

# CRS Report for Congress

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## **Health Care Spending: Past Trends and Projections**

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# Health Care Spending: Past Trends and Projections

## Summary

This report focuses on trends in personal health care spending, which includes spending on health care goods and services provided to individuals and excludes expenditures for administrative costs, research, and public health activities. Personal health care expenditures have grown considerably over the past 40 years. Between 1960 and 2002 (the most recent year available), personal health care spending increased from \$23.4 billion to \$1.6 trillion. It is estimated that personal health spending will exceed \$2.9 trillion in 2013.

Data on health expenditures suggest four important trends. First, during the 1990s, health spending has grown at lower rates than in the past. However, in 2000, 2001, and 2002 health spending grew at higher rates than the previous decade. Second, health care spending as a percent of gross domestic product (GDP) was relatively constant between 1992 and 2000. Health spending as a percent of GDP increased in 2001 and 2002, indicating that health expenditures are growing faster than the overall economy. Third, four types of health services consistently compose the bulk of health care expenditures: hospital care, physician and clinical services, nursing home and home health care, and prescription drugs. Spending on prescription drugs has grown since 1980 and is projected to continue growing during the next decade. Fourth, over the past 40 years, the primary financing of health care has shifted from out-of-pocket payments to payments by private insurance and the federal government.

## Contents

Growth in Spending .....	1
Health Spending and Gross Domestic Product .....	5
Spending on Specific Categories of Health Care .....	6
Who Pays for Health Care? .....	7

## List of Figures

Figure 1. Growth in Nominal Personal Health Care Expenditures .....	3
Figure 2. Factors Influencing Growth in Nominal Personal Health Expenditures .....	4
Figure 3. Personal Health Care Spending as a Percent of Gross Domestic Product (GDP) .....	5
Figure 4. Major Categories of Personal Health Care Spending as a Percent of Total Personal health Expenditures .....	6
Figure 5. Source of Payment for Personal Health Care as a Percent of Total Personal Health Care Expenditures .....	8

## List of Tables

Table 1. 2002 Health Expenditures .....	2
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# Health Care Spending: Past Trends and Projections

## Growth in Spending

In 2002 (the most recent year available), over \$1.6 trillion was spent on health care and health-related activities.<sup>1</sup> **Table 1** indicates how this amount was spent. Data on national health expenditures include spending on a broad range of health-related activities. A small portion of 2002 health expenditures (about \$213 billion, or 14%) was spent on administrative costs, net cost of private health insurance,<sup>2</sup> government public health activities, research,<sup>3</sup> and construction. However, the vast majority of 2002 health expenditures was spent on personal health care. Personal health care includes goods and services provided to individuals to treat or prevent medical conditions. The remainder of this report will focus on personal health care expenditures.

Spending on personal health care continues to increase every year. Between 1960 and 2002, expenditures for personal health care grew from \$23.4 billion to \$1.3 trillion; in 2013, personal health care spending is projected to exceed \$2.9 trillion. **Figure 1** tracks past and projected growth rates of personal health care spending in nominal terms (i.e., not adjusted for inflation). From the beginning of 1994 to the end of 1999, health spending increased at an average annual rate of 5.4%. This low growth is attributable to changes in both the private and public sectors. In the private sector, the increased use of managed care limited cost growth during the mid-1990s. Vigorous fraud-and-abuse investigation and the Balanced Budget Act of 1997 (which slowed growth in hospital, home health, and nursing home payments) constrained health expenditures in the late 1990s.<sup>4</sup> The effects of these changes in public and private sector have subsided. Personal health expenditures have increased each year from a 6.6% increase in 2000, and an 8.5% increase in 2001, to an 8.8% increase in

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<sup>1</sup> All dollar figures cited in this report were obtained from the Centers for Medicare and Medicaid Services (CMS), Office of the Actuary. All percentages were calculated by Congressional Research Service (CRS) using data from CMS.

<sup>2</sup> Net cost of private health insurance is equal to the difference between all premiums paid to insurance providers minus what insurance providers must pay for the provision of health care to its members.

<sup>3</sup> Research excludes amounts spent by pharmaceutical manufacturers, medical equipment suppliers, and other companies. Expenditures on research and development by such entities are implicitly included in the spending figures for other categories, e.g., prescription drugs and durable medical equipment.

