Business, Households, and Governments: Health Spending, 1991

Cathy A. Cowan, M.B.A., and Patricia A. McDonnell

Governments have been thrust to the forefront of health care reform efforts as growth in government health care costs was faster than growth in all other sponsor sectors in 1991. In the business sector, real health care costs per worker have risen 65 times faster than real wages and salaries per worker during the past 26 years. Households continue to devote 5 percent of income after taxes to health care, the same percentage for the last 8 years. This article presents data supporting these findings, and an analysis of health care spending by each sponsor sector.

INTRODUCTION

In 1991, expenditures for health services and supplies (HSS) reached $728.6 billion, an increase of 11.7 percent from the previous year (Letsch et al., 1992). In this article, the traditional way of looking at health spending, concentrating on services and sources of funds, is rearranged to take one step back to see who sponsors the payment of health care bills. Expenditures for HSS, estimates of current year spending on health care, are broken down into the payer categories of business, households, governments, and non-patient revenues. (HSS is a subset of national health expenditures and excludes research and construction which are considered investments in future health care.) Spending by these payer categories are examined over time, and measures of the changing burden this spending imposes are presented. We also explore the role of employers in private business and government as they provide private health insurance for their workers, and examine several private and public surveys conducted to measure premiums and other characteristics of employer-sponsored insurance.

The designations of who pays for and bears the burden of health care are somewhat arbitrary. Ultimately, the individual bears the primary responsibility of paying for health care through health insurance premiums, out-of-pocket costs, philanthropic contributions to health organizations, income tax and other taxes, earnings reduced by increases in employers health insurance costs, higher costs of products, and decreased dividends to owners.

In 1991, $728.6 billion was spent on health services and supplies (Table 1). The private sector, which includes business, households, and non-patient revenues, accounted for 65 percent ($474.1 billion) of HSS. The public sector accounted for the remaining 35 percent ($254.5 billion). Expenditures by the public sector include only general revenue expenditure by Federal, State, and local governments on health care programs, and for governments' employer contributions to health insurance plans, and to the Medicare hos-

The authors are with the Office of the Actuary, Health Care Financing Administration (HCFA) and the opinions expressed are those of the authors and do not necessarily reflect HCFA's views or policy positions.

Table 1

Expenditures for Health Services and Supplies, by Type of Payer: United States, Selected Calendar Years 1965-91

Type of Payer	1965	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991
	Amount in Billions										
Total	38.2	69.1	124.7	238.9	407.2	438.9	476.9	526.2	583.6	652.4	728.6
Private	30.3	50.1	86.2	162.0	279.0	301.8	327.5	362.5	398.3	436.6	474.1
Private Business	6.0	13.7	27.8	64.3	113.5	125.9	131.8	151.0	167.0	187.9	205.4
Employer Contribution to Private Health Insurance Premiums	4.9	9.8	19.9	47.9	83.9	92.2	95.0	110.9	122.8	140.2	152.7
Employer Contribution to Medicare Hospital Insurance Trust Fund	0.0	2.1	5.0	10.5	20.3	23.3	24.6	26.2	28.1	29.5	32.8
Workers' Compensation and Temporary Disability Insurance	0.8	1.4	2.4	5.1	7.8	8.8	10.5	12.0	14.1	16.0	17.5
Industrial Inplant Health Services	0.2	0.3	0.5	0.9	1.4	1.6	1.7	1.9	2.1	2.2	2.4
Household	23.7	35.0	55.9	90.8	153.6	163.1	181.9	196.1	213.8	228.9	247.0
Employee Contribution to Private Health Insurance Premiums and Individual Policy Premiums	4.6	6.0	9.9	16.6	30.0	30.9	37.5	37.7	42.7	46.6	52.2
Employee and Self-Employment Contributions and Voluntary Premiums Paid to Medicare Hospital Insurance Trust Fund[1]	0.0	2.4	5.7	12.0	24.0	26.0	29.4	31.2	33.7	35.6	39.9
Premiums Paid by Individuals to Medicare Supplementary Medical Insurance Trust Fund	0.0	1.0	1.7	2.7	5.2	5.2	6.1	8.7	11.2	10.2	10.7
Out-of-pocket Health Spending	19.0	25.6	38.5	59.5	94.4	100.9	108.8	118.5	126.2	136.5	144.3
Non-Patient Revenue	0.6	1.5	2.5	7.0	12.0	12.9	13.8	15.4	17.5	19.8	21.7
Public	7.9	18.9	38.5	76.8	128.2	137.1	149.4	163.7	185.4	215.8	254.5
Federal Government	3.4	10.4	21.3	42.6	68.9	71.6	77.0	84.3	96.5	113.7	133.8
Employer Contributions to Private Health Insurance Premiums	0.2	0.3	1.2	2.2	4.3	4.0	4.8	6.4	8.0	9.1	9.8
Adjusted Medicare	0.0	2.0	3.3	11.1	20.3	19.6	19.7	20.9	25.8	31.2	34.8
Medicare	0.0	7.6	16.4	37.5	72.0	76.8	83.0	90.5	102.6	110.7	122.8
Less Medicare Hospital Trust Fund Contributions and Premiums	0.0	4.7	11.3	23.7	46.6	52.0	57.1	60.9	65.5	69.3	77.3
Less Medicare Supplementary Medical Insurance Premiums	0.0	1.0	1.7	2.7	5.2	5.2	6.1	8.7	11.2	10.2	10.7
Health Program Expenditures (Excluding Medicare)	3.3	8.2	16.8	29.2	44.3	48.0	52.4	57.0	62.7	73.3	89.2
Medicaid	0.0	2.9	7.4	14.5	23.1	25.4	27.9	31.0	35.4	42.8	55.9
Department of Veterans Affairs	1.2	1.8	3.5	5.9	8.6	9.1	9.6	10.0	10.6	11.5	12.2
Department of Defense	1.0	1.8	2.8	4.3	7.6	8.4	9.3	9.8	10.4	11.7	12.8
Other Programs[2]	1.2	1.8	3.0	4.4	4.9	5.2	5.6	6.2	6.2	7.4	8.3
State and Local Government	4.5	8.5	17.2	34.2	59.3	65.5	72.4	79.4	88.8	102.1	120.7
Employer Contributions to Private Health Insurance Premiums	0.3	0.6	1.9	6.7	16.0	16.7	17.9	20.4	23.6	26.3	29.7
Employer Contributions to Medicare Hospital Insurance Trust Fund	0.0	0.2	0.7	1.3	2.2	2.7	3.1	3.4	3.8	4.2	4.6
Health Expenditures by Program	4.2	7.6	14.6	26.3	41.1	46.1	51.4	55.6	61.4	71.6	86.5
Medicaid	0.0	2.5	6.1	11.6	18.6	19.8	22.9	23.9	26.8	32.7	44.6
Hospital Subsidies	2.6	3.4	5.2	6.2	7.8	10.0	11.2	12.4	12.8	13.6	13.9
Other Programs[3]	1.6	1.8	3.3	8.5	14.7	16.3	17.3	19.3	21.8	25.3	27.9

[1]Includes one-half of self-employment contribution to Medicare hospital insurance trust fund.
[2]Includes maternal and child health, vocational rehabilitation, Alcohol, Drug, and Mental Health Administration, Indian Health Service, Office of Economic Opportunity (1965-74), Federal workers' compensation, and other miscellaneous general hospital and medical programs and public health activities.
[3]Includes other public and general assistance, maternal and child health, vocational rehabilitation, and public health activities.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

pital insurance trust fund for their employees.

