Policy Research Perspectives

National Health Expenditures, 2015: Annual Spending Growth at its Highest Rate Since 2007

By Carol K. Kane, PhD

Introduction

This Policy Research Perspective (PRP) provides an in-depth look at U.S. national health expenditures (NHE) in 2015. Data for 2015 are the most recent available and were released by the Centers for Medicare and Medicaid Services (CMS) in December 2016 (Martin, et al.; CMS). As with every annual release, estimates for previous years were also revised. This PRP also examines how certain components of spending have changed over time.

NHE grew at a rate of 5.8 percent in 2015 to a level of $3,205.6 billion dollars or $9,990 on a per capita basis. In comparison, spending grew by 5.3 percent in 2014 and by an average of 3.7 percent per year over the five-year period from 2008 to 2013. Although the 2015 growth rate is the highest single year growth rate since 2007 (6.5 percent), it is still low by historical standards. Going back to the early 1960s when health spending data was first collected in its current format, there are only a handful of years in the mid-1990s when spending grew more slowly than it did in 2015. As in 2014, spending growth in 2015 was affected by coverage expansions resulting from the Affordable Care Act (ACA) that increased the use and intensity of healthcare services. Although physician spending was affected by those expansions, the 10-year (2005 to 2015) average annual growth rate of 3.9 percent in physician spending was lower than the average rates for other large categories of personal healthcare spending.

Looking at spending as a percentage of gross domestic product (GDP) allows one to see what share of our national resources are devoted to healthcare and—on the flip side—are not available for other types of consumption or investment. Because the 2015 growth rate for health spending was greater than that for GDP (3.7 percent), this share increased from 17.4 percent in 2014 to 17.8 percent in 2015. This share is more than 2 percentage points higher than it was 10 years ago (15.5 percent in 2005). CMS projects that by 2025 health spending will consume 19.9 percent of GDP (Keehan, et al.).

What are national healthcare expenditures?

CMS categorizes health spending in three different ways:

- The categories under type of expenditure answer the question “Where does the money go?” Healthcare expenditures can either be saved and put toward research, structures, and equipment (investment), or consumed today (health consumption expenditures). The bulk of

health consumption expenditures is made up of what CMS terms "personal healthcare spending." Personal healthcare includes spending on services, procedures, or products such as hospital stays, physician provided services, and prescription drugs. Separate from personal healthcare, health consumption expenditures also include spending on administration, public health, and the profits of private health insurers.

- The categories under source of funds answer "Who pays the bill" for the health consumption expenditures? Here, CMS identifies the payments made under different types of health insurance programs (private, Medicare, Medicaid, and other) as well as payments made by other third party payers that are not considered to be a form of health insurance (e.g., workers compensation). Out-of-pocket spending is also a source of funds for health consumption expenditures.
- Finally, the categories under sponsor answer "And how is all that financed?" Financing is different than who pays the bill. For example, while the care of many patients is paid for by private health insurer payments (a type of source of funds), those payments come from the premium revenue of insurers. Premiums, in turn, are generally funded by employees and employers, so households and private businesses would be the ultimate financing sources for that spending and are two examples of sponsors. Federal, state, and local governments are others.

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

Figure 1 shows the breakdown of NHE by type of expenditure.

As outlined above, health consumption expenditures (HCE) is the name for health spending that is consumed today rather than saved. A very large portion of health spending, 95.2 percent in 2015, falls into this broad category. HCE is further divided into spending on personal healthcare, government public health activities, government administration, and the net cost of health insurance.

Personal healthcare spending is what we traditionally think of with regard to spending—spending on hospital stays, visits to the physician, or on prescription drugs. In the aggregate, 2015 personal healthcare spending was $2,717.2 billion, or 84.8 percent of total health spending.

Large categories of personal healthcare spending are shown in Figure 1. Thirty-two percent of 2015 healthcare spending ($1,036.1 billion) was for hospital services. Spending on physician services ($502.8 billion) accounted for 15.7 percent of spending, and spending on retail outlet sales of prescription drugs ($324.6 billion) 10.1 percent. Spending on clinical services, often shown combined with spending on physician services, is shown separately here and accounted for 4.1 percent of spending ($132.1 billion) in 2015.[1] Spending on nursing care and home healthcare each accounted for 4.9 percent and 2.8 percent of spending, respectively ($156.8 billion and $88.8 billion). Fifteen percent of personal healthcare spending ($476 billion) was for other services not identified separately in Figure 1.[2]

[1] Clinical spending includes spending made in establishments classified as outpatient care centers under the North American Industry Classification System (NAICS). Outpatient care centers include family planning, outpatient mental health and substance abuse, HMO medical, kidney dialysis, freestanding ambulatory surgical and emergency, and other not already categorized outpatient care centers.
[2] The nursing home category also includes care provided in continuing care retirement communities.

Spending on government public health activities in 2015 was $80.9 billion or 2.5 percent of total spending. Government administration spending amounted to $42.6 billion or 1.3 percent of total spending.