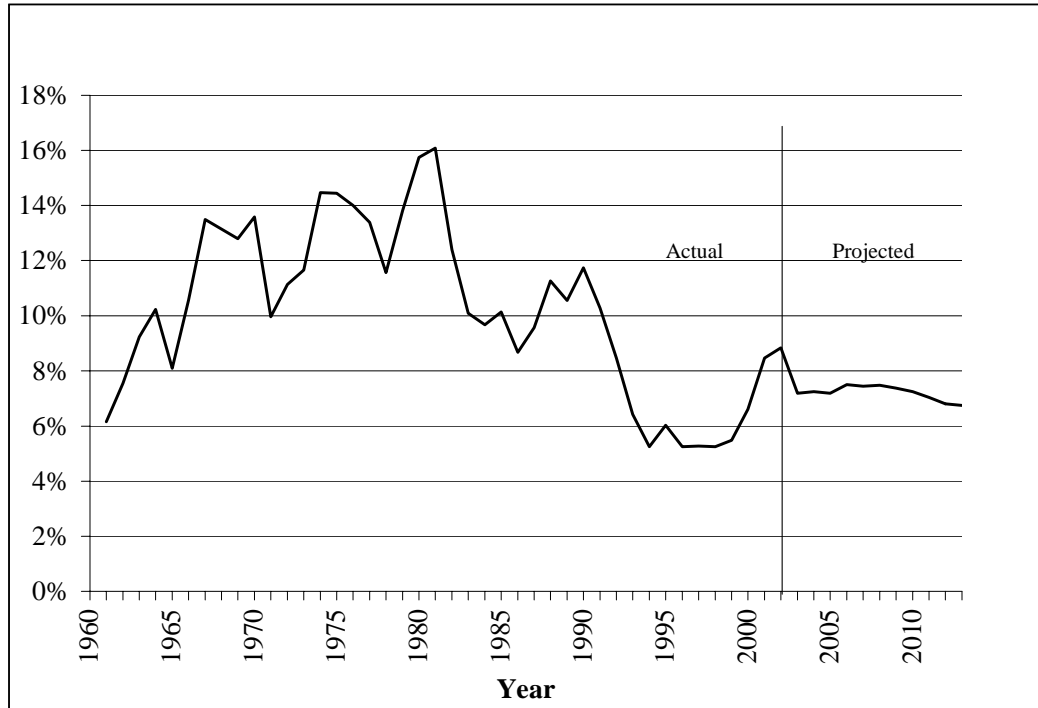
<sup>4</sup> Levit, Katharine, Cynthia Smith, Cathy Cowan, Helen Lazenby, and Anne Martin, *Inflation Spurs Spending in 2000*. *Health Affairs*. v. 21, no. 1, January/February 2002.

2002 — the highest growth rate since 1991. Yet, looking from a broader historical perspective, spending growth in 2002 was still much lower than that in most years since 1960 (see **Figure 1**). In particular, the years 1979 through 1981 experienced growth rates between 13.8% and 16.1%. Between 2003 and 2013, personal health care spending is projected to increase at an average rate of about 7% per year.

**Table 1. 2002 Health Expenditures**

Type of Expenditure	Amount (\$ billions)	Increase over 2001 spending (\$ billions)	Percent increase over 2001 spending
Personal health care expenditures:			
Hospital care	\$486.5	\$42.2	9.5%
Physician and clinical services	\$339.5	\$24.4	7.7%
Long-term care:			
Nursing home care	\$103.2	\$4.1	4.1%
Home health care	\$36.1	\$2.4	7.2%
Prescription drugs	\$162.4	\$21.6	15.3%
Dental services	\$70.3	\$4.7	7.2%
Other professional services	\$45.9	\$3.2	7.6%
Non-durable medical goods (excluding prescription drugs)	\$31.7	\$0.7	2.3%
Durable medical goods	\$18.8	\$0.6	3.3%
Other personal health care	\$45.8	\$4.9	12.1%
<b>Total personal health care expenditures</b>	<b>\$1,340.2</b>	<b>\$108.8</b>	<b>8.8%</b>
Government administration and net cost of private health insurance	\$105.0	\$14.6	16.2%
Government public health activities	\$51.2	\$2.8	5.9%
Research	\$34.3	\$2.8	8.9%
Construction	\$22.4	\$3.2	16.8%
<b>Total national health expenditures</b>	<b>\$1,553.0</b>	<b>\$132.3</b>	<b>9.3%</b>

**Source:** Prepared by the Congressional Research Service (CRS) based on data from the Centers for Medicare and Medicaid Services, Office of the Actuary.