BUSINESS

Private business spent $205.4 billion on health care for employees in 1991. This constitutes a 9.3-percent increase in expenditures from 1990. Private business expenditures include employer contributions to private health insurance premiums ($152.7 billion) and to the Medicare hospital insurance trust fund ($32.8 billion). These expenditures also include the costs absorbed by business for the medical portion of both workers' compensation and temporary disability insurance ($17.5 billion), and for industrial inplant health services ($2.4 billion) (Table 2).

The share that business paid for health care changed from 1965 to the present. In 1965, private business accounted for 16 percent of HSS. By 1981, the percentage paid by business had grown to 28 percent. The share of health care costs paid by business remained fairly constant from 1981 to 1991.

The share or amount that business pays for health care can be examined in the context of the burden that business bears in paying for these costs. Burden can be measured in several different ways. One way is to compare business health spending with profits, either before or after taxes. Business health spending estimates cover expenditures by all types of business, such as corporations, partnerships, and sole proprietorships. However, only corporate profits are used to measure business profits because a similar concept is not available for partnerships and sole proprietorships. As shown in Table 3, in 1965 business spending for health equaled 7.6 percent of corporate profits before taxes. By 1991, this percentage had increased eightfold to 61.8 percent. The comparison of business expenditures for health care with corporate profits after taxes showed the same type of increase, from 12.4 percent in 1965 to 97.5 percent in 1991.

Business health spending as a percentage of total compensation quadrupled from 1965 to 1991, 1.8 percent to 7.6 percent (Table 3). Health care costs also accounted for more and more of fringe benefits. In 1965, health care costs consumed 20.5 percent of fringe benefits. By 1991, this percentage had doubled to 48.6 percent, almost one-half of total fringe benefits.

Business was able to transfer some of its burden of rising health care costs to employees (U.S. Congressional Budget Office, 1992). When health care costs rise, employers can counterbalance the increase by lowering wage growth, or lowering other fringe benefits such as pension plans and other supplements to wages. Growth in health care costs also can be slowed by increasing employee premium contributions, increasing copayments and deductibles, and decreasing benefits or dropping them altogether. Other options available to business include the substitution of capital costs (equipment) for labor costs (total compensation). In aggregate, this lowers the number of employees per unit of output and increases productivity per worker, permitting employers to reduce their work force (and total compensation). This change in mix between capital and labor costs may be manifesting itself subtly by a loss of manufacturing industry jobs with higher wages and fringe benefits, with a growth in service industry jobs, and with lower

Table 2

Percent Distribution of Expenditures for Health Services and Supplies, by Type of Payer: United States, Selected Calendar Years 1965-90

Type of Payer	1965	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991
	Percent Distribution										
Total	100	100	100	100	100	100	100	100	100	100	100
Private	79	73	69	68	69	69	69	69	68	67	65
Private business	16	20	22	27	28	29	28	29	29	29	28
Household (individual)	62	51	45	38	38	37	38	37	37	35	34
Non-patient revenue	2	2	2	3	3	3	3	3	3	3	3
Public	21	27	31	32	31	31	31	31	32	33	35
Federal Government	9	15	17	18	17	16	16	16	17	17	18
State and local government	12	12	14	14	15	15	15	15	15	16	17

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

wages and fringe benefits (Levit, Olin, and Letsch, 1992).

Business' accounting of health care costs will change dramatically in 1993 as the impact of the Financial Accounting Standards Board rule 106 (FASB106) is realized. This rule requires companies to account for future obligations for retiree health benefits during the period in which these obligations are incurred. The amount of the effect on business health care costs in 1993 is unknown. One company, General Motors, wrote off $20.8 billion in 1992 (Brown and Swoboda, 1993). In 1991, only 41 percent of employers determined the amount of their FASB106 obligations that needed to be included in their 1993 balance sheets (Foster Higgins, 1992). This change does not affect the level of business health care spending reported in this article because only current expenditures, not future obligations, are measured in this taxonomy.

Responses to FASB106 include increasing or completely shifting premium costs to retirees, instituting defined employer contribution retiree health care plans, increasing deductibles and copayments for retirees, and tightening eligibility criteria for coverage (Foster Higgins, 1992). This will put even more of a strain on individuals and, potentially, on public programs such as Medicaid, particularly for retirees under 65 years of age who are not yet eligible for Medicare. In addition, providers may experience an increase in uncompensated care because of the lack of insurance coverage for retirees' health care.

The burden of rising health care cost for private business has been documented in this article. On an individual basis, businesses have reacted to this burden by initiating managed care, utilization review, higher premium requirements for employees, and increased deductible and coinsurance costs. Despite these initiatives, each business on its own, typically, does not affect enough of the local health care market to have much impact on reducing cost growth. Instead, private businesses have resorted to other strategies

Table 3

Private Business Expenditures for Health Services and Supplies as a Percent of Business Expense or Profit: United States, Selected Calendar Years 1965-91

	Business Health Spending as a Share of				
	Labor Compensation[1,2]			Corporate Profits[2,3]	
Year	Total Compensation	Wages and Salaries	Fringe Benefits	Before Tax	After Tax
	Percent				
1965	1.8	2.0	20.5	7.6	12.4
1970	2.8	3.1	26.5	17.4	31.1
1975	3.8	4.4	27.5	19.8	31.1
1980	4.9	5.8	31.2	26.9	41.2
1985	5.9	7.0	38.2	51.2	88.3
1986	6.2	7.4	40.3	58.2	113.1
1987	6.1	7.2	40.6	45.9	81.9
1988	6.4	7.6	42.5	43.5	71.7
1989	6.7	7.9	44.0	48.8	82.8
1990	7.1	8.4	46.6	53.0	85.9
1991	7.6	9.1	48.6	61.8	97.5

[1]For employees in private industry.
[2]Based on July 1992 data from the U.S. Department of Commerce national income and product accounts.
[3]A similar concept of "profits" for sole proprietorships and partnerships is not available.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

internal to their own operations, such as trading lower wages for higher fringe benefits or substituting capital for labor, to minimize the impact of rising health care costs. The outcome of these strategies is apparent: Compensation as a share of gross domestic product (GDP) has remained constant between 1970-91 (Table 4). Because of these measures, business has been able to protect itself from rising health care costs.

Business plays an important role in providing health insurance for its own workers, and has been responsible for introducing many cost-saving innovations. However, business' ability to protect itself from rising costs, its fragmented influence on the health care marketplace, plus its general lack of interest in addressing problems of the uninsured limits its role in designing the future direction of health care in the United States.

