
Financing Health Care: Businesses, Households, and Governments, 1987-2003

Cathy A. Cowan, M.B.A. and Micah B. Hartman

This article provides estimates of health care expenditures by businesses, households, and governments for 1987-2003. Sponsors that finance public and private health insurance programs and other payers face increasing challenges as health care cost rise. Their capacity to support rising costs was particularly strained during the recent economic recession, with the Federal Government's burden measured against revenue available for this purpose growing faster than for other sponsors.

INTRODUCTION

In this article, we present a view of health care spending in the U.S. that focuses on the sectors that finance or sponsor health care. The three broad categories of sponsors are businesses, households, and governments. This view allows us to examine each of the sponsor's ability to pay for their health care obligations. The basis for these estimates is the national health expenditure accounts¹, the official Federal Government estimates of total U.S. health care spending (Centers for Medicare & Medicaid Services, 2005).

The NHEA structure is a matrix comprised of expenditures for health care goods and services and of funding sources

that pay for these goods and services. These sources of funds are classified into private health insurance (PHI), out-of-pocket spending, other private revenues, and specific government programs such as Medicare and Medicaid. For national accounting, this structure is useful in measuring changes in spending trends associated with policy initiatives in the government and private sectors, along with the amounts paid by each source.

The analysis in this article is based on a subset of the National Health Expenditures. This subset, health services and supplies (HSS), represents spending for health care provided during the year, including personal health care, government public health and program administration. In 2003, HSS was about 96 percent of National Health Expenditures, which also include investment, research, and construction expenditures.

To determine where the responsibility for financing health care falls, we reorganize spending into business, household, and government sectors. This reallocation to the sponsors of health care is as follows:

- PHI—Allocated to businesses, Federal, and State and local government employers and employees (or households) who pay for employer-sponsored health insurance premiums, and to individuals (or households) who purchase health insurance directly.
- Medicare—Distributed between employers (businesses, Federal, and State and local governments), and employees (households) are the payroll taxes

¹ National Health Expenditures Accounts (NHEA) replaces National Health Accounts (NHA) as the name for the health care expenditure accounting structure that is used to estimate total health care spending in the U.S. The change was made to clarify that we are measuring the amount spent on health care, not trying to measure the health of U.S. citizens.

The authors are with the Centers for Medicare & Medicaid Services (CMS). The statements expressed in this article are those of the authors and do not necessarily reflect the views or policies of CMS.

through the Federal Insurance Contributions Act (FICA) and the Self-Employment Contributions Act (SECA) for the Hospital Insurance (HI) fund. Supplementary Medical Insurance (SMI) premiums paid by beneficiaries are allocated to households and the corresponding SMI general revenues are allocated to the Federal Government. Medicaid “buy-ins” (payments by State Medicaid Programs and matched by the Federal Government of HI and SMI premiums for individuals who are eligible for both Medicaid and Medicare) are classified with the Medicaid Program.

- Medicaid—Distributed to Federal and State and local governments.
- Workers’ compensation spending, temporary disability insurance, and industrial inplant health services—Allocated to employers who sponsor these benefits.

A small portion of the health spending is estimated for other private revenues—philanthropic giving and revenues received by some health care providers from non-health services (for example, cafeteria, and gift shop revenues).

After the NHEA sources of funds are allocated to these sponsor categories, we construct ways to compare sponsor’s health care financing amounts with measures of their overall income or revenues. These relative measures help track the changes in the sponsors’ ability to finance health care. In the private business sector, we compare health care spending to total employee compensation and to aggregate wages and salaries. The burden measure for households is defined as the proportion of personal income spent on health care. Federal, State, and local government burden is measured by comparing spending on health to tax receipts.

Although we categorize sponsors into businesses, households, and governments—direct financers of health insurance—individ-

uals ultimately bear the full responsibility of paying for increasing health care costs through higher taxes, reduced wages, and higher product costs (Pauly, 1995).

More information regarding the methodology and definitions is available at the CMS Web site: <http://www.cms.hhs.gov/statistics/burden-of-health-care-costs/>

SUMMARY

Businesses, households, and governments are sponsors of health care, and therefore pay the costs of consuming medical care. The changing obligations placed on each of these sponsors can result in changes to the types of health insurance that is offered or selected, scope of benefits and cost-sharing arrangements. In this article, we have constructed measures to track the changes in the ability to finance health care faced by these sponsors.

In 2003, spending growth for health services and supplies decelerated for the first time in 7 years (Smith et al., 2005). Even with this slowdown, the burden placed on each of the sponsors continued to grow. The portion of health spending as a share of total compensation continued to grow even as businesses passed on more of the growth in health care costs to employees by increasing their portion of PHI premiums and raising copays and deductibles. Household income did not keep pace with the increased premiums and out-of-pocket health care spending. For Federal programs, while health care costs slowed due to legislative changes, Federal revenues declined in 2003. States are also struggling with ways to pay for health costs despite seeing this cost growth slow in 2003.

In the near future, there could be a shift in the burden among the sponsors. States have had a slight increase in the growth of revenues in 2004 (National Governors

Association and National Association of State Budget Officers, 2004). The Medicare Prescription Drug, Improvement, and Modernization Act of 2003 expands the Medicare Program to include prescription drug coverage that lessens the burden that households face in paying for health costs. This legislation also provides subsidies to employers to help them offset the costs of providing health insurance coverage for retirees and is intended to reduce States' contributions to prescription drug spend-

ing for dually eligible beneficiaries. However, a few of these changes will shift the health care financing to governments, particularly the Federal Government, which raises long term sustainability questions for the Federal Government programs as highlighted in The 2005 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Fund (2005).