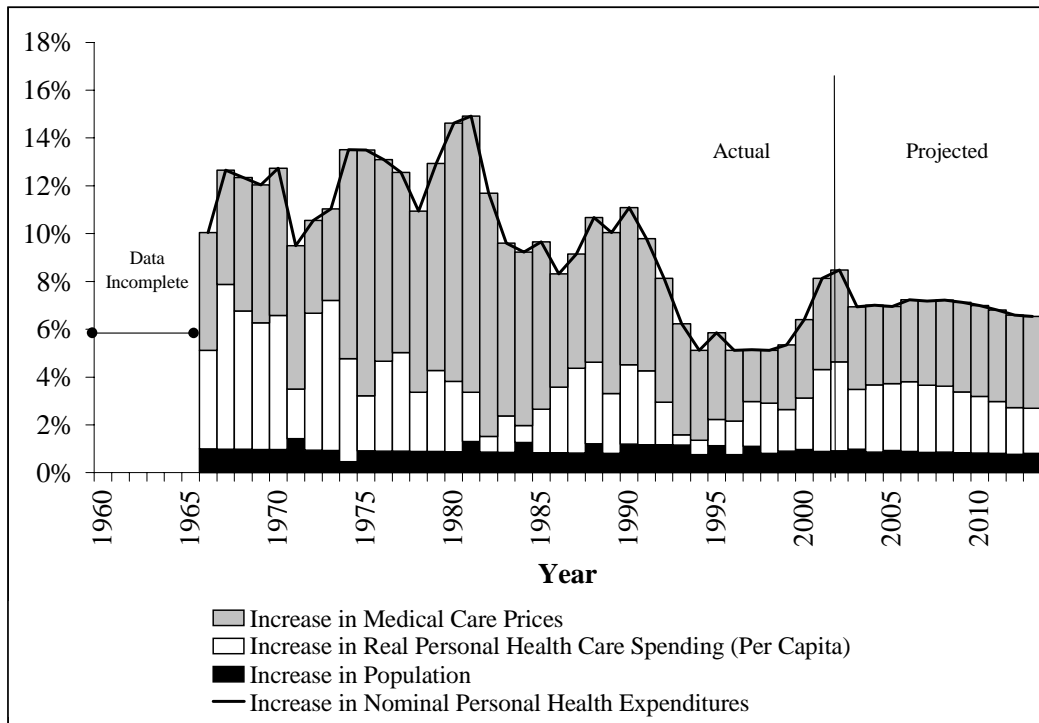
**Figure 1. Growth in Nominal Personal Health Care Expenditures**

**Source:** CRS calculations using data from the Centers for Medicare and Medicaid Services, Office of the Actuary.

A combination of factors can cause nominal spending to increase: rising prices, population growth, increases in the quantity of medical services each person receives, advances in medical knowledge and technology, and other factors. Expenditures attributable to non-price factors are often referred to as “real” spending. Growth in real spending represents a quantitative and qualitative increase in the level of medical care that individuals are receiving and can indicate an improvement in the population’s standard of living.<sup>5</sup> Conversely, increases in health care expenditures attributable to higher prices represent only a pecuniary transfer from the payer to the providers and manufacturers of medical goods and services. **Figure 2** depicts the share of nominal spending growth attributable to increases in medical care prices, increases in population, and increases in per capita real health expenditures (what some experts describe as the “intensity” of care). For much of the time period shown in **Figure 2**, prices played a larger role in nominal spending increases than population or non-price factors (e.g., improved medical technology or higher utilization). During the late 1990s, medical care prices, constrained by managed care, grew at lower rates than in any other year shown. Price growth is projected to increase during the next decade, though not to the high levels experienced during the 1970s and 1980s.

<sup>5</sup> In general, higher consumption of goods and services (medical and non-medical alike) is usually viewed as improving the standard of living for an individual. However, some experts might argue that higher utilization is not always indicative of a higher standard of living. For example, an outbreak of a contagious disease would increase the utilization of health services, yet no one would claim that those infected would have a higher standard of living.

**Figure 2. Factors Influencing Growth in Nominal Personal Health Expenditures**



**Source:** CRS calculations using data from the U.S. Census Bureau and the Centers for Medicare and Medicaid Services, Office of the Actuary.

**Note:** To make component factors additive, percentages in this figure represent continuous growth rates rather than discrete annual changes. Continuous growth rates can be converted to discrete yearly changes using the formula:  $[(\text{annual change}) = \exp(\text{continuous rate}) - 1]$ .