The net cost of health insurance is the difference between incurred premiums for private health insurance and the amount paid for benefits—what insurance companies have left over after benefits are paid. This category includes administrative costs, additions to reserves, rate credits and dividends, premium taxes and plan profits or losses. It also reflects the difference between premiums and benefits for private health insurance companies that insure Medicare, Medicaid and CHIP enrollees. In 2015, the net cost of health insurance was $210.1 billion or 6.6 percent of total health spending. Outside of the broad category of HCE is health spending that is invested. Five percent ($154.7 billion) of health spending was invested in 2015.

The shares shown in Figure 1 have been relatively stable over the past 25 years. For example, the biggest percentage point difference between what we spent our healthcare dollars on in 2015 and in 1990 is in prescription drugs. In contrast to the 10.1 percent share in 2015, spending in that category accounted for only 5.6 percent of spending in 1990. The drug share of total health spending has been at or above 9 percent since 2001.

Figure 2 compares the 2006 through 2015 annual growth rates for personal healthcare spending in the aggregate and for its three largest components: hospital care, physician and clinical services, and prescription drugs. As in Figure 1, the physician and clinical categories are shown separately. Average annual growth rates for the 2005 through 2015 period are shown on the right side of the figure.

Spending is determined both by how much and what types of healthcare are used (non-price factors) and the prices that are paid for the healthcare that is used (price factors). In turn, growth in health spending is determined by the underlying growth in those same factors. In some years, or for some categories, price growth is the driving factor behind spending growth. In other years, utilization is the reason. Since 2013, a non-price factor, increased utilization from expansions in health insurance coverage due to the ACA, has been a primary reason for acceleration in physician, clinical, and hospital spending. Hospital price growth in 2015 was only 0.9 percent—the slowest rate since 1998—and prices in the combined physician and clinical category fell by 1.1 percent.

In contrast, CMS identified price factors as an important contributor to growth in prescription drug spending. For example, 2015 marked the fourth consecutive year in which there was double-digit price growth for existing brand-name drugs. Other factors behind growth in prescription drug spending include increased spending on new medicines, increased spending on generics, and fewer patent expirations for expensive blockbuster drugs.

Physician spending grew by an average annual rate of 3.9 percent over the 10-year period from 2005 to 2015, lower than the average rates for the other large categories of personal healthcare spending, and lower than the growth rate for personal healthcare spending as a whole.

Spending by source of funds: who pays the bill?

Figure 3 shows the distribution of national healthcare spending according to its source of funds. The $3,050.8 billion in health consumption expenditures is allocated to the program that pays the bill.[3] Each of the categories includes only those amounts actually paid by those programs. All payments made directly by patients—regardless of patient insurance type or whether the patient is uninsured—are part of out-of-pocket spending.

Private health insurance spending in 2015 was $1,072.1 billion or 33.4 percent of total spending. Medicare spending, at $646.2 billion, accounted for 20.2 percent of spending, and Medicaid spending, at $545.1 billion, 17.0 percent of spending. Less than 4 percent of spending was paid for by other types of health insurance not already listed. These include CHIP and programs under the Department of Defense and Veterans Affairs. Other sources that are not considered to be health insurance) paid for 7.7 percent of healthcare spending. The percentage paid out-of-pocket was 10.5 percent.

Figure 4 provides a longer term perspective on changes in how healthcare services have been paid for. In each year, the percentages of spending from each of the categories sum to 100 percent and the data for 2015 are equivalent to those in in Figure 3. In contrast to its current share of 10.5 percent, in 1965 almost 45 percent of spending on healthcare was paid for out-of-pocket. Less than 25 percent of spending was paid for by private insurers. The share paid out-of-pocket remained higher than that paid by private health insurers until 1977. Medicare spending has exceeded out-of-pocket spending since 1993, and Medicaid spending has exceeded it since 2000. The long term changes in shares have been driven by a variety of factors including the introduction of new programs (e.g., Medicare and Medicaid in the mid-1960s), expansion of benefits (e.g., Medicare Part D in 2006), and changes in underlying economic conditions (e.g., recession-related job-loss).

Spending by sponsor: where does that money *really* come from?

Health spending by sponsor addresses the issue of financing. With regard to private health insurance spending, financing for premiums comes from *employee* contributions (which would be categorized under household sponsorship) and *employer* contributions (categorized under private business sponsorship). Although households with private health insurance make out-out-pocket payments for their healthcare (copayments, coinsurance, and payments before a deductible is reached), those out-of-pocket payments are not considered a financing source for private health insurance. Rather, out-of-pocket payments are a separate and distinct sponsor category categorized under household sponsorship.

For Medicare spending, financing sources include dedicated payroll taxes from employers and employees as well as premiums paid by individuals for Supplementary Medical Insurance (SMI). General tax revenues and trust fund expenditures also play a large role in the financing of Medicare because the dedicated financing sources are not sufficient to cover benefits and other costs. As with private health insurance spending, out-of-pocket payments made by Medicare beneficiaries are not a funding source for Medicare spending.

[3] CMS does not show the sources of funding for health related investments ($154.7 billion or 4.8 percent of NHE).