Table 1
Expenditures for Health Services and Supplies, by Type of Sponsors: Selected Calendar Years
1987-2003

Type of Sponsor	1987	1992	1997	2000	2001	2002	2003
	Amount in Billions						
Health Services and Supplies	\$477.8	\$797.1	\$1,055.8	\$1,260.9	\$1,373.8	\$1,499.8	\$1,614.2
Businesses, Households, and Other Private	331.2	520.1	664.7	812.2	862.9	923.4	992.2
Private Businesses	122.4	206.6	268.0	342.6	369.3	395.1	423.0
Households	186.4	279.8	348.2	418.3	442.4	475.4	512.6
Other Private	22.4	33.7	48.5	51.3	51.1	52.9	56.6
Governments	146.6	277.0	391.1	448.8	510.9	576.4	622.0
Federal Government	75.1	155.3	220.1	236.9	278.1	318.3	344.0
State and Local Governments	71.5	121.7	171.0	211.9	232.8	258.1	278.1
	Percent Distribution						
Share of Health Services and Supplies	100	100	100	100	100	100	100
Businesses, Households, and Other Private	69	65	63	64	63	62	61
Private Businesses	26	26	25	27	27	26	26
Households	39	35	33	33	32	32	32
Other Private	5	4	5	4	4	4	4
Governments	31	35	37	36	37	38	39
Federal Government	16	19	21	19	20	21	21
State and Local Governments	15	15	16	17	17	17	17
	Average Annual Percent Growth from Previous Year Shown						
Growth of Health Services and Supplies	—	10.8	5.8	6.1	9.0	9.2	7.6
Businesses, Households, and Other Private	—	9.4	5.0	6.9	6.2	7.0	7.4
Private Businesses	—	11.0	5.3	8.5	7.8	7.0	7.1
Households	—	8.5	4.5	6.3	5.8	7.5	7.8
Other Private	—	8.5	7.6	1.9	-0.4	3.6	6.9
Governments	—	13.6	7.1	4.7	13.8	12.8	7.9
Federal Government	—	15.7	7.2	2.5	17.4	14.4	8.1
State and Local Governments	—	11.2	7.0	7.4	9.9	10.9	7.7

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, 2005.

- HSS spending reached \$1.6 trillion in 2003. Businesses, households, governments, and other private revenues finance HSS. Other private revenues, such as philanthropy, have maintained a generally steady share of HSS, going from 5 percent in 1987 to 4 percent in 2003.
- The share of HSS financed by businesses, households, and other private sources decreased from 69 percent in 1987 to 61 percent in 2003 as the public share grew from 31 to 39 percent—narrowing the gap between public and private financing.
- Although government-financed health cost growth moderated somewhat in 2003, it was still the third consecutive year that government expenditures grew faster than overall businesses, households, and other private expenditures. During the early 1990s, government expenditures also grew faster than private sector spending. This was especially true for the Federal Government in financing these expenditures, prompting changes to the Medicare Program, such as those that occurred with the Balanced Budget Act (BBA) of 1997. (Subsequent legislation, such as the Balanced Budget Refinement Act of 1999, the Benefits Improvement and Protection Act of 2000, and the Consolidated Appropriations Resolution of 2003 offset some of the BBA reductions.) Government expenditures include spending by Federal, and State and local governments for programs such as Medicaid and Medicare (81 percent) plus PHI premiums and Medicare HI Trust Funds payroll taxes paid on behalf of government employees (19 percent).
- Most of the shift in share to the government sector from 1987 to 1997 was offset by a decrease in the share of household spending, which fell from 39 to 32 percent. This was particularly true during the managed care era (1993-1997) when strong competition among health plans for the employer market, together with effective price negotiation with health care providers and other cost management techniques, helped slow health costs increases and reduce the proportion of costs that were paid out of pocket. The share of spending by business has been virtually unchanged at 26-27 percent over the past 16 years.

Table 2
Private Businesses Expenditures for Health Services and Supplies: Selected Calendar Years
1987-2003

Category of Private Businesses Spending	1987	1992	1997	2000	2001	2002	2003
	Amounts in Billions						
Private Businesses	\$122.4	\$206.6	\$268.0	\$342.6	\$369.3	\$395.1	\$423.0
Employer Contribution to PHI	84.4	149.1	194.9	251.3	274.5	297.2	320.6
Employer Medicare HI Trust Fund Payroll Taxes ¹	24.6	34.4	49.5	62.3	63.4	62.9	64.3
Workers Compensation and Temporary Disability Insurance	11.7	20.6	20.0	24.7	27.1	30.3	33.2
Industrial Inplant Health Services	1.7	2.6	3.6	4.2	4.4	4.7	4.9
	Percent Distribution						
Share of Private Businesses Spending	100	100	100	100	100	100	100
Employer Contribution to PHI	69	72	73	73	74	75	76
Employer Medicare HI Trust Fund Payroll Taxes ¹	20	17	18	18	17	16	15
Workers Compensation and Temporary Disability Insurance	10	10	7	7	7	8	8
Industrial Inplant Health Services	1	1	1	1	1	1	1
	Average Annual Percent Growth from Previous Year Shown						
Growth in Private Businesses Spending	—	11.0	5.3	8.5	7.8	7.0	7.1
Employer Contribution to PHI	—	12.1	5.5	8.8	9.2	8.3	7.9
Employer Medicare HI Trust Fund Payroll Taxes ¹	—	6.9	7.6	8.0	1.7	-0.8	2.3
Workers Compensation and Temporary Disability Insurance	—	12.0	-0.5	7.2	9.5	12.0	9.6
Industrial Inplant Health Services	—	8.9	6.5	5.5	4.8	4.7	5.4

¹ Includes one-half of self-employment contribution to Medicare HI trust fund.

NOTES: PHI is private health insurance. HI is hospital insurance.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, 2005.