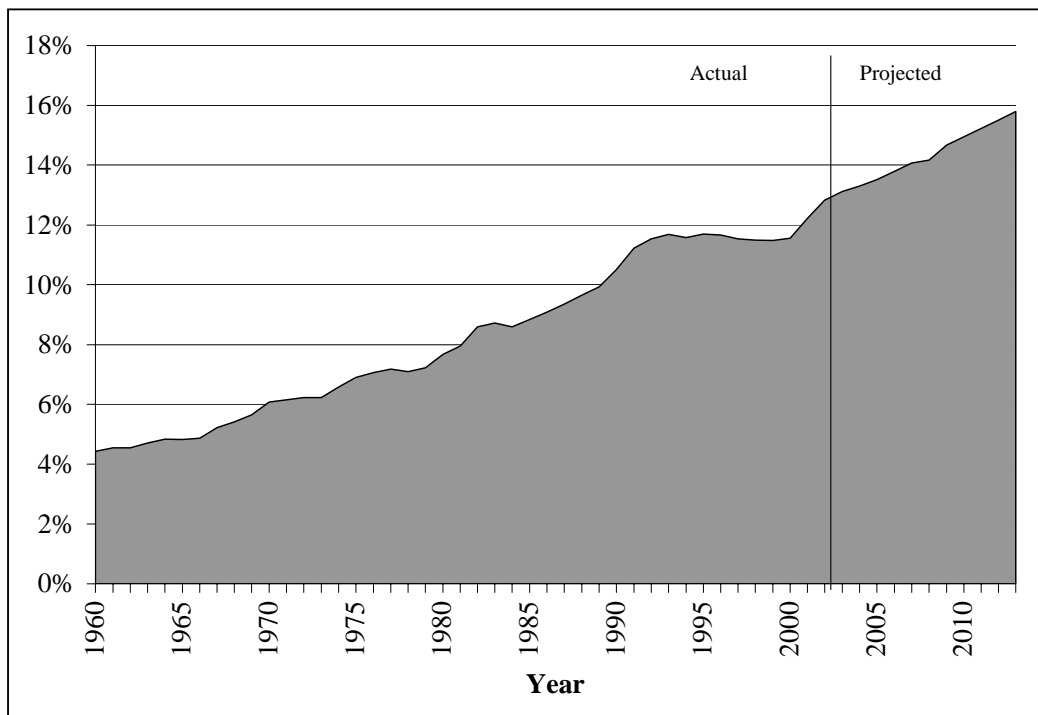
However, currently available price indexes may not accurately reflect changes in medical care prices. Ideally, a price index would measure only how much must be paid this year to receive the same level of care as that received in some base period, holding quality constant. But it is difficult to hold the quality of care constant over time considering the rate of medical advances. For example, heart surgeries today are of higher quality than those performed in the past, as measured by survival rates. Yet, price indices tend to treat both procedures as equal in quality. Thus, measures of increases in the price of heart surgeries capture both pure price increases as well as quality increases, which violates the basic principle of price indexes. By including quality effects in price measures, price indexes tend to overstate true increases in medical prices.<sup>6</sup>

<sup>6</sup> For more information, see Berndt, Ernst R., David M. Cutler, Richard G. Frank, Zvi Griliches, Joseph P. Newhouse, and Jack E. Triplett. "Price Indexes for Medical Care Goods and Services: An Overview of Measurement Issues." Published in *Medical Care Output and Productivity*, edited by David M. Cutler and Ernst R. Berndt. (Chicago: The University of Chicago Press, 2001)

## Health Spending and Gross Domestic Product

Personal health expenditures as a percent of GDP have risen since 1960. This trend has two implications: (1) personal health care spending is growing faster than the overall economy, and (2) a larger share of the nation's economic resources is being devoted to providing medical goods and services to the population. **Figure 3** depicts past and projected personal health care spending as a percent of GDP. In 1960, personal health care expenditures were about 4% of GDP; in 2002, they were 13%. Much of this growth occurred between 1960 and 1991. Between 1992 and 2000, personal health expenditures as a percent of GDP remained between 11.5% and 11.7%. This relative constancy indicates that expenditures were growing at about the same rate as the overall economy. In 2001, however, personal health care expenditures grew to 12.3% of GDP, an indication that personal health care spending grew faster than the overall economy in that year. It is projected that personal health care spending will continue to grow faster than the overall economy, accounting for almost 16% of GDP in 2013.