Figure 5 shows the breakdown of 2015 health spending by sponsor. To the far right, it has the breakdown of overall spending—19.9 percent by private business, 27.7 percent by households, 28.7 percent by the federal government, 17.1 percent from state/local governments, and 6.7 percent from other private sources. 2015 is the first year in which the federal share exceeded the household share. The left and middle columns of that figure show how private health insurance spending and Medicare spending are financed.[4]

Forty-five percent of private health insurance spending was financed by private businesses through their contributions to the premiums of their enrolled employees. Thirty-two percent was financed by the household sector. This includes employee[5] contributions to premiums (23.4 percent) as well as contributions of individuals who purchase private insurance outside of their job (5.5 percent). It also includes the medical portion of premiums paid for property and casualty insurance (3.2 percent).

The federal government financed 6.1 percent of private health insurance spending in 2015. 2015 was the second year in which ACA tax credits and subsidies were available to low income individuals for the purchase of health insurance through exchanges. That source of federal financing amounted to 2.7 percent of private health insurance spending. The half a billion dollars in small business tax credits (phased in under the ACA in 2010) accounted for a negligible share of private health insurance spending. The retiree drug subsidy to employer sponsored health insurance (ESI) plans financed another 0.1 percent. Finally, the federal government is also an employer and, as such, makes contributions to the premiums of its employees. These contributions financed 3.2 percent of private spending. In a similar capacity, state and local governments' contributions to the premiums of their employees financed 16.5 percent of 2015 private health insurance spending.

With respect to Medicare spending, 15.3 percent was financed by private businesses through the payroll tax paid by private employers. Thirty-two percent of Medicare spending was financed by the household sector. This consists of employees' payroll taxes (21.6 percent) and premiums paid by individuals to the SMI trust fund (9.9 percent). Forty-nine percent of Medicare spending was financed by the federal government. Nearly all of this consisted of general tax revenue and trust fund expenditures (47.0 percent), although the payroll tax paid by the federal government in its role as an employer and the federal portion of Medicare buy-in premiums for dual beneficiaries also accounted for small shares (0.7 percent and 1.3 percent). State and local governments provided financing for 4.3 percent of Medicare spending through payroll tax contributions (2.0 percent), state phase down Part D payments (1.4 percent), and the state portion of Medicare buy-in payments (0.9 percent).

Figure 6 gives an overview of how the financing of healthcare has changed over the past 25 years. The rightmost bar—for 2015—is the same information presented for total spending in Figure 5. The household share fell almost 9 percentage points over this period, from 36.2 percent of spending in 1990 to 27.7 percent in 2015. The federal share increased from 17.2 percent to 28.7 percent. As suggested by Figure 3, the decrease in the household share is due almost entirely to the relative

[4] Absent from the figure is Medicaid spending (financed by the federal and state governments), out-of-pocket spending (financed entirely by households), and other health spending (financed from each of the sponsor types).

[5] Employee contributions include those from privately employed individuals as well as those made by state, local, and federal government employees.

decrease in out-of-pocket spending, which fell from 19.1 percent of health spending in 1990 to 10.5 percent in 2015. In contrast, the share of health spending financed through premium contributions for private health insurance and employee payroll taxes/SMI premiums (the other components of the household share) have changed little over this period.

Summary

National health expenditures grew at a rate of 5.8 percent in 2015 to a level of $3,205.6 billion dollars or $9,990 on a per capita basis. In comparison, spending grew by 5.3 percent in 2014 and by an average of 3.7 percent per year over the five-year period from 2008 to 2013. Spending growth in 2014 and 2015 was affected by coverage expansions resulting from the Affordable Care Act that increased the use and intensity of healthcare services. Because the rate of growth in health spending exceeded that for GDP, spending as a share of GDP increased from 17.4 percent in 2014 to 17.8 percent in 2015.

In 2015, 84.8 percent ($2,717.2 billion) of total healthcare spending was for personal healthcare—hospital services, physician services, prescription drugs, and the like. The remaining 15.2 percent of spending was for government administration, government public health activities, the net cost of health insurance and investment. Thirty-two percent ($1,036.1 billion) of total spending was for hospital services. Spending on physician services ($502.8 billion) accounted for 15.7 percent of spending, and spending on retail outlet sales of prescription drugs ($324.6 billion) 10.1 percent. Despite changes in the healthcare system, these shares have remained relatively constant over the past 25 years. The biggest percentage point difference between what we spent our healthcare dollars on in 2015 and in 1990 is in prescription drugs which had only a 5.6 percent share in 1990. Over the 10-year period from 2005 to 2015, physician spending grew by an average annual rate of 3.9 percent, lower than the average rates for other large categories of personal healthcare spending, and lower than the growth rate for personal healthcare spending as a whole.

Looking at spending from a source of funds perspective, 10.5 percent ($338.1 billion) of 2015 health spending was paid out-of-pocket compared to 17.0 percent ($545.1 billion) from Medicaid, 20.2 percent ($646.2 billion) from Medicare, and 33.4 percent ($1,072.1 billion) from private health insurance spending. The out-of-pocket share of spending has decreased almost continuously over the last 50 years from a high of near 45 percent in 1965.