Table 4

Total Compensation as a Percent of Gross Domestic Product (GDP): United States, Selected Years 1965-91

Year	Total Compensation	GDP	Total Compensation as a Percent of GDP
	Amounts in Billions		
1965	400	703	56.9
1970	618	1011	61.2
1975	949	1586	59.8
1980	1644	2708	60.7
1985	2383	4039	59.0
1986	2524	4269	59.1
1987	2699	4540	59.4
1988	2921	4900	59.6
1989	3100	5251	59.0
1990	3291	5522	59.6
1991	3391	5677	59.7
	Average Annual Growth Rates from Previous Year Shown		
1965-70	9.1	7.5	—
1970-75	8.9	9.4	—
1975-80	11.6	11.3	—
1980-85	7.7	8.3	—
1985-86	5.9	5.7	—
1986-87	6.9	6.3	—
1987-88	8.2	7.9	—
1988-89	6.1	7.2	—
1989-90	6.2	5.2	—
1990-91	3.0	2.8	—
1985-91	6.1	5.8	—
1965-91	8.6	8.4	—
	Cumulative Growth Rates		
1965-70	54.6	43.8	—
1970-91	448.4	461.5	—
1965-91	748.1	707.5	—

SOURCES: Health Care Financing Administration, Office of the Actuary, Office of National Health Statistics, and U.S. Department of Commerce, Bureau of Economic Analysis, 1992.

HOUSEHOLDS

Households spent $247.0 billion on health care in 1991 (Table 1). This includes expenditures for private health insurance (either through an employer or individually purchased plans), and out-of-pocket spending for services not covered by insurance and for deductibles and copayments. Households also pay premiums for and contribute to Medicare hospital and supplementary medical insurance trust funds.

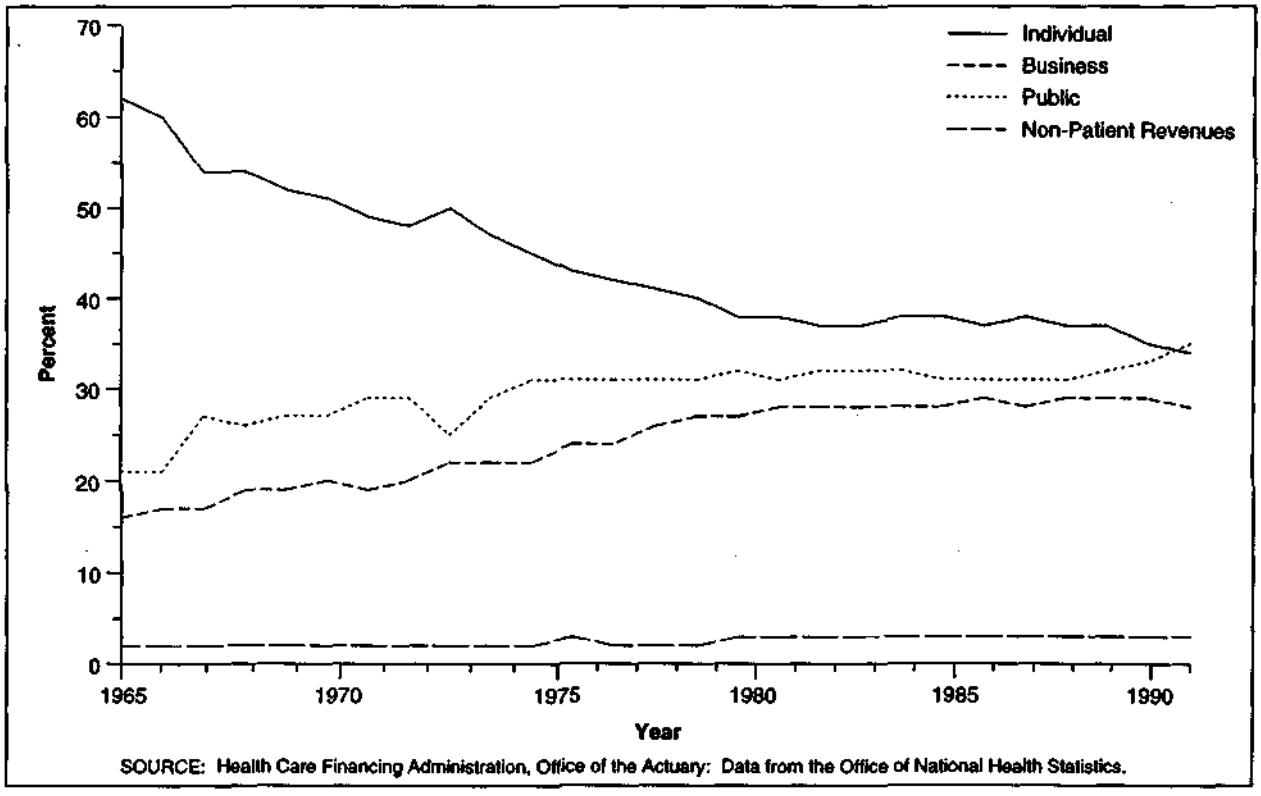
The portion of HSS that households paid during the last 27 years has slowly declined. Households paid for 34 percent of health services and supplies in 1991, compared with 62 percent in 1965. The other two payers, business and the public sector, slowly assumed a larger share of the payments for health care. For the first time in 1991, the public sector paid more than households for health care (Figure 1).

The financial burden that households bear for health care has remained relatively stable during the past 8 years. According to the Bureau of Labor Statistics' (BLS) Consumer Expenditure Survey (CE), households spent approximately 5 percent of their income after taxes on health care from 1984 to 1991 (Table 5).

However, health care costs vary according to the age of the head of the household according to the survey. For exam-

Figure 1

Percent of Expenditures for Health Services and Supplies, by Payer: United States 1965-91



SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

ple, in 1991, households headed by persons under 65 years of age, 4.0 percent of their income after taxes went for health care. Households with persons 65 years of age or over spent a higher percentage of their income after taxes (12.2 percent) to cover the cost of health care than did households headed by younger people (Table 5).

Using the Consumer Expenditure Survey to compare the burdens borne by the different head of household age groups, we needed to consider the disparate income and assets between the two groups. Income after taxes for households with a person 65 years of age or over is only $18,515 compared with $34,232, for the under 65 years of age household (U.S. Department of Labor,

Table 5

Expenditures for Health as a Percent of Household (Individual) Income: United States, Calendar Years 1984-91

	Health Spending as a Share of Income After Taxes[1]		
Year	All Ages	Reference Person 65 Years of Age or Over[2]	Reference Person Under 64 Years of Age[2]
1984	4.9	11.3	4.0
1985	4.8	11.0	3.9
1986	4.9	11.8	4.6
1987	4.6	10.7	3.6
1988	5.0	12.5	3.8
1989	4.9	11.5	3.9
1990	5.1	12.5	4.0
1991	5.1	12.2	4.0

[1]Calculated from the Consumer Expenditure Integrated Survey of the Bureau of Labor Statistics. In this survey, the institutionalized population, including nursing home residents were excluded, so spending for nursing home care in the Consumer Expenditure Survey covers only a small portion of total days of care.

