE Financing in 2020 and 2021 (billions of dollars)

	2020			2021		
SPONSOR	**Level**	**Share of total spending**	**Growth from previous year**	**Level**	**Share of total spending**	**Growth from previous year**
Private business						
Employer contribution to employer sponsored health insurance premiums	$520.1	12.6%	-3.0%	$553.7	13.0%	6.5%
Employer Medicare Hospital Insurance Trust Fund payroll taxes	$120.4	2.9%	1.5%	$131.3	3.1%	9.0%
Workers' compensation and temporary disability insurance	$41.1	1.0%	-13.4%	$40.8	1.0%	-0.6%
Worksite health care	$7.4	0.2%	-1.5%	$8.2	0.2%	11.1%
Total private business	**$689.0**	**16.6%**	**-2.9%**	**$734.0**	**17.2%**	**6.5%**
Household						
Employee contribution to employer-sponsored health insurance premiums	$285.9	6.9%	2.8%	$294.0	6.9%	2.8%
Household contribution to direct purchase insurance	$75.1	1.8%	2.1%	$74.6	1.8%	-0.6%
Medical portion of property and casualty insurance	$38.1	0.9%	-1.3%	$39.0	0.9%	2.3%
Employee and self-employment payroll taxes and voluntary premiums paid to Medicare Hospital Insurance Trust Fund	$183.1	4.4%	3.8%	$194.9	4.6%	6.5%
Premiums paid by individuals to Medicare Supplementary Medical Insurance Trust Fund and the Pre-existing Condition Insurance Plan	$103.2	2.5%	8.1%	$107.9	2.5%	4.5%
Out-of-pocket health spending	$392.3	9.5%	-2.6%	$433.2	10.2%	10.4%
Total household	**$1,077.7**	**26.0%**	**1.2%**	**$1,143.6**	**26.9%**	**6.1%**
Other private revenues	**$272.5**	**6.6%**	**-0.1%**	**$291.3**	**6.8%**	**6.9%**

Source: https://www.cms.gov/research-statistics-data-and-systems/statistics-trends-and-reports/nationalhealthexpenddata/nationalhealthaccountshistorical. Table 5, 5-1, 5-2, 5-3, 5-4, 5-5, 5-6 in NHE Tables [ZIP].

Exhibit 6. continued

SPONSOR	2020 Level	2020 Share of total spending	2020 Growth from previous year	2021 Level	2021 Share of total spending	2021 Growth from previous year
Federal government						
Employer contribution to employer-sponsored health insurance premiums	$39.8	1.0%	3.2%	$41.0	1.0%	3.1%
Employer Medicare Hospital Insurance Trust Fund payroll taxes	$4.8	0.1%	4.2%	$4.9	0.1%	2.4%
Federal general revenue and Medicare Net Trust Fund expenditures	$371.0	9.0%	3.2%	$410.9	9.7%	10.8%
Federal portion of Medicaid payments	$460.6	11.1%	18.8%	$513.0	12.1%	11.4%
Federal portion of Medicare buy-in premiums	$14.1	0.3%	19.6%	$14.9	0.4%	5.8%
Retiree Drug Subsidy payments to employer-sponsored health insurance plans	$0.6	0.0%	-9.2%	$0.6	0.0%	-10.5%
Federal portion of government public health activity	$135.8	3.3%	921.4%	$78.8	1.9%	-41.9%
Other federal programs	$193.1	4.7%	1276.1%	$71.9	1.7%	-62.7%
Other federal health insurance and programs	$240.5	5.8%	7.5%	$261.1	6.1%	8.6%
Marketplace tax credits and subsidies	$50.2	1.2%	0.8%	$60.0	1.4%	19.4%
Total federal government	**$1,510.4**	**36.4%**	**36.8%**	**$1,457.2**	**34.2%**	**-3.5%**
State and local government						
Employer contribution to employer-sponsored health insurance premiums	$167.5	4.0%	-4.4%	$179.6	4.2%	7.3%
Employer Medicare Hospital Insurance Trust Fund payroll taxes	$15.8	0.4%	2.9%	$16.3	0.4%	3.2%
State portion of Medicaid payments	$211.4	5.1%	-7.0%	$221.0	5.2%	4.6%
State portion of Medicare buy-in premiums	$7.2	0.2%	-8.1%	$7.5	0.2%	4.1%
State phase down payments (Part D)	$11.6	0.3%	-5.7%	$12.1	0.3%	4.3%
State portion of government public health activities	$102.5	2.5%	9.3%	$108.8	2.6%	6.1%
Other programs	$78.4	1.9%	5.8%	$83.6	2.0%	6.7%
Total state and local government	**$594.4**	**14.3%**	**-1.9%**	**$629.0**	**14.8%**	**5.8%**
TOTAL	**$4,144.1**	**100%**	**10.3%**	**$4,255.1**	**100%**	**2.7%**