Households financed 27.7 percent of health spending in 2015, exceeded for the first time only slightly by the federal government's share (28.7 percent). Despite the introduction of ACA tax credits and subsidies in 2014, the federal government's 28.7 percent share of spending was less than 1 percentage point higher than it was in 2010 (28.1 percent). Together, ACA tax credits and subsidies accounted for only 0.9 percent of health spending in 2015. Businesses financed 19.9 percent of health spending in 2015, and state and local governments 17.1 percent.

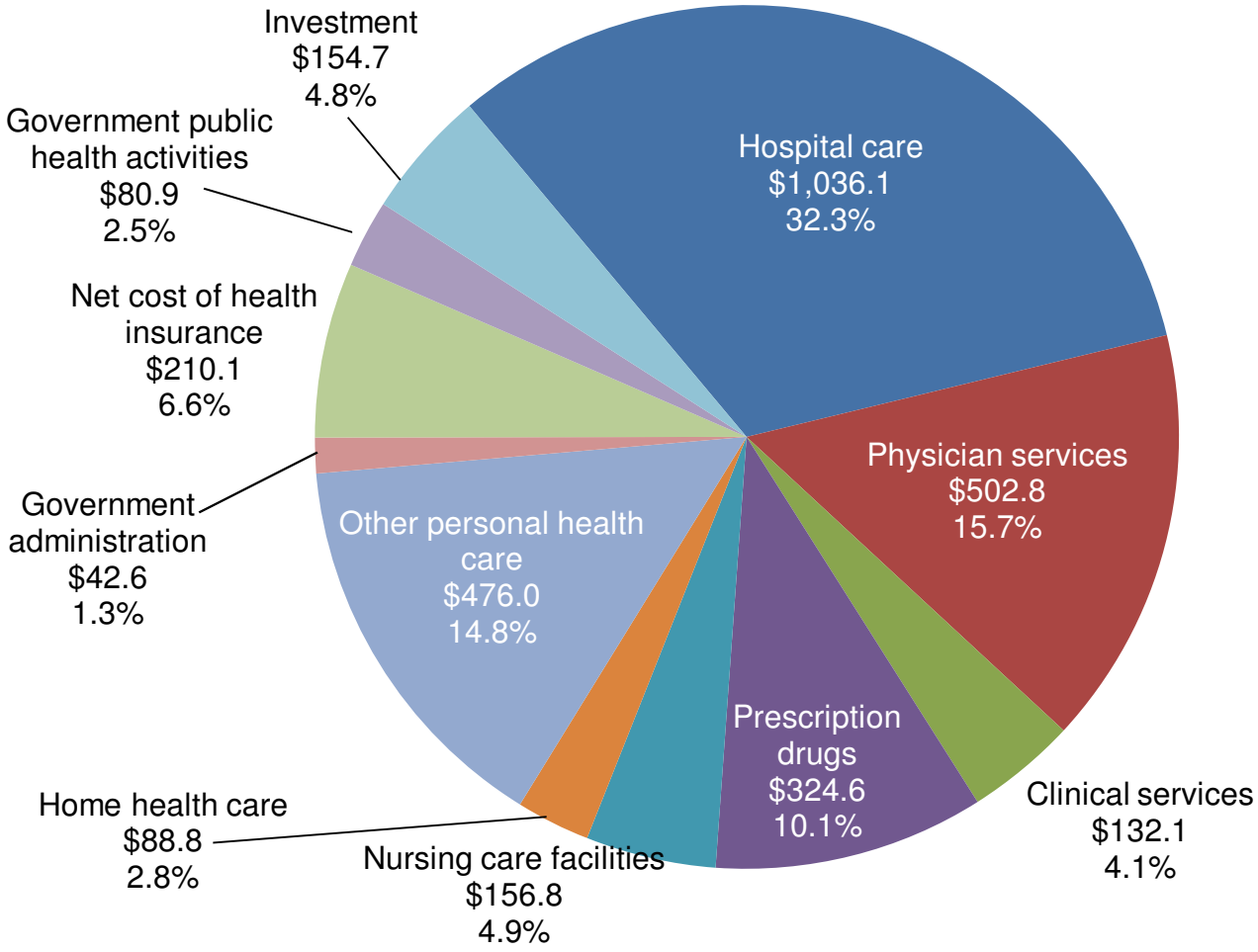
References

CMS. National health expenditure data: historical. https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html.

Keehan, SP. et al. National health expenditure projections, 2016-25: price increases, aging push sector to 20 percent of economy. Health Affairs (Project Hope). 2017;36(3). Available from http://content.healthaffairs.org/content/36/3/553.full.pdf+html.