- Private businesses expenditures reached \$423.0 billion in 2003, 7.1 percent higher than in 2002. The employer portion of employer-sponsored health insurance premiums is the largest share of private businesses health expenditures, 76 percent, followed by employer payroll taxes for the Medicare HI Trust Fund, 15 percent.
- Despite the recent slowing growth in PHI premiums, businesses still faced an average annual growth in PHI premiums of 8.3 percent from 1999-2003, compared to 5.9 percent during the 1991-1998 period, when enrollment in health maintenance organizations (HMOs) was at an all-time high. Such plans were reasonably successful at controlling health care costs, but became unpopular with consumers, resulting in declining HMO enrollment, from 31 percent of covered workers in 1996 to 25 percent in 2004 (Claxton et al., 2004). During that time, workers increasingly have shown preference for preferred provider organization and point-of-service plans, trading broader access to providers for higher costs (Levit et al., 2003).
- During 2001 and 2002, the mild recession marked by falling employment, very low inflation, and stagnant wages and salaries resulted in a deceleration, then decline, in private employer paid payroll taxes collected for the Medicare HI Trust Fund. In fact, from 2000 to 2002, employer-paid Medicare payroll taxes experienced the slowest period of growth in the history of the fund. In general, since these taxes are based on wages and salaries and do not directly reflect increases in health care costs, growth in payroll taxes has not kept up with other private business-paid health care costs. As a result, the payroll tax share of total private business expenditure for health has steadily declined (from 20 percent in 1987 to 15 percent in 2003).
- Workers compensation is insurance for injuries sustained while on the job. Temporary disability insurance provides workers with partial compensation for loss of wages caused by temporary non-occupational disability. Industrial inplant health services are the employer costs associated with directly operating facilities or providing supplies for the health care needs of employees, either on- or off-site. These three programs were 9 percent of spending by private business on health care in 2003.
- Rising medical costs in the late 1980s prompted employers to adopt managed care workers' compensation plans, a step that is, in part, credited with slowing workers' compensation cost growth from 1992-1997. Additionally, lower injury rates, benefit changes, safety and return-to-work programs, antifraud measures, and tightening of eligibility standards likely contributed to slowing growth during that same period (Mont et al., 2001; American Academy of Actuaries, 2000).

Table 3

Private Businesses Health Spending as a Share of Total Employee Compensation: Calender Years 1987-2003

Year	Amount in Billions			Percent Growth			Share of Total Compensation (Percent)	
	Total Compensation	Wages and Salaries ¹	Health Spending ²	Total Compensation	Wages and Salaries ¹	Health Spending ²	Wages and Salaries ¹	Health Spending ²
1987	\$2,193.6	\$1,849.5	\$122.4	—	—	—	84.3	5.6
1988	2,372.4	2,002.5	138.6	8.2	8.3	13.2	84.4	5.8
1989	2,513.1	2,117.5	159.3	5.9	5.7	15.0	84.3	6.3
1990	2,658.6	2,238.6	178.8	5.8	5.7	12.2	84.2	6.7
1991	2,725.3	2,279.0	192.0	2.5	1.8	7.4	83.6	7.1
1992	2,882.2	2,398.3	206.6	5.8	5.2	7.6	83.2	7.2
1993	3,023.3	2,505.7	221.2	4.9	4.5	7.1	82.9	7.3
1994	3,193.6	2,647.5	234.6	5.6	5.7	6.1	82.9	7.4
1995	3,368.4	2,814.3	248.4	5.5	6.3	5.9	83.5	7.4
1996	3,539.9	2,982.9	262.2	5.1	6.0	5.5	84.3	7.4
1997	3,783.1	3,211.0	268.0	6.9	7.6	2.2	84.9	7.1
1998	4,107.7	3,490.0	287.7	8.6	8.7	7.3	85.0	7.0
1999	4,407.0	3,747.3	313.4	7.3	7.4	8.9	85.0	7.1
2000	4,776.4	4,059.1	342.6	8.4	8.3	9.3	85.0	7.2
2001	4,882.4	4,132.1	369.3	2.2	1.8	7.8	84.6	7.6
2002	4,942.8	4,119.1	395.1	1.2	-0.3	7.0	83.3	8.0
2003	5,108.3	4,211.1	423.0	3.3	2.2	7.0	82.4	8.3

¹ Does not include self-employed income.

² The estimate of private businesses health spending is calculated by the National Health Statistics Group and includes employer share of employer sponsored health insurance premiums, employer Medicare hospital insurance trust fund payroll taxes, workers compensation, temporary disability insurance, and industrial inplant health services.

SOURCES: U.S. Department of Commerce: Bureau of Economic Analysis, 2005; Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, 2005.

- Since 1998, businesses health spending (BHS), as a share of total compensation, has been on the rise. In 2003, health spending for private businesses was 8.3 percent of total compensation, up from 7.0 percent in 1998.
- Breaking from prior and subsequent trends, private sector employees saw their wages and salaries grow faster than private businesses spending on health care from 1995–1998. Over the last 4 years, however, private BHS outpaced wage and salary growth by an average annual rate of nearly 5 percent (U.S. Bureau of Economic Analysis, 2005).
- For almost a decade between 1991 and 2000, health care spending by private business as a share of compensation remained fairly stable. Between 2000 and 2003, however, this share rose sharply from 7.2 to 8.3 percent, driven by escalating employer-paid health insurance premiums and workers' compensation medical costs. Most economists believe that employers trade wages for rising benefit costs, resulting in slower wage or non-medical benefit growth for workers (Monaco and Phelps, 1995; Pauly, 1995). As a percent of total compensation, wages and salaries reached a record low of 82 percent in 2003.

Table 4
Expenditures for Private Health Insurance (PHI), by Sponsor: Selected Calendar Years 1987-2003