**Figure 3. Personal Health Care Spending as a Percent of Gross Domestic Product (GDP)**



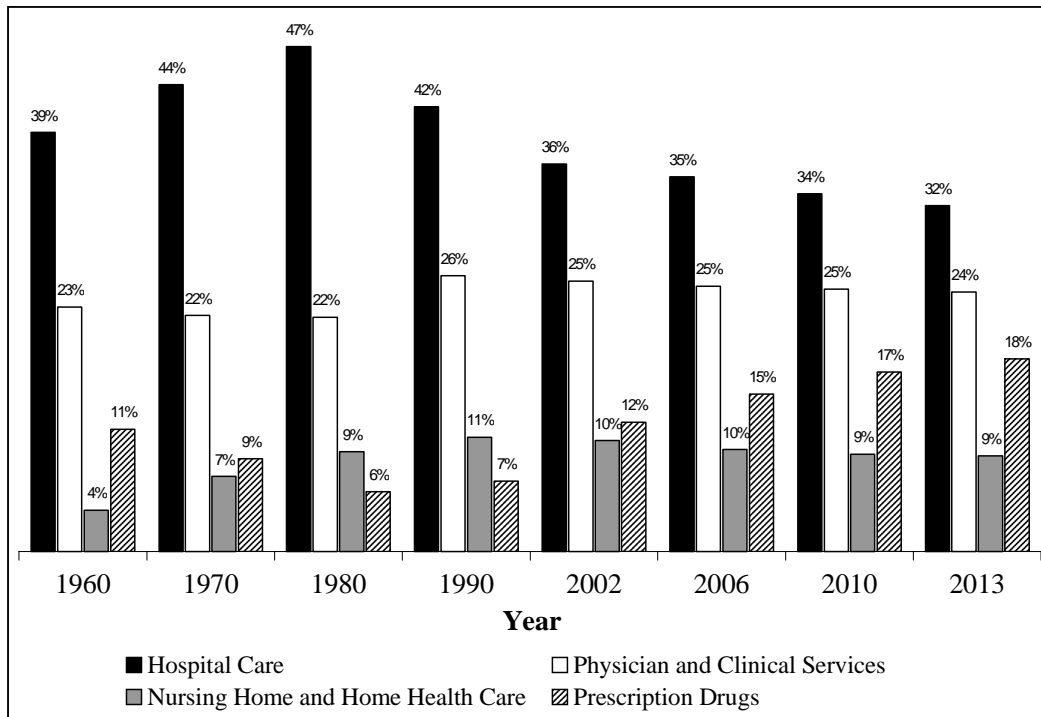
**Source:** CRS calculations using data from the Centers for Medicare and Medicaid Services, Office of the Actuary.



## Spending on Specific Categories of Health Care

Of the total amount spent on personal health care, the largest categories of expenditures tend to be hospital care, physician and clinical services, nursing home and home health care, and prescription drugs. The contribution of these four categories to personal health spending has remained fairly constant, averaging 84% of total personal health care spending over the last four decades. However, the relative sizes of these categories have changed over time. **Figure 4** depicts past and projected spending on each of these categories as a percent of personal health care spending. Expenditures on hospital care, as a percent of personal health spending, have decreased from 47% in 1980 to 36% in 2002. They are projected to decrease further in the future. This trend indicates that spending on hospital care is growing at a slower rate than spending on other categories of personal health care. Spending on prescription drugs as a percent of personal health care spending has increased from 6% in 1980 to 12% in 2002. It is projected to continue increasing through the next decade. Such a trend indicates that spending on prescription drugs is rising faster than other categories of personal health care. **Figure 4** probably underestimates the impact of prescription drugs on personal health care expenditures. Data on drug spending reflect prescription drugs obtained from retail pharmacies, but it excludes drugs provided by institutional pharmacies. Drugs dispensed to patients from a hospital or nursing home pharmacy are excluded from the prescription drug category. Instead, spending on drugs dispensed from institutional pharmacies is implicit in the amount spent for services at the respective institutions (e.g., hospital services or nursing home care).

**Figure 4. Major Categories of Personal Health Care Spending as a Percent of Total Personal Health Expenditures**



**Source:** CRS calculations using data from the Centers for Medicare and Medicaid Services, Office of the Actuary.

## Who Pays for Health Care?

Direct payments for personal health care come from five general sources: consumer payments out-of-pocket, payments by private insurance companies, federal funds, state and local funds, and “other” private funds. Out-of-pocket payments include payments by those without health insurance. Out-of-pocket payments also include payments by the insured for deductibles, coinsurance, and costs not covered by insurance (excluding premiums). “Other” private funds consist mostly of philanthropic contributions to the health care system.