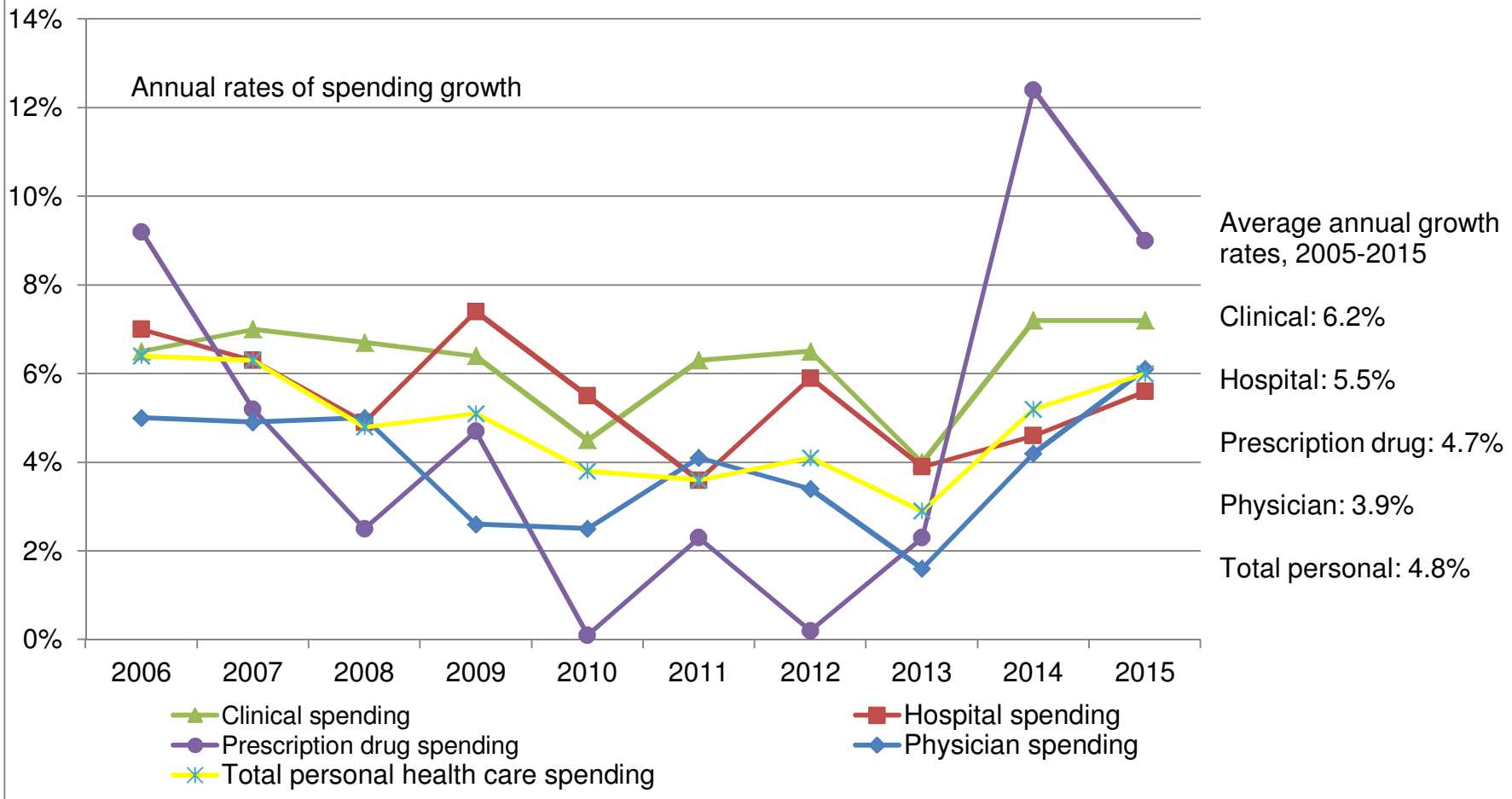
Martin, AB. et al. National health spending: faster growth in 2015 as coverage expands and utilization increases. Health Affairs (Project Hope). 2017;36(1):166-176. Available from http://content.healthaffairs.org/content/36/1/166.full.pdf+html.

Figure 1. The U.S. Spent $3,205.6 Billion on Healthcare in 2015 Where Did It Go?