Sponsor	1987	1992	1997	2000	2001	2002	2003
	Except Where Noted, Amount in Billions						
Total PHI Premiums	\$147.9	\$273.8	\$360.7	\$450.6	\$496.6	\$549.5	\$600.6
Employer Sponsored PHI Premiums	135.4	251.5	336.3	421.9	466.2	515.0	563.0
Employer Contribution to PHI Premiums	106.0	193.9	253.0	324.2	357.1	392.0	426.5
Private	84.4	149.1	194.9	251.3	274.5	297.2	320.6
Federal	4.9	10.7	11.4	14.3	15.8	17.7	19.7
State and Local	16.7	34.1	46.7	58.6	66.9	77.1	86.2
Employee Contribution to PHI Premiums	29.5	57.6	83.3	97.7	109.1	123.0	136.5
Private	23.3	46.4	67.8	79.2	88.4	98.4	109.1
Federal	2.4	3.5	4.1	5.3	5.9	6.6	7.3
State and Local	3.8	7.7	11.3	13.2	14.8	18.0	20.1
Individual Policy Premiums	12.5	22.4	24.5	28.7	30.4	34.5	37.6
Number of Enrollees (In Millions)	181.4	184.7	188.1	197.6	196.4	195.6	194.5
Per Enrollee Estimates of PHI (In Dollars)	\$815	\$1,482	\$1,917	\$2,280	\$2,528	\$2,810	\$3,088
	Average Annual Percent Growth from Previous Year Shown						
Total PHI Premiums	—	13.1	5.7	7.7	10.2	10.6	9.3
Employer Sponsored PHI Premiums	—	13.2	6.0	7.9	10.5	10.5	9.3
Employer Contribution to PHI Premiums	—	12.8	5.5	8.6	10.1	9.8	8.8
Private	—	12.1	5.5	8.8	9.2	8.3	7.9
Federal	—	17.1	1.3	7.8	10.2	12.1	11.6
State and Local	—	15.3	6.5	7.9	14.1	15.3	11.7
Employee Contribution to PHI Premiums	—	14.4	7.6	5.5	11.7	12.7	11.0
Private	—	14.8	7.9	5.3	11.5	11.4	10.8
Federal	—	8.0	3.0	8.7	12.3	11.4	11.2
State and Local	—	15.2	8.1	5.1	12.9	21.1	11.7
Individual Policy Premiums	—	12.4	1.8	5.4	6.0	13.5	9.0
Number of Enrollees	—	0.4	0.4	1.7	-0.6	-0.4	-0.6
Per Enrollee Estimates of PHI	—	12.7	5.3	5.9	10.9	11.2	9.9
	Percent of Premiums Paid by Employer						
Employer-Sponsored PHI	78.2	77.1	75.2	76.9	76.6	76.1	75.8
Private	78.4	76.3	74.2	76.0	75.6	75.1	74.6
Federal	66.9	75.1	73.5	73.0	72.7	72.8	72.9
State and Local	81.5	81.6	80.5	81.7	81.8	81.1	81.1

NOTE: PHI is private health insurance.

SOURCES: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, 2005; and Office of Personnel Management, 2005.

- Total PHI premiums reached \$600.6 billion in 2003 and per enrollee estimates were \$3,088.
- Over the last decade, total PHI premiums more than doubled, while the number of enrollees has grown less than 6 percent. This means that almost all of the growth in PHI premiums is a result of increasing costs and utilization per enrollee, rather than increases in the number of persons covered by PHI.
- Overall, in 2003, the share of premiums paid by private and government employers declined to 75.8 percent, a level last seen in the late 1990s.
- While 2001 and 2002 was a period of double-digit PHI premium growth, some private employers were able to shift expenses to employees through higher premiums (Levit et al., 2004). This resulted in the percent of PHI paid by private employers declining from a high in 2000 of 76.0 to 74.6 in 2003.
- The Federal Government share of employer-sponsored health insurance has remained relatively stable over the past 3 years. However, Federal employee and employer contributions to PHI have experienced 3 years of double-digit growth, higher than most past years since 1987.
- The number of enrollees with PHI continued to decline, from a peak of 197.6 million in 2000 to 194.5 million in 2003, a level last seen in 1999.
- The recent decline of manufacturing jobs and increase in service sector employment has impacted worker benefits because service sector jobs typically are less likely to provide health insurance. This continued structural change, intensified by the recent recession, may have partly contributed to the decline in the enrollment in employment-based health insurance plans (Fronstin, 2004).
- In addition, for the manufacturing jobs that remain, the likelihood of coverage by employer-sponsored health insurance diminished, also contributing to the decline in employment-based health insurance (Fronstin, 2004).
- However, other research has attributed a majority of the decline in the number of insured to premium increases for employees, not employment changes. A study estimates that since 1987, workforce changes have had little effect on the rates of coverage. This study suggests that declines in coverage have resulted almost entirely from increases in premiums in relation to personal income (Gilmer and Kronic, 2005).

Table 5

Households Expenditures for Health Services and Supplies: Selected Calendar Years 1987-2003

Category of Households Spending	1987	1992	1997	2000	2001	2002	2003
	Amount in Billions						
Households	\$186.4	\$279.8	\$348.2	\$418.3	\$442.4	\$475.4	\$512.6
Employee Contribution to PHI Premiums and Individual Policy Premiums	41.9	80.0	107.8	126.3	139.5	157.5	174.1
Employee and Self-Employment Payroll Taxes and Voluntary Premiums Paid to Medicare HI Trust Fund ¹	29.4	41.8	63.0	82.5	82.9	84.1	86.0
Premiums Paid by Individuals to Medicare SMI Trust Fund	6.2	12.1	15.4	16.3	18.0	19.6	22.0
Out-of-Pocket Health Spending	108.9	145.9	162.0	193.1	202.0	214.2	230.5
	Percent Distribution						
Share of Households Spending	100	100	100	100	100	100	100
Employee Contribution to PHI Premiums and Individual Policy Premiums	23	29	31	30	32	33	34
Employee and Self-Employment Payroll Taxes and Voluntary Premiums Paid to Medicare HI Trust Fund ¹	16	15	18	20	19	18	17
Premiums Paid by Individuals to Medicare SMI Trust Fund	3	4	4	4	4	4	4
Out-of-Pocket Health Spending	58	52	47	46	46	45	45
	Average Annual Percent Growth from Previous Year Shown						
Growth in Households Spending	—	8.5	4.5	6.3	5.8	7.5	7.8
Employee Contribution to PHI Premiums and Individual Policy Premiums	—	13.8	6.1	5.4	10.4	12.9	10.5
Employee and Self-Employment Payroll Taxes and Voluntary Premiums Paid to Medicare HI Trust Fund ¹	—	7.3	8.5	9.4	0.5	1.4	2.2
Premiums Paid by Individuals to Medicare SMI Trust Fund	—	14.4	5.0	1.9	10.3	9.0	11.9
Out-of-Pocket Health Spending	—	6.0	2.1	6.0	4.6	6.0	7.6

¹ Includes one-half of self-employment contribution to Medicare HI trust fund and trust fund revenues from the income taxation of Social Security benefits.

NOTES: PHI is private health insurance. HI is hospital insurance. SMI is supplementary medical insurance.