[2]Consumer expenditure data are tabulated by age of reference person. Therefore households may include members who are in a different age category than the reference person. For example, a person who is under age 65 and lives in a household with a reference person 65 years of age or over will be included with that over 65 years of age household.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

1984-91). Despite the lower income, 62 percent of the households headed by persons 65 years of age or over are homeowners without a mortgage. Only 14 percent of households headed by a person under 65 years of age are homeowners without a mortgage. On average, households with a person 65 years of age or over may be spending a larger percent of their income for health care, but they have more assets (at least in real estate) than the households headed by a person under 65 years of age. With lower shelter expenses, households headed by the elderly may be better able to devote a larger share of income to health care costs. With this dichotomy, evaluation of the health care burden each age group bears is not clear-cut.

Households may be feeling the burden of health costs in other ways. As businesses cut back on labor or eliminated health benefits, households lost health insurance coverage. Between 1980-91, a smaller proportion of the population was covered by employer-sponsored insurance, despite an increase in the percentage of the population who were workers. From 1982 to 1991, the percent of full-time, full-year workers who were uninsured rose from 7.5 percent to 11.2 percent (Levit, Olin, and Letsch, 1992). In these cases, public programs such as Medicaid or providers through uncompensated care may have been covering the households' health bill.

GOVERNMENTS

In 1991, health care expenditures by the Federal, State, and local governments reached $254.5, exceeding the amount spent by private business and households (Table 1). Although government spending historically had exceeded spending by business, 1991 was the first year in which government spending also exceeded that of households. In 1991, government spending rose to 35 percent of health services and supplies, up from 33 percent in 1990, whereas household share of spending fell from 35 percent in 1990 to 34 percent in 1991 (Table 2).

The Federal government paid $133.8 billion for health care in 1991, 17.7 percent more than in 1990. Of that amount, the Federal government paid $34.8 billion in general revenue for Medicare, $55.9 billion for Medicaid, and $33.3 billion for health care through the Department of Veterans Affairs, the Department of Defense, and other programs. As an employer, the Federal Government paid $9.8 billion for health insurance premiums (Table 1).

State and local governments funded $120.7 billion for health care in 1991. Most of this funding, 37 percent, went to financing the Medicaid program. The second largest portion, 28 percent, represented contributions by State and local governments as employers to private health insurance and to the Medicare hospital trust fund for their employees (Table 1).

As shown in Table 1, the Health Care Financing Administration's (HCFA's) Medicare program is the largest health care payer in the public sector, spending $122.8 billion in 1991. In this accounting taxonomy, however, a large proportion of these annual expenditures are offset by employer, employee, and self-employed contributions and premiums to the hospital insurance (HI) trust fund, and through individually paid premiums to the supplementary insurance trust fund. These expenditure offsets are mostly captured under private business and household

expenditures. The remaining $34.8 billion are counted as Federal Government general revenue contributions and include Medicare general revenue payments plus a small amount of government-as-employer contributions to the HI trust fund. As a result, in this taxonomy Medicare plays a relatively small role in the increase in public expenditures in 1991—only $3.6 billion out of total public spending increases of $38.7 billion.

Instead, the smaller of the two HCFA programs, Medicaid, is responsible for 65 percent of the growth in public spending in this taxonomy for 1991. In 1991, Federal and State Medicaid expenditures ($100.5 billion) increased $25.0 billion out of total public funding increases of $38.7 billion. This growth is reflected in both the Federal and State Medicaid expenditures that grew 33.2 percent, the highest rate since the program's inception. This accelerated growth was caused by "expansions to Medicaid program eligibility and a slowdown in the economy which caused additional people to qualify for coverage; provider tax and donation programs; clarification of laws requiring reasonable and adequate payment rates for nursing homes and hospitals; increased payments to hospitals serving a disproportionate share of Medicaid or other low-income people; and passage of regulations requiring nursing homes to adhere to higher standards to be eligible to receive payment from Medicaid" (Letsch et al., 1992).

Growth in health care expenses consistently outpaced growth in general revenues for all levels of government during the past 26 years. In 1991, the Federal government's health spending consumed 20.5 percent of Federal revenues, up from 17.2 percent in 1990. For the same period, State and local government spending grew from 18.9 percent to 21.4 percent of State and local revenues. The large jumps in government revenue shares going for health care signals a dramatic change in the burden health care is imposing on governments (Table 6).

Governments are feeling squeezed by the need to finance growing health care costs with revenues that have not kept pace with needs, especially during the last recession. Governments at all levels are making tough decisions on the allocation of funds to programs, methods to raise revenues, and ways to balance budgets and finance deficits.

The Federal Government in particular is facing the prospect of ever-increasing deficits fueled, in part, by rising health care costs. Deficit financing has an im-

Table 6

Expenditures for Health Services and Supplies as a Share of Federal, State, and Local Government Revenues: United States, Selected Calendar Years 1965-91

Year	Federal Government Health Spending as a Share of Federal Revenues[1]	State and Local Government Health Spending as a Share of State and Local Revenues[2]
	Percent	
1965	3.5	8.0
1970	7.3	8.9
1975	11.0	11.1
1980	11.6	14.1
1985	14.4	15.4
1986	14.5	13.9
1987	13.7	14.4
1988	14.5	14.8
1989	15.1	17.5
1990	17.2	18.9
1991	20.5	21.4

[1]Excludes contributions to social insurance because these came directly from businesses and individuals. These funds are for dedicated purposes and are not part of the general revenue pool of funds from which health spending can be financed. Based on July 1992 data from the U.S. Department of Commerce national income and product accounts.

[2]Excludes contribution to social insurance, as explained in footnote 1, and Federal grants in aid, such as Federal Medicaid grants to States. Based on July 1992 data from the U.S. Department of Commerce national income and product accounts.

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

pact on the growth and development of the economy: It transfers the cost of current expenditures to future generations, it eats up large amounts of current revenue in paying interest on debt, and it discourages investment because of increasing uncertainty about the future.

The strain on governments in 1991 was particularly great. Increasing financial demands of Medicaid, a growing access-to-health-care problem for Medicaid recipients, and increasing numbers of uninsured persons, combined with health care costs that equal more than 20 percent of their revenue sources have thrown governments at all levels into the center of health care reform. States such as California, Florida, Maryland, Minnesota, Pennsylvania, and Vermont are developing alternatives to their current health care insurance and delivery methods. Similarly, the Federal Government is deeply involved in developing nationwide health care reform proposals.

NON-PATIENT REVENUES

Non-patient revenues funded 3 percent of all health care spending in 1991, a share maintained throughout the past decade. Non-patient revenues consist of philanthropic expenditures for health care services and other revenue sources in institutions such as hospitals, home health agencies, and nursing homes that are not directly associated with the delivery of patient care services. These sources include gift shops, educational programs, cafeterias, and parking lots. In 1991, $21.7 billion of health expenditures were funded from such sources.