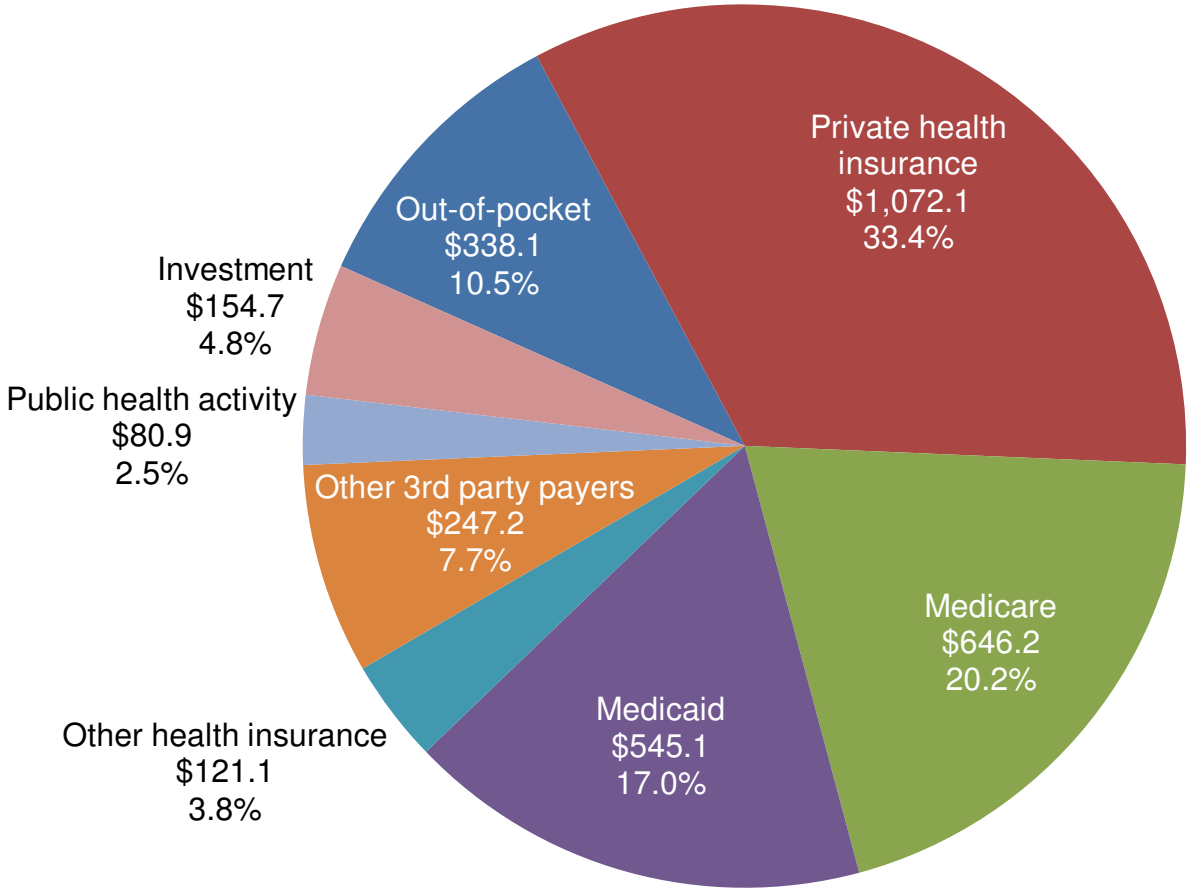
Source: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html. Tables 2, 9, and 10 in NHE Tables [ZIP].

Figure 2. Spending on Physician Services Has Grown More Slowly Than Spending in Other Categories



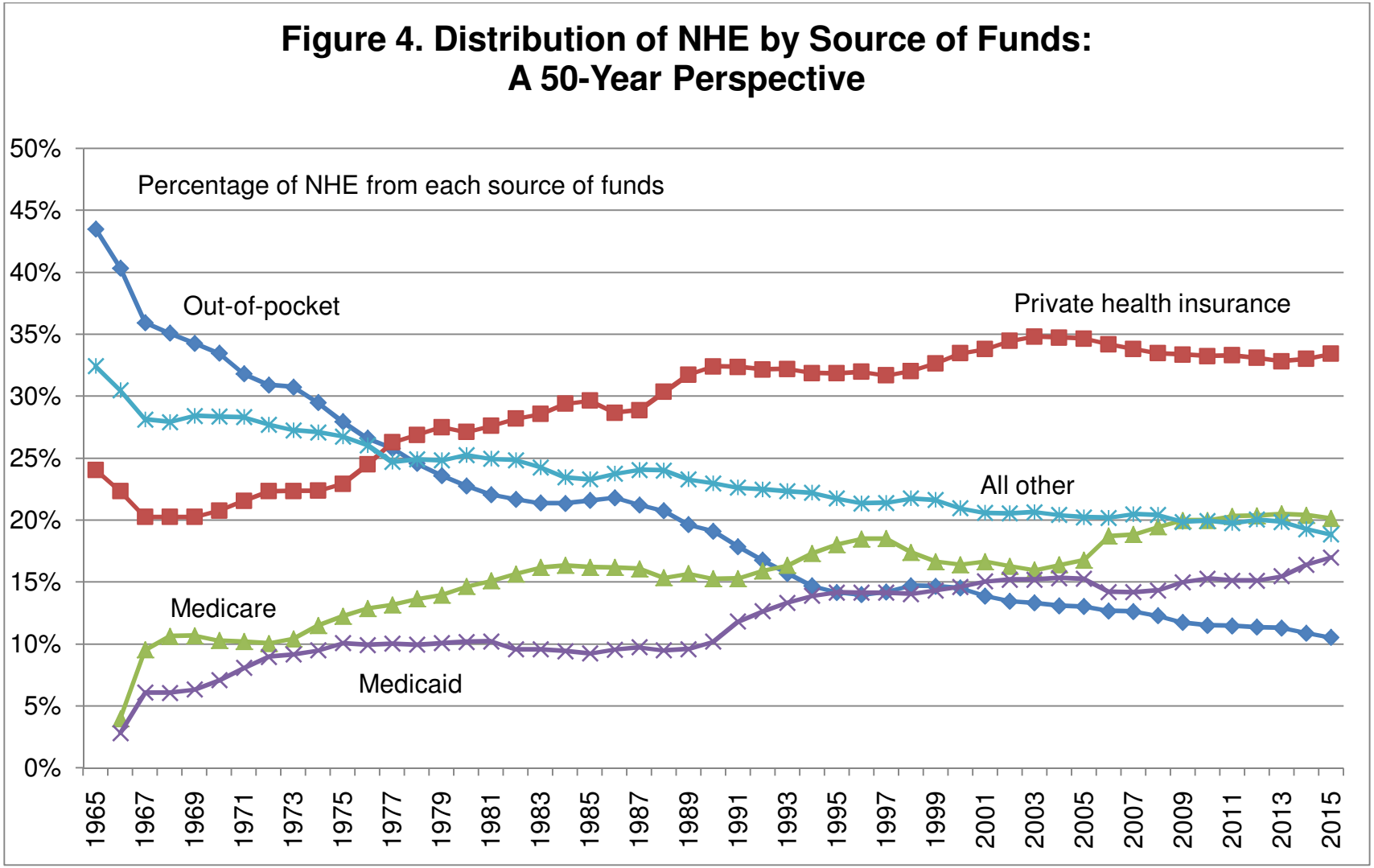
Source: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html. Tables 6, 7, 9, 10, and 16 in NHE Tables [ZIP].