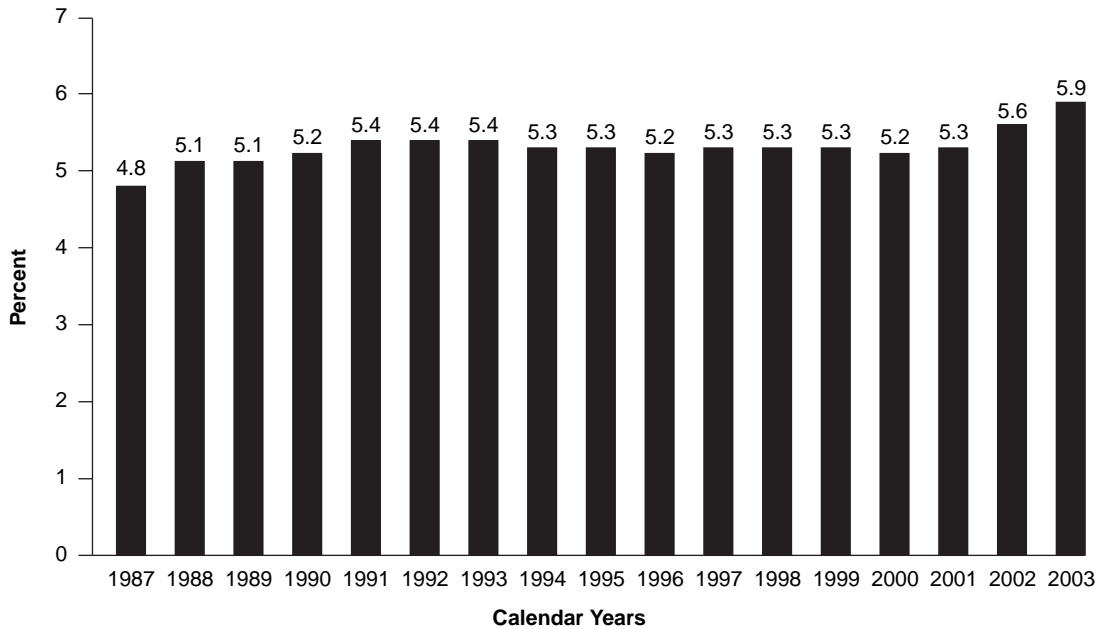
SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, 2005.

- Households' spending reached \$512.6 billion in 2003, about one-third of total spending on HSS. Spending for PHI premiums, including the employee share of employer-sponsored health insurance and individually purchased health insurance, was \$174 billion while out-of-pocket spending for copays, deductibles, and for goods and services not covered by insurance was \$230.5 billion. Since 1987, the share of households' health spending going to PHI premiums increased from 23 to 34 percent while the share for out-of-pocket spending dropped from 58 to 45 percent.
- Spending by households grew 7.8 percent in 2003, the second consecutive year of over 7 percent growth. Other

periods with growth in this range include 1988 to 1990 and 1997 to 1998. The earlier period of higher growth occurred before the expansion of enrollment in the more tightly managed health plans, while the later period reflected stabilization in enrollment in these plans (Claxton et al. 2004). The latest period of slow growth, 1999 to 2001, occurred as the overall economy grew rapidly and labor markets were tight, providing employers with incentives not to pass on rising health care costs to employees. In 2002, this changed as employers began passing more costs to individuals, primarily through higher copays and deductibles.

Figure 1

Household Health Spending¹ as a Percent of Adjusted Personal Income²: Calendar Years 1987-2003



¹ Health financing by households includes premiums for employee share of employer-sponsored and individually purchased health insurance, contributions and premiums for Medicare and out-of-pocket expenditures for co-insurance, deductibles, and services not covered by insurance.

² Personal income includes wages and salaries, other labor income, proprietor's income, rental income, dividend and interest income and transfer payments less personal contributions for social insurance.

SOURCES: Centers for Medicare & Medicaid Services, Office of the Actuary: Data from the National Health Statistics Group, 1987-2003; U.S. Department of Commerce, Bureau of Economic Analysis, January 2005.

- By looking at the share of household personal income that goes to health care, we can assess the burden that health care costs place on households. Between 2001 and 2003, the share of personal income consumed by health care grew rapidly, increasing 0.6 percentage points from 5.3 to 5.9 percent. This is the fastest increase in share since the 1987-1988 period.
- For 2002 and 2003, household income did not keep pace with the growth in health care expenses. Personal income

growth of 3.1 percent in 2001, 1.3 percent in 2002, and 3.0 percent in 2003 were slow by historical standards (U.S. Bureau of Economic Analysis, 2004). During this period, household spending for health care grew at rates that—at 5.8 percent in 2001, 7.5 percent in 2002, and 7.8 percent in 2003—were two or more times as fast as income growth.

Table 6

State and Local Governments Expenditures for Health Services and Supplies: Selected Calendar Years 1987-2003

Category of State and Local Governments Spending	1987	1992	1997	2000	2001	2002	2003
	Amount in Billions						
State and Local Governments	\$71.5	\$121.7	\$171.0	\$211.9	\$232.8	\$258.1	\$278.1
Employer Contribution to PHI Premiums	16.7	34.1	46.7	58.6	66.9	77.1	86.2
Employer Medicare HI Trust Fund Payroll Taxes	3.1	4.8	6.2	7.4	7.9	8.4	8.7
Medicaid ¹	22.8	41.0	66.3	86.5	93.5	104.2	111.8
Other Programs ²	28.8	41.8	51.8	59.4	64.5	68.4	71.5
	Percent Distribution						
Share of State and Local Governments Spending	100	100	100	100	100	100	100
Employer Contribution to PHI Premiums	23	28	27	28	29	30	31
Employer Medicare HI Trust Fund Payroll Taxes	4	4	4	4	3	3	3
Medicaid ¹	32	34	39	41	40	40	40
Other Programs ²	40	34	30	28	28	27	26
	Average Annual Percent Growth from Previous Year Shown						
Growth in State and Local Governments Spending	—	11.2	7.0	7.4	9.9	10.9	7.7
Employer Contribution to PHI Premiums	—	15.3	6.5	7.9	14.1	15.3	11.7
Employer Medicare HI Trust Fund Payroll Taxes	—	8.7	5.5	6.2	6.7	5.4	3.5
Medicaid ¹	—	12.5	10.1	9.2	8.2	11.4	7.3
Other Programs ²	—	7.7	4.4	4.6	8.6	6.1	4.5

¹ Includes Medicaid buy-in premiums for Medicare.