EMPLOYER HEALTH COSTS

Business, households, and governments share the responsibility of paying for private health insurance premiums. In 1991, these premiums reached $244.4 billion (Table 7). During the past 27 years, more of this responsibility shifted from individuals to employers. In 1991, employers—private business and government—contributed 79 percent of total premiums ($192.2 billion) for health insurance coverage for their employees, up from 54 percent in 1965. Individuals, either through their employment or through individually purchased plans, paid $52.2 billion for health insurance premiums in 1991.

The willingness of private employers to pay for a larger portion of private health insurance premiums during the last 27 years lies in the preferential tax treatments of employer benefits, the ability to substitute higher benefit increases for lower wages, and employees' desire to maintain or enhance benefits. As with other business expenses, payments for private health insurance premiums are deducted from employer taxable income, lowering tax obligations. For both private business and government employees, employer-paid health care premiums received as a fringe benefit are also not taxable, permitting the employee to realize more value from health care premiums than from a comparable taxable wage increase. Where employers and employees had been implicitly deciding, they are more recently explicitly deciding to maintain or increase health care coverage in exchange for lower or no real wage and salary growth (Kramon, 1989; Woolsey, 1990). In effect, the perceived value of health care to employees is greater than the value of foregone wages and salaries.

Table 7

Expenditures for Private Health Insurance, by Type of Payer: United States, Selected Calendar Years 1965-91

Type of Payer	1965	1970	1975	1980	1985	1986	1987	1988	1989	1990	1991
						Amount in Billions					
Total Private Health Insurance Premiums	10.0	16.7	32.9	73.4	134.2	143.8	155.2	175.3	197.1	222.2	244.4
Employer	5.4	10.7	23.0	56.8	104.2	112.9	117.7	137.7	154.3	175.6	192.2
Private	4.9	9.8	19.9	47.9	83.9	92.2	95.0	110.9	122.8	140.2	152.7
Public	0.4	0.9	3.1	8.9	20.3	20.7	22.7	26.8	31.6	35.4	39.5
Federal	0.2	0.3	1.2	2.2	4.3	4.0	4.8	6.4	8.0	9.1	9.8
State and Local	0.3	0.6	1.9	6.7	16.0	16.7	17.9	20.4	23.6	26.3	29.7
Employee and Indvidual	4.6	6.0	9.9	16.6	30.0	30.9	37.5	37.7	42.7	46.6	52.2
						Percent Distribution					
Total Private Health Insurance Premiums	100	100	100	100	100	100	100	100	100	100	100
Employer	54	64	70	77	78	78	76	79	78	79	79
Private	49	59	61	65	63	64	61	63	62	63	63
Public	4	5	9	12	15	14	15	15	16	16	16
Federal	2	1	4	3	3	3	3	4	4	4	4
State and Local	3	4	6	9	12	12	12	12	12	12	12
Employee and Individual	46	36	30	23	22	22	24	21	22	21	21

SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

For all private and government employers, real total compensation per employee grew at a rate of 0.6 percent annually from 1965 to 1991 (Table 8). Real employer health spending per worker, a component of real total compensation, grew 6.8 percent annually for the same period. When the 1965-91 cumulative growths of all the components of real total compensation are compared, health (up 451.5 percent) increased at an unsustainable rate when compared with wages (up 6.9 percent), and with pension plans and other fringe benefits (up 59.0 percent) (Figure 2).

The largest component of the non-health fringe benefits is pension and profit sharing plans. Employer contributions to pension and profit sharing has declined since the late 1970s. The decline

Table 8

Economy-wide Real Compensation Per Employee[1] and Average Annual Growth: United States, Selected Calendar Years 1965-91

Year	Real Compensation						Full-Time and Part-Time Employees (in Thousands)
			Fringe Benefits				
	Total Compensation	Wages and Salaries	Total	Employer Health Expenditures[2]	Pension Payments[3]	Other[4]	
1965	18,307	16,668	1,639	289	968	382	69,877
1970	19,897	17,749	2,148	478	1,289	381	80,003
1975	20,499	17,590	2,908	688	1,754	466	85,347
1980	20,256	16,995	3,261	911	1,843	507	99,233
1985	20,958	17,481	3,477	1,203	1,806	468	107,133
1986	21,475	17,907	3,569	1,277	1,820	472	109,118
1987	21,526	18,057	3,469	1,266	1,738	465	112,148
1988	21,824	18,242	3,582	1,360	1,757	465	115,221
1989	21,548	17,972	3,576	1,417	1,723	436	117,832
1990	21,465	17,855	3,611	1,493	1,695	422	119,413
1991	21,562	17,819	3,742	1,597	1,707	439	117,541
	Average Annual Growth Rates from Previous Year Shown						
1965-70	1.7	1.3	5.6	10.5	5.9	-0.0	2.7
1970-75	0.6	-0.2	6.2	7.6	6.4	4.1	1.3
1975-80	-0.2	-0.7	2.3	5.8	1.0	1.7	3.1
1980-85	0.7	0.6	1.3	5.7	-0.4	-1.6	1.5
1985-86	2.5	2.4	2.6	6.1	0.8	-1.1	1.6
1986-87	0.2	0.8	-2.8	-0.9	-4.5	-1.4	2.8
1987-88	1.4	1.0	3.3	7.5	1.1	-0.0	2.7
1988-89	-1.3	-1.5	-0.2	4.2	-1.9	-6.3	2.3
1989-90	-0.4	-0.7	1.0	5.4	-1.6	-3.1	1.3
1990-91	0.4	-0.2	3.6	6.9	0.7	3.9	-1.6
1985-91	0.5	0.3	1.2	4.8	-0.9	-1.1	1.6
1965-91	0.6	0.3	3.2	6.8	2.2	0.5	2.0
	Cumulative Growth Rates						
1965-70	8.7	6.5	31.1	65.1	33.2	-0.1	14.5
1970-91	8.4	0.4	74.2	234.1	32.4	15.1	46.9
1965-91	17.8	6.9	128.3	451.5	76.3	15.0	68.2

[1]Includes compensation for private industry and Federal and State and local governments per full-time and part-time employee, deflated using the Consumer Price Index for Urban Wage Earners and Clerical Workers.
[2]Includes employer contribution to health insurance premiums, and to Medicare trust funds, and workers' compensation and temporary disability insurance.
[3]Includes private and public pension plans, old age, survivors, and disability insurance (Social Security), railroad retirement, and pension benefit guaranty.
[4]Includes employer contributions to unemployment insurance, life insurance, corporate directors fees, and several minor categories of employee compensation.

Source: Health Care Financing Administration, Office of the Actuary, Office of National Health Statistics, and U.S. Department of Commerce, Economics and Statistics Administration, Bureau of Economic Analysis, and U.S. Department of Labor, Bureau of Labor Statistics.