Figure 3. 2015 Healthcare Spending By Source Of Funds



Source: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html. Tables 2 and 3 in NHE Tables [ZIP].

Figure 4. Distribution of NHE by Source of Funds: A 50-Year Perspective



Source: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html. NHE2015.xls in National Health Expenditures by type of service and source of funds [ZIP].

Notes: "All other" includes other types of health insurance, other 3rd party payers, public health spending, and investment. In each year, the percentages sum to 100 percent.

Figure 5. The Financing of Medicare Spending, Private Health Insurance Spending, and NHE, 2015 (billions of dollars)

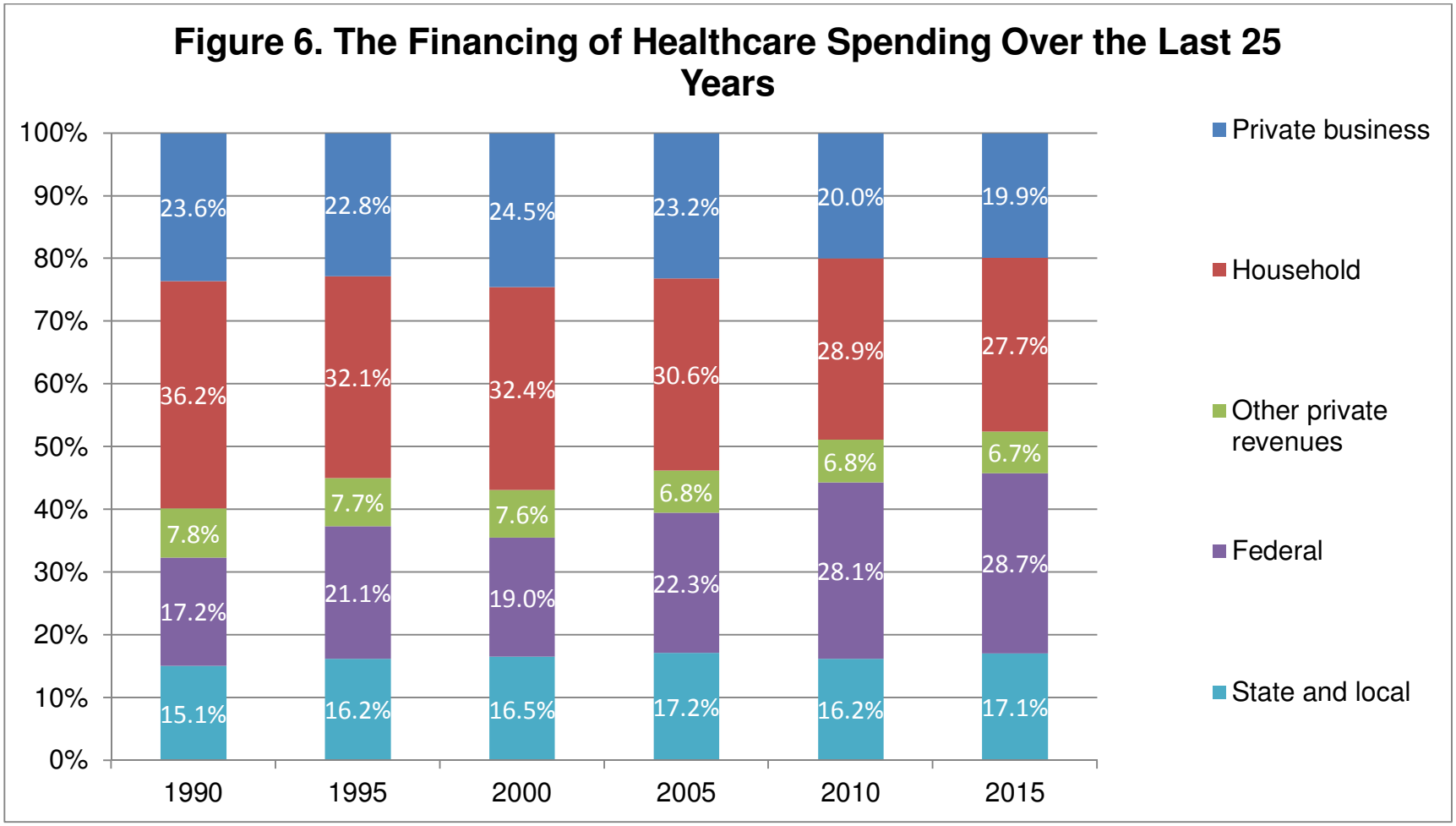
	PRIVATE SPENDING		MEDICARE SPENDING		NHE	
SPONSOR	Level	Percentage	Level	Percentage	Level	Percentage
Private business						
Employer contribution to employer sponsored health insurance premiums	$484.8	45.2%			$484.8	15.1%
Employer Medicare Hospital Insurance trust fund payroll taxes*			$98.8	15.3%	$ 98.8	3.1%
Workers compensation, temporary disability insurance, worksite healthcare					$ 54.0	1.7%
Total private business	**$484.8**	**45.2%**	**$98.8**	**15.3%**	**$637.6**	**19.9%**
Household						
Employee contribution to employer sponsored health insurance premiums	$251.3	23.4%			$251.3	7.8%
Household contribution to direct purchase health insurance	$59.5	5.5%			$59.5	1.9%
Medical portion of property and casualty	$34.5	3.2%			$34.5	1.1%
Employee/self-emp. payroll taxes and voluntary premiums paid to Medicare Hosp. Ins. trust fund*			$139.3	21.6%	$139.3	4.3%
Premiums paid by individuals to Medicare Supplementary Medical Insurance trust fund			$ 64.1	9.9%	$64.1	2.0%
Out-of-pocket					$338.1	10.5%
Total household	**$345.3**	**32.2%**	**$203.4**	**31.5%**	**$886.8**	**27.7%**
Other private					**$215.1**	**6.7%**