² Includes other public and general assistance, maternal and child health, vocational rehabilitation, public health activities, and State Children's Health Insurance Program (SCHIP).

NOTES: PHI is private health insurance. HI is hospital insurance.

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, 2005.

- In 2003, spending of \$278.1 billion by State and local governments for health care represented a marked deceleration in spending growth. The 7.7 percent increase in spending was over 3 percentage points slower than in 2002. The primary driver of this lower growth rate was slowing Medicaid expenditures, whose growth slowed by 4.1 percentage points in 2003—from 11.4 percent to 7.3 percent. Medicaid accounts for the largest portion of State and local governments' health expenditures. Recently, States have been experiencing fiscal pressures, and by mid-2003, when States were beginning their fiscal year, nearly all States had implemented some kind of cost containment on Medicaid spending (Smith et al., 2004). At the same time, States' ability to utilize various creative financing schemes to increase Federal Medicaid funding were limited by Federal regulation (Smith et al., 2005).
- Since State and local governments are also employers, contributions to PHI premiums for active and retired workers accounted for almost one-third of State and local health expenditures in 2003. Though growth in the States' payments for PHI premiums decelerated in 2003, it still marked the fourth consecutive year of double-digit growth.
- Other State and local government programs such as general assistance, maternal and child health, and public health activities accounted for 26 percent of State and local government health spending in 2003.

Table 7

Federal Government Expenditures for Health Services and Supplies: Selected Calendar Years 1987-2003

Category of Federal Spending	1987	1992	1997	2000	2001	2002	2003
	Amount in Billions						
Federal Government	\$75.1	\$155.3	\$220.1	\$236.9	\$278.1	\$318.3	\$344.0
Spending as an Employer	6.6	12.9	13.8	16.9	18.4	20.6	22.8
Employer Contribution to PHI Premiums	4.9	10.7	11.4	14.3	15.8	17.7	19.7
Employer Medicare HI Trust Fund Payroll Taxes	1.7	2.2	2.4	2.6	2.7	2.9	3.1
Spending from General Revenues	68.5	142.4	206.2	220.0	259.7	297.7	321.2
Medicare ¹	17.5	39.1	69.0	49.1	69.2	84.5	93.4
Medicaid ²	28.1	69.1	97.1	120.1	133.7	150.5	160.9
Other Programs ³	22.8	34.2	40.2	50.8	56.8	62.7	66.9
	Percent Distribution						
Share of Federal Spending	100	100	100	100	100	100	100
Spending as an Employer	9	8	6	7	7	6	7
Employer Contribution to PHI Premiums	6	7	5	6	6	6	6
Employer Medicare HI Trust Fund Payroll Taxes	2	1	1	1	1	1	1
Spending from General Revenues	91	92	94	93	93	94	93
Medicare ¹	23	25	31	21	25	27	27
Medicaid ²	37	45	44	51	48	47	47
Other Programs ³	30	22	18	21	20	20	19
	Average Annual Percent Growth from Previous Year Shown						
Growth in Federal Spending	—	15.7	7.2	2.5	17.4	14.4	8.1
Spending as an Employer	—	14.4	1.4	6.9	9.0	11.6	10.8
Employer Contribution to PHI Premiums	—	17.1	1.3	7.8	10.2	12.1	11.6
Employer Medicare HI Trust Fund Payroll Taxes	—	5.4	1.6	2.5	2.7	8.9	5.7
Spending from General Revenues	—	15.8	7.7	2.2	18.0	14.6	7.9
Medicare ¹	—	17.4	12.1	-10.7	41.0	22.1	10.5
Medicaid ²	—	19.7	7.0	7.4	11.3	12.6	6.9
Other Programs ³	—	8.4	3.3	8.1	11.9	10.3	6.7

¹ Excludes Medicare HI trust fund payroll taxes and premiums, Medicare Supplementary Medical Insurance premiums, and Medicaid premium payments.

² Includes Federal portion of Medicaid buy-in premiums for Medicare.

³ Includes maternal and child health, vocational rehabilitation, Substance Abuse and Mental Health Services Administration, Indian Health Service, Federal workers' compensation, public health activities, Department of Defense, Department of Veterans Affairs, State Children's Health Insurance Program (SCHIP), and other miscellaneous general hospital and medical programs.

NOTES: PHI is private health insurance. HI is hospital insurance.

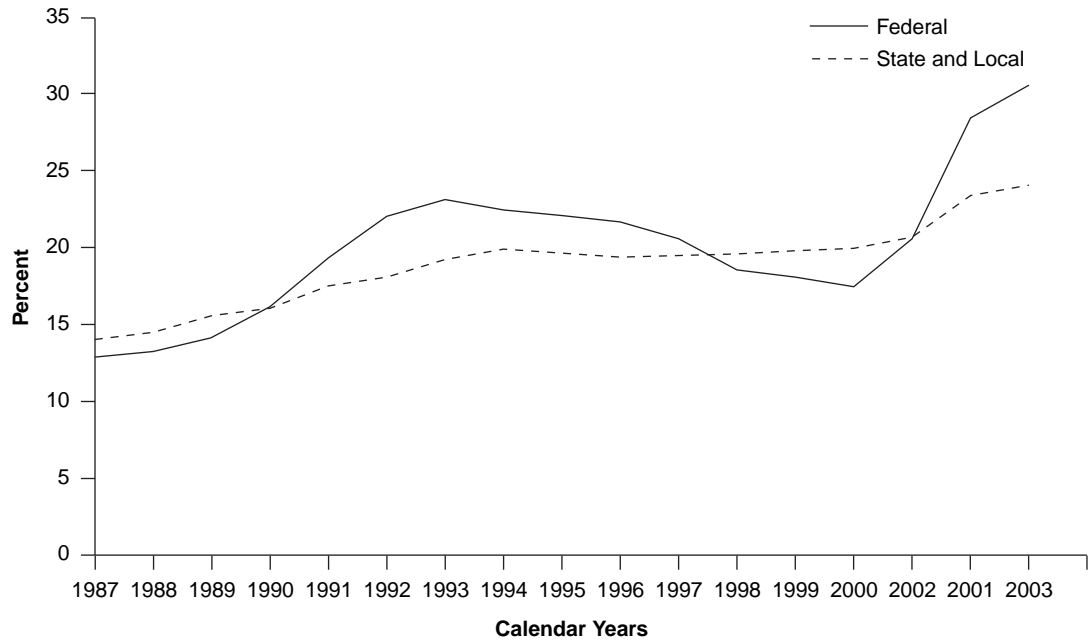
SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group, 2005.