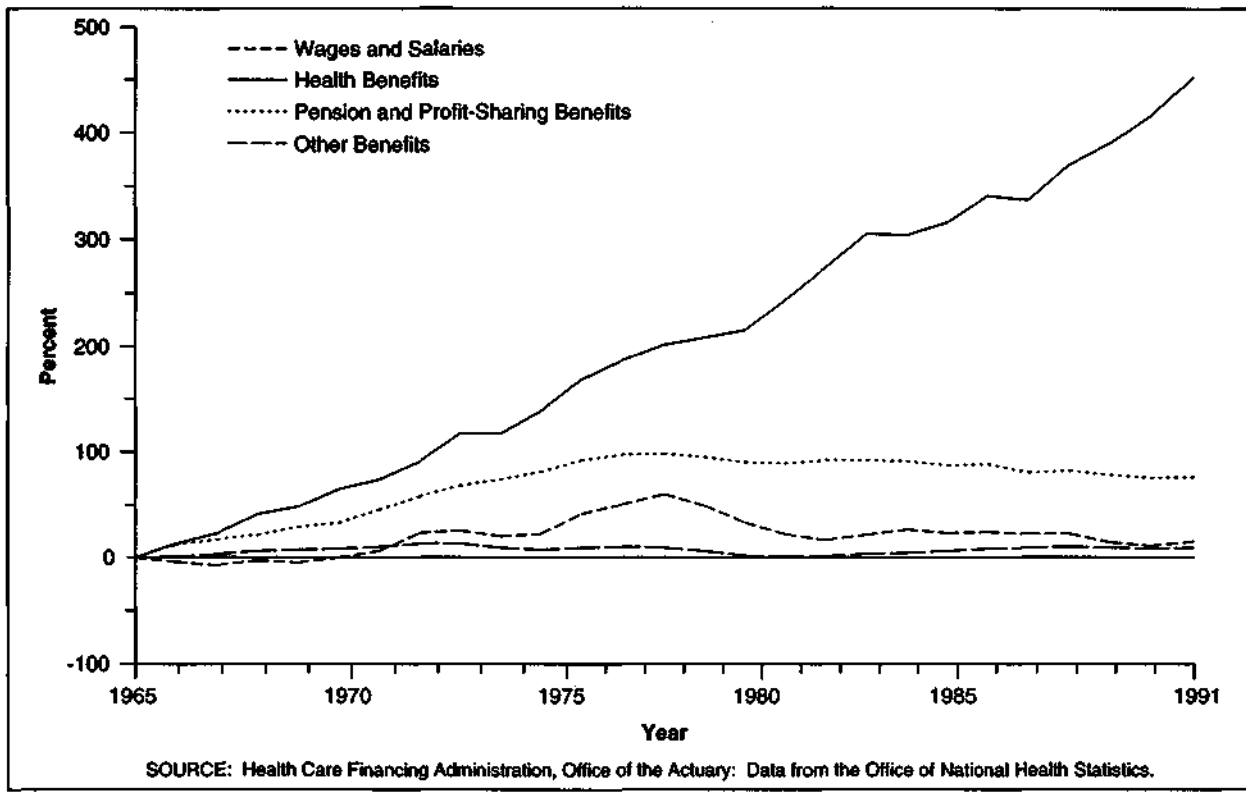
in real contributions to pension plans helped employers to absorb the rising costs of health care without raising total compensation.

There are two categories of pension and profit-sharing plans—private pensions set up by businesses and retirement plans required by law. The decline in real contributions was mainly because of the decline in employer contributions to private pension plans. Real employer contributions per full-time and part-time worker to mandated retirement plans (such as Social Security and Railroad Retirement) remained stable during the period from 1982 to 1991. The decline in real contributions to private pension plans may be the result of several factors. First, the high interest rates of the early 1980s enabled some pension plans to experience surpluses. Contributing employers lowered their contributions and, in some cases, removed funds from the pension plans.

Also, there has been a switch from defined benefit to defined contribution pension plans. Defined contribution plans specify the levels of employer and employee contributions to a plan, but not the formula for determining the benefits. On the other hand, defined benefit plans use predetermined formulas to calculate a retirement benefit and obligate the employer to provide those benefits (U.S. Department of Labor, 1991). A defined contribution plan fixes the amount of employer contribution per employee that will not fluctuate because of changes in inter-

Figure 2

Cumulative Growth in Components of Real Compensation Per Worker: 1965-91



SOURCE: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics.

est rates or inflation, in effect lowering the expected real contribution over time.

The composition of real fringe benefits has changed since 1965. Pension plans shifted from a 59.1-percent share of real fringe benefits in 1965 to a 45.6-percent share in 1991. At the same time, real employer health expenditures grew as a share of real fringe benefits, from 17.6 percent to 42.7 percent.

The aggregate employer insurance premiums discussed in this section summarize the experience of business and governments nationally. They represent the experience of all sizes of establishments in all industries and government. These premiums for hospital, medical, dental, prescription drug, and vision coverage include those paid to insurance companies, Blue Cross and Blue Shield organizations, and health maintenance organizations (HMOs), as well as the costs incurred by establishments that self-insure health care benefits. These aggregate employer health insurance premiums cover only the employer contributions for policies of current workers, retirees, former workers, and dependents. That is, they measure the aggregate financial impact on employers of the provision of health care benefits to workers.

SURVEYS OF EMPLOYER-SPONSORED INSURANCE

Expenditures for health care are the most rapidly growing component of employee compensation. Escalating costs and a focus on employer-sponsored health insurance in many of the proposals for health care reform have employers and policymakers scrambling for data to measure and explain the difference in employer-sponsored private health insurance options.

Comprehensive data are not readily available. To be comprehensive, data should be representative of employers of all sizes and industries and have complete financial as well as coverage data. Each of the surveys discussed later provides selected information on employer-based health insurance for certain groups of employers. In order to use information from these surveys effectively, it is important to understand their background. The following descriptions present the methodology used in 3 employer-based surveys, and a brief overview of the information that was gathered.[1]

EMPLOYEE BENEFIT SURVEY

The Employee Benefit Survey (EBS) was first conducted in 1979 by BLS (U.S. Department of Labor, 1992b). Initially, it was designed to collect data on employee benefit plan provisions and characteristics for full-time employees in medium and large size firms. The survey has gradually expanded to include part-time employees, small private establishments, and State and local governments and is currently conducted during a 2-year cycle. Data for small private establishments (under 100 employees) and State and local governments are collected in two separate surveys in even-numbered years, whereas data for medium and large private establishments (100 workers or more) are collected in the odd numbered years (U.S. Department of Labor, 1991, 1992a, 1993).