Notes: *Each of these two categories includes half of self-employment contributions to the Medicare Hospital Insurance trust fund. Absent from the figure is Medicaid spending (financed by the federal and state governments), out-of-pocket spending (financed entirely by households), and other health spending (financed from each of the sponsor types).

Figure 5. The Financing of Medicare Spending, Private Health Insurance Spending and NHE, 2015 (billions of dollars), continued

SPONSOR	PRIVATE SPENDING Level	PRIVATE SPENDING Percentage	MEDICARE SPENDING Level	MEDICARE SPENDING Percentage	NHE Level	NHE Percentage
Federal						
Employer contribution to employer sponsored health insurance premiums	$33.9	3.2%			$33.9	1.1%
Marketplace tax credits and subsidies	$29.2	2.7%			$29.2	0.9%
Retiree Drug Subsidy payments to employer Sponsored health insurance premiums	$1.4	0.1%			$1.4	0.0%
Small business tax credit	$0.5	0.0%			$0.5	0.0%
Employer Medicare Hospital Insurance trust fund payroll taxes			$4.2	0.7%	$4.2	0.1%
Federal general revenue and trust fund expenditures			$303.6	47.0%	$303.6	9.5%
Federal portion of Medicare buy-in premiums			$8.6	1.3%	$8.6	0.3%
Federal portion of Medicaid payments					$344.0	10.7%
Other health program expenditures					$193.1	6.0%
Total federal	**$65.0**	**6.1%**	**$316.4**	**49.0%**	**$918.5**	**28.7%**
State and Local						
Employer contribution to employer sponsored health insurance premiums	$177.0	16.5%			$177.0	5.5%
Employer Medicare Hospital Insurance trust fund payroll taxes			$12.9	2.0%	$12.9	0.4%
State portion of Medicare buy-in premiums			$5.9	0.9%	$5.9	0.2%
State phase down payments (Part D)			$8.9	1.4%	$8.9	0.3%
State portion of Medicaid payments					$201.1	6.3%
Other health program expenditures					$141.9	4.4%
Total state and local	**$177.0**	**16.5%**	**$27.7**	**4.3%**	**$547.7**	**17.1%**
TOTAL	**$1,072.1**	**100.0%**	**$646.2**	**100.0%**	**$3,205.6**	**100.0%**

Source: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html. Tables 5, 5-1, 5-2, 5-3, 5-4, 5-5, and 5-6 in NHE Tables [ZIP].



Source: https://www.cms.gov/Research-Statistics-Data-and-Systems/Statistics-Trends-and-Reports/NationalHealthExpendData/NationalHealthAccountsHistorical.html. Table 5 in NHE Tables [ZIP].