- Spending by the Federal Government for health care reached \$344.0 billion in 2003, or 21 percent of HSS. Federal health care spending growth decelerated sharply in 2003, at roughly one-half the 2001 and 2002 rates. Growth for all Federal health programs, except the Department of Veterans Affairs and Indian Health Service, decelerated between 2002 and 2003 (CMS, 2005).
- Medicare accounted for 27 percent of Federal health spending in 2003. Federal Government Medicare expenditures are calculated as NHEA Medicare expenditures for benefits and administration less the sum of HI payroll taxes paid by employers, employees, and the self-employed, HI and SMI premiums, and HI income from taxation of Social Security benefits. This difference is roughly equal to trust fund interest income and Federal general revenue contributions to Medicare.
- Medicaid spending, which was 47 percent of Federal health care costs in 2003, also decelerated sharply, slowing from 12.6 percent growth in 2002 to 6.9 percent in 2003. While nearly all States implemented cost containment efforts in 2003, many States specifically controlled growth in Medicaid spending and enrollment by tightening eligibility and restricting benefits (National Governors Association and National Association of State Budget Officers, 2004).
- Other Federal programs show the same trends as Federal Medicaid spending growth. Growth in these programs decelerated from 10.3 percent in 2002 to 6.7 percent in 2003. They account for about one-fifth of Federal Government spending on health care.

- From 1998 to 2000, growth in Federal general revenue and interest income financing for Medicare steadily decelerated. During this period, Medicare expenditure growth was very slow, in fact negative in 1998 and 1999. This coincided with more revenue collected through payroll taxes levied on rapidly rising wages in a growing economy.
- In 2001 and 2002 as economic growth slowed, the amount of Medicare spending financed through general revenues increased substantially, due in part to a rapid growth in overall Medicare spending coupled with a slowdown in income received from payroll taxes.
- In 2003, as overall growth in Medicare spending slowed and growth in income from payroll taxes accelerated slightly, the growth in Medicare expenditures financed by general revenues slowed. However, the share of Medicare financed through general revenues and premiums increased because total Medicare expenditures continued to grow faster than income from payroll taxes.

Figure 2

Government Health¹ Expenditures as a Percent of Federal and State and Local Government Revenues²: Calendar Years 1987-2003



¹ Health expenditures for government includes employer contributions to private health insurance for government employees, and general revenue spending for Medicare, Medicaid, and other Federal, State, and local programs.

² Federal Government revenues do not include social insurance receipts since these funds cannot be used to fund general revenue obligations.

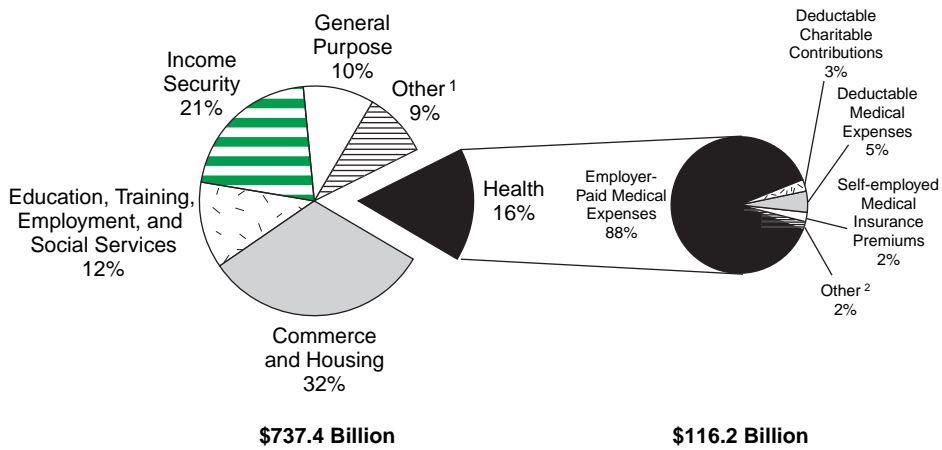
SOURCES: Centers for Medicare & Medicaid Services, Office of the Actuary: Data from the National Health Statistics Group, 1993-2003, U.S. Department of Commerce, Bureau of Economic Analysis, October 2004.

- The burden on governments to pay for health costs is increasing. Federal Government's burden, measured by comparing its employer and general revenue spending on health against its non-payroll-tax revenues, increased significantly in 2003 to about one-third of Federal revenues. While Federal health care spending growth slowed in 2003, the Federal Government's revenues declined as income tax cuts were implemented (U.S. Bureau of Economic Analysis, 2005).
- State and local government burden, using a similar measure as that used for the Federal Government comparison, also increased in 2003. About one-quarter of State and local governments' revenues go to health care. Several States

have reached a financial crisis as they struggle to find ways to finance increasing health care costs, especially for Medicaid. Unlike the Federal Government that can support deficit spending by borrowing, almost all State governments must balance their budgets each year, making the pressure they face from rising State health care costs particularly acute. Higher than expected State revenues from taxes in States fiscal year 2004, which includes part of calendar year 2003, partially offset increased growth in State health spending, resulting in only a modest increase in burden in 2003 (National Governors Association and National Association of State Budget Officers, 2004).

Figure 3

Distribution of Income Tax Expenditures, by Type of Deduction and Exclusion: Fiscal Year 2003



¹ Other includes: National Defense, International Affairs, General Science, Space and Technology, Energy, Natural Resources and Environment, Agriculture, Transportation, Community and Regional Development, Social Security, Veterans Benefits and Services, General Purpose Fiscal Assistance, and Interest.