The EBS sampling frame is comprised of employer establishments filing State

[1]All the surveys are available upon request from the appropriate proprietary or public sources.

unemployment insurance (UI) reports in the 50 states and the District of Columbia. A sample of establishments is selected within each industry group. The probability of selection into the sample is proportional to the establishment's employment. Within the sampled establishments, a second sample selection of occupations is made. The probability of an occupation being selected is proportional to its employment within the establishment. Each year, new establishments from selected industries are introduced into the sample to replace previously selected establishments in the same industries. The entire sample is replaced approximately every 4 years (U.S. Department of Labor, 1992b). The sampling frames for the economic cost index and the EBS merged for the 1990 survey collections. Prior to 1990, the EBS sample was selected from a list of establishments from the State unemployment insurance reports for the 48 contiguous States and the District of Columbia. The sampling frame was first stratified by broad industry group and then by establishment size group. All health plans within the sampled establishments were then reviewed (U.S. Department of Labor, 1992b). The total sample for the 1991 survey of medium and large private establishments was 3,246. The sample size for the 1990 survey of small private establishments and state and local governments was 3,567 and 1,464 units respectively (U.S. Department of Labor, 1991, 1992a, 1993).

BLS field economists collect data on the existence of benefits, the number of workers in selected occupations who participate in specific benefit plans, and the detailed characteristics of all benefits received by selected workers. Survey respondents are asked to provide documents describing their employee benefit plans. These documents are analyzed by BLS central office staff to obtain EBS data on various plan provisions.

Response rates for the three collection stages vary considerably. Sixty-six percent of the sampled medium and large establishments provided data for the 1991 survey. In 1990, 91 percent of the sampled State and local governments, but only 57 percent of sampled small establishments provided EBS data. This low response rate for small establishments was because of the 21 percent of establishments for that size group that were out of business. (U.S. Department of Labor, 1992b).

The EBS collects a wide variety of benefit-related information from employers, and provides information on the prevalence and detailed characteristics of employee benefit plans, health insurance plan designs, types of insurance coverage, and the methods of employee cost sharing, including deductibles and coinsurance amounts (U.S. Department of Labor, 1991, 1992c, 1993). BLS also publishes an average monthly employee premium contribution for both individual and family coverage, but not the amount contributed by the employer to the premium. Although the number of employees participating in employer-sponsored insurance is collected, the number participating in either individual and family coverage is not. Therefore, an estimate of aggregate employee premium contributions cannot be tabulated from the EBS.

Since the EBS as it is currently collected cannot provide either the aggregate employer or aggregate employee premium contribution for health insurance, it does not directly contribute to the premium data discussed within this arti-

cle. However, the monthly average employee premium contribution is valuable to compare with other survey data sources to look at trends in private health insurance and develop acceptable ranges for monthly employee contributions.

The EBS provides a unique and comprehensive sampling frame collected at regular intervals during the past decade. The survey can be used effectively for the trend analysis of items such as the breadth of health care coverage, including provisions for vision, dental, prescription drug, and mental health benefits, in addition to well baby and routine physical examinations, copayments and deductibles, and participation in HMOs.

FOSTER HIGGINS SURVEY

The Foster Higgins (1987) health benefits survey was first conducted in 1986 to collect data on employer-sponsored health benefits. Four reports developed from the 1991 survey (Foster Higgins, 1992) analyze data from survey respondents and provide a profile on employer-sponsored health benefits and cost management programs. The survey covers all types of private health insurance plans, and separately reports data on employer health care spending for indemnity plans, managed care plans, flexible benefits programs, and retiree plans. (Included in the Foster Higgins *Indemnity Report* is information on commercial, Blue Cross and Blue Shield, and self-insured plans [Foster Higgins, 1992].)

Response to the Foster Higgins survey has grown from 1,466 employers in 1986 (Foster Higgins, 1987) to 2,409 in 1991 (Foster Higgins, 1992). In 1991, the survey questionnaire was mailed to more than 10,000 employers including employee coalitions, Fortune 500 companies, 48 State governments and Foster Higgins' past, present, and future clients. Thirty-nine percent of the respondents were small companies ranging in size from 2 to 500 employees. Approximately 50 percent of the respondents participated in the previous year's survey. No adjustment was made for survey non-response, and no adjustment was used to make results representative of all employers (Erb, 1993).

The survey provides information on an annual, average, private health insurance cost per employee for employers who purchase health insurance as well as for those who self-insure. An annual cost for an employee enrolled in a managed care plan is also available. The survey profiles plan design, scope of coverage, cost sharing, types of funding and administration, and utilization review among various sized employers by region and industry. Information on retirees, including Medicare integration as well as premium contributions and medical plan costs, is included. Data on managed care plans including HMOs, preferred provider organizations (PPO), and point of service (POS) plans are also available (Foster Higgins, 1992).

EMPLOYER-SPONSORED HEALTH INSURANCE SURVEY

Since 1987, the Health Insurance Association of America (HIAA) has conducted a national survey of employer-sponsored health insurance plans. The results of the survey enable HIAA to track trends in employer-sponsored health insurance and provide insight into changes in employee health benefits.

The 1991 HIAA sampling frame consisted of 4,751 private and public employ-

ers drawn from the March 1991 Dun and Bradstreet list of private employers and the 1984 HCFA benchmark list of public employers, stratified by firm size and region. The responding 3,323 private firms and State and local governments (a response rate of 70 percent) were interviewed by telephone in the spring of 1991 by Westat, Inc., a Washington, DC, based survey research firm. The interviews included more than 100 questions about the firms, their employees, and the health plans they offer, if any. Firms indicated the number of each of four plan types they offer (conventional, HMO, PPO, and POS plan), and reported detailed information about their three largest plans, based on plan enrollment (Miller, 1993).

An important characteristic of the HIAA survey is its ability to collect data and report trends from a representative sample of the employer population that includes employers with fewer than 100 employees. The increasing tendency of smaller employers to reject health insurance coverage for their employees as well as the growing propensity towards managed care options are described. The survey also provides information on average monthly premium contributions, including both the employer and employee, for both single and family coverage. Extensive data on self-insured health plans as well as individual information on POS plans (a relatively new funding arrangement) are also available (Sullivan et al., 1992).