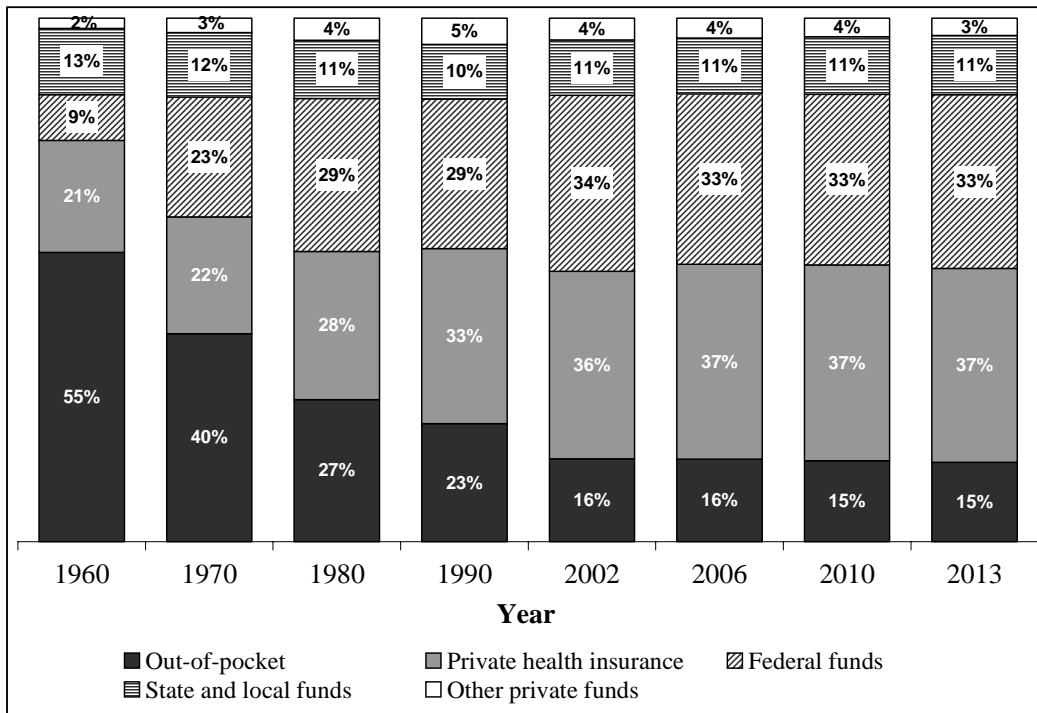
Ultimately, all health care spending is paid for by individuals through direct payments, cost-sharing, insurance premiums,<sup>7</sup> taxes, and charitable contributions. However, most of these payments are redistributed; what a person pays does not necessarily reflect how much health care that person receives. One who pays relatively high taxes might not have any of their health care financed by the government. Similarly, there are some people who pay health insurance premiums, yet use less care than the sum of the premiums paid. Only when individuals pay directly for the cost of treatment (either because they are uninsured or because they have not met their deductible) do personal expenditures directly reflect the amount of care received.

**Figure 5** shows the percent of personal health care spending attributable to each source. In 1960, 55% of all personal health care was financed out-of-pocket, whereas private insurance paid for 21% and the federal government paid for 9%. In 2002, only 16% of personal health care was paid out-of-pocket while private insurance paid for 36% and the federal government paid for 34%. Much of the increase in the federal government’s share of health spending occurred during the 1960s, when the Medicare and Medicaid programs were introduced. The increase in the federal government’s share of payments during the 1990s is likely due to the ability of private insurance to reduce its share of expenditures through managed care. Furthermore, during this period, there was a dramatic increase in the quality and cost of health services.

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<sup>7</sup> Even if the employer is contributing all or a portion of the insurance premium, individual workers generally accept lower wages in exchange for this benefit. Thus, they pay for employer contributions to health care in the form of reduced wages that are lower than what they would otherwise be paid if the employer offered no health benefits.

**Figure 5. Source of Payment for Personal Health Care as a Percent of Total Personal Health Care Expenditures**



**Source:** CRS calculations using data from the Centers for Medicare and Medicaid Services, Office of the Actuary.