² Other includes: Medical savings accounts/health savings accounts, exclusion of interest on hospital construction bonds, special Blue Cross®/Blue Shield® deduction, and tax credit for orphan drug research.

SOURCE: Executive Office of the President, 2004.

- Overall, health-related tax expenditures accounted for 16 percent, or \$116.2 billion, of all tax expenditures in 2003, ranking third behind commerce and housing, at 32 percent, and income security, at 21 percent. The Federal Government receives less income tax revenue than would otherwise occur because of certain allowed tax deductions and income exclusions. These forgone revenues are often referred to as tax expenditures.
- Tax exclusions for employer contributions for medical insurance premiums and medical care were the largest health-related tax expenditure in 2003, at \$101.9 billion. The second largest health-related tax expenditure was deductible medical expenses at \$6.2 billion.
- Current national income accounting principles recognized by the Bureau of Economic Analysis National Income and Product Accounts (NIPA), the United Nation's System of National Accounts, and the Organization of Economic Cooperation and Development (OECD) Health Accounts, do not include tax expenditures in their estimates.
- CMS, the Bureau of Economic Analysis, and OECD recognize that tax expenditures provide important economic incentives that influence the level and distribution of costs throughout the entire health care market. However, because no explicit taxes are collected or spending incurred, the NHEA, like the NIPA and the OECD, do not include tax expenditures in their official national accounting practices. (Levit et al., 2000; Cowan et al., 2002).
- As the amounts of the exclusions continue to grow, so does the debate about how to show estimates of health-related tax expenditures and compare them with the NHEA. The Office of Management and Budget (OMB) offers some insight on the difficulty of directly integrating tax expenditures with the NHEA stating that "...individual tax expenditures will not necessarily equal the increase in Federal revenues by repealing these special provisions. Tax expenditures alter economic behavior through various incentives and the estimates provided are interdependent, meaning they do not reflect any interactions between other programs and individual and corporate income tax receipts" (Executive Office of the President, 2004). Currently, CMS, along with OMB and the Congressional Budget Office (CBO) use sidebars, such as this discussion, to show tax expenditure estimates.

ACKNOWLEDGMENTS

The authors would like to thank Steve Heffler, Mark Freeland, and Katie Levit for their comments and guidance in presenting the data in this article. We would also like to thank Rick Foster and Suzanne Codespote for their helpful comments.

REFERENCES

- American Academy of Actuaries: *The Workers' Compensation System: An Analysis of Past, Present, and Potential Future Crisis*. American Academy of Actuaries. Washington, DC. 2000.
- Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Fund: *The 2004 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Fund*. Washington, DC. March 23, 2004.
- Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Fund: *The 2005 Annual Report of the Board of Trustees of the Federal Hospital Insurance and Federal Supplementary Medical Insurance Trust Fund*. Washington, DC. March 23, 2005.
- Centers for Medicare & Medicaid Services: National Health Account, 1960-2003. Baltimore, MD. January 2005. Internet address: <http://www.cms.hhs.gov/statistics/nhe/default.asp>
- Claxton, G., Gil, I., Finder, B., et al.: *Employer Health Benefits 2004 Annual Survey*. The Henry J. Kaiser Family Foundation. Menlo Park, CA. Health Research and Educational Trust. Chicago, IL. 2004.
- Cowan C.A., McDonnell P.A., Levit K.R., et al.: Burden of Health Care Costs: Businesses, Households, and Governments, 1987-2000. *Health Care Financing Review* 23(3):131-159, Spring 2002.
- Executive Office of the President, Office of Management and Budget: *Analytical Perspectives, Budget of the United States Government, Fiscal Year 2005*. U.S. Government Printing Office. Washington, DC. 2004.
- Fronstin, P.: The Impact on Employment-Based Health Benefits of the Shift From a Manufacturing Economy to a Service Economy. Employee Benefit Research Institute. Washington, DC. *Employee Benefit Research Institute Notes* 25(6):1-7, June 2004.
- Gilmer, T., Kronick, R.: It's the Premiums, Stupid: Projections of the Uninsured Through 2013. Web Exclusive. *Health Affairs* W5-143, April 2005. Internet address: <http://content.healthaffairs.org> (Accessed 2005.)
- Levit, K.: The 'Right' Accounting Approach: Author's Response. *Health Affairs* 19(2):273-274, March/April 2000.
- Levit, K., Smith, C., Cowan, C., et al.: Trends in U.S. Health Care Spending, 2001. *Health Affairs* 22(1):154-164, January/February 2003.
- Levit, K., Smith, C., Cowan, C., et al.: Health Spending Rebound Continues in 2002. *Health Affairs* 23(1):147-159, January/February 2004.
- Monaco, R. and Phelps, J.: Health Care Prices, The Federal Budget, and Economic Growth. *Health Affairs* 14(2):249-259, Summer 1995.
- Mont, D., Burton, J.F., Jr., Reno, V., et al.: *Workers' Compensation: Benefits, Coverage and Costs, 1999 New Estimates and 1996-1998 Revisions*. National Academy of Social Insurance. Washington, DC. May 2001.
- National Governors Association and National Association of State Budget Officers: *The Fiscal Survey of States*. Washington, DC. December 2004.
- Pauly, M.: When Does Curbing Health Costs Really Help the Economy? *Health Affairs* 14(2):68-82, Summer 1995.
- Smith, C., Cowan, C., Sensenig, A., et al.: Health Spending Growth Slows in 2003. *Health Affairs* 24(1):185-194, January/February 2005.
- Smith, V., Ramesh, R., Gifford, K., et al.: *The Continuing Medicaid Budget Challenge: State Medicaid Spending Growth and Cost Containment in Fiscal Years 2004 and 2005*. The Henry J. Kaiser Family Foundation. Menlo Park, CA. October 2004.
- U.S. Bureau of Economic Analysis: *Data from the National Income and Product Accounts, 1987-2003*. U.S. Department of Commerce. Washington, DC. January 2005. Internet address: <http://www.bea.doc.gov/bea/dn1.htm> (Accessed 2005.)

Reprint Requests: Cathy Cowan, Centers for Medicare & Medicaid Services, 7500 Security Boulevard, N3-02-02, Baltimore, MD 21244-1850. E-mail: cathy.cowan@cms.hhs.gov