SURVEY SUMMARIZATION

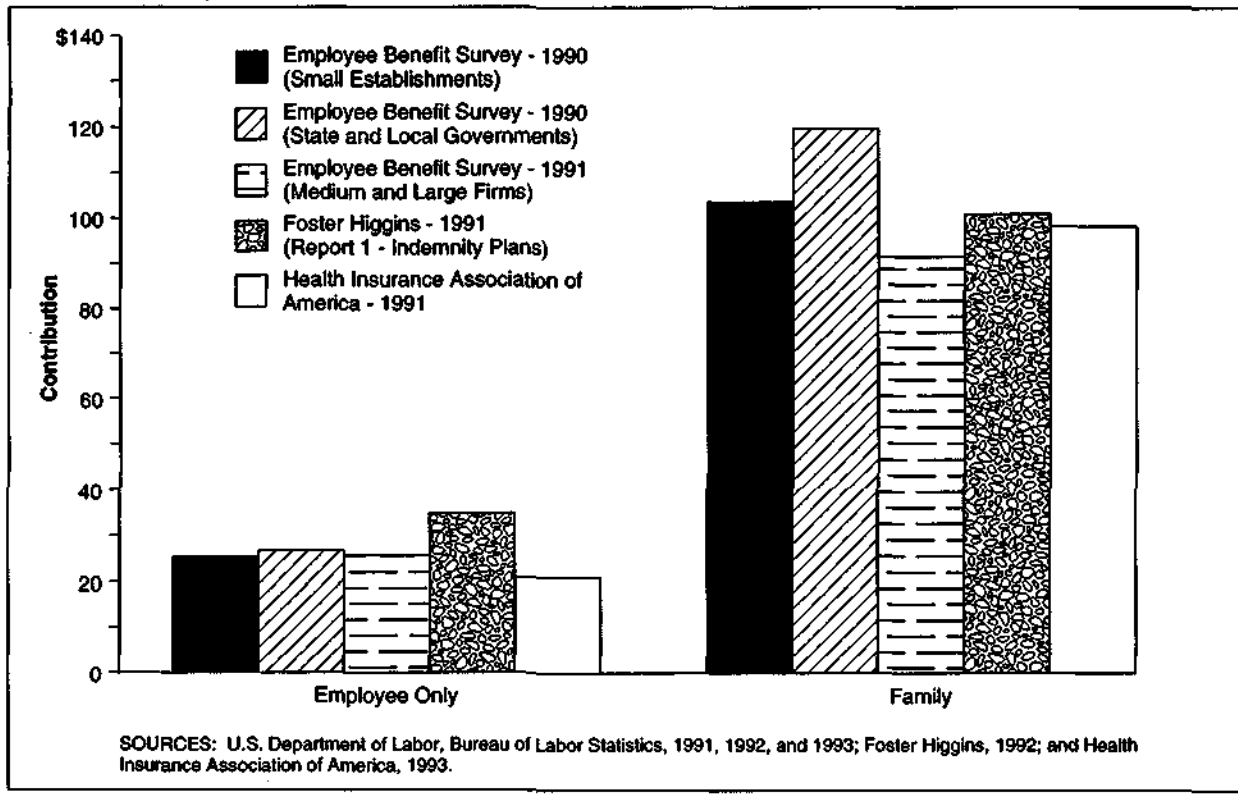
Each of the surveys previously discussed is rich with statistics and profile-developing trends within employer-sponsored health insurance. One consistently reported feature of each survey is the average monthly employee contribution for conventional private health insurance plans. Conventional plans are traditional indemnity plans that are either purchased through Blue Cross and Blue Shield or a commercial carrier, or self-insured through an employer. They exclude HMOs, PPOs, and POS. Figure 3 shows monthly contributions made by employees toward private health insurance premiums for plans sponsored by employers. Although other combinations are possible, plans usually have a least two types: employee-only and family.

For employee-only coverage, 1991 monthly premiums in the three surveys range from $21 to $35. At first glance, Foster Higgins, with a $35 monthly employee contribution for employee-only coverage, seems high. However, unlike HIAA, Foster Higgins computes their average employee contribution using only those plans in which employees actually contribute toward the premium (Erb, 1993). Foster Higgins estimates about 45 percent of all full-time employees had their individual medical coverage paid entirely by their employer in 1991. Not including the zero contributors, when computing the average per employee, causes the Foster Higgins estimate to be higher.

For family plans, monthly employee contributions range from $91.52 to $119.77. Because most employers usually require some employee contribution for family coverage, the Foster Higgins computation for family coverage ($101.00), unlike that for employee-only coverage, is closer to the estimate from HIAA ($98.78). Both the HIAA survey and the Foster Higgins survey include small, medium, and large size firms as well as State and local governments. To calculate a com-

Figure 3

Monthly Employee Contributions for Conventional Private Health Insurance Plans



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics, 1991, 1992, and 1993; Foster Higgins, 1992; and Health Insurance Association of America, 1993.

parable premium using the BLS survey data, one would weight the three BLS studies together (U.S. Department of Labor, 1991, 1992a, 1993). The resulting estimate of employee premiums for family coverage would probably fall much closer to those reported by HIAA and Foster Higgins.

At least part of the difference in payments for both employee-only and family coverage can also be attributed to the variation in each of the three surveys' methodologies. First, the monthly employee contribution for all three BLS studies is based on the number of covered full-time workers (Figure 3). Contributions for part-time workers are not included. The HIAA estimates are based on both part-time and full-time employees, as is Foster Higgins. Second, the employee contributions for all three BLS studies include conventional and PPO plans. The estimates for HIAA and Foster Higgins are for conventional plans only. Third, all three of the BLS studies are based on a representative sample of establishments. The HIAA survey, although a representative sample, collects data on the responding firm's largest plans, up to three types. Foster Higgins averages the survey responses over the number of employers who respond to the survey without weighting to a universe of firms or employee counts.

Examination of each of the three surveys has revealed differences in methodology. The surveys also differ from the National Health Account (NHA) estimates

cited in this article because they measure different variables (Gabel, 1992). The NHA measures aggregate expenditures in a given year, whereas the strength of the surveys lies in individual plan characteristics, including cost per employee.

METHODOLOGY AND REVISIONS

In this article we look at HSS by who sponsors the provision of health care services, business, households, and governments rather than by the traditional NHA payer categories, such as private health insurance, Medicare, and Medicaid (Letsch et al., 1992). Spending for health care services measured by HSS (a subset of the NHA) covers the cost of all personal health care goods and services, government public health activities, administrative costs of public programs, and the net cost of private health insurance (Lazenby et al., 1992). Spending on health care does not always flow directly from the sponsor into the health care system, but can pass through intermediaries, such as insurers and governments. These payments in turn are allocated to the different types of health care services. For example, households, business, and governments each pay health insurance premiums: households through direct purchase of policies or through employees' contributions to employer sponsored health insurance; and business and government employers through contributions to employee health insurance plans. Health insurance premiums are used to pay for the health care benefits or services delineated in the NHA, plus health insurers' administrative expenses and profits or retained earnings.

Most of the estimates (such as workers' compensation and non-patient revenues) presented in this report come directly from the NHA and are reassigned to separate sponsor categories. Other estimates also come from the NHA, although they must be disaggregated before reassignment. Two NHA estimates are affected by this disaggregation and reassignment: Medicare and private health insurance. Data sources used in Medicare disaggregation include *Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund* (1992a), *Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund* (1992b), and unpublished detailed data on Medicare hospital insurance tax liability from the Social Security Administration. Private health insurance estimates are split into private and public employer-paid premiums and household-paid premiums using data from Bureau of Economic Analysis (BEA), the U.S. Chamber of Commerce, Health Care Financing Administration, the U.S. Bureau of the Census, the Office of Personnel Management, and the U.S. Bureau of Labor Statistics.

A full description of methods used to produce these estimates has been published in previous articles (Levit and Cowan, 1991; Levit and Cowan, 1990; Levit, Freeland, and Waldo, 1989).

In 1991 the NHA estimates were updated for the current year and contained revisions back to 1985, although most revisions concentrated on 1989 and 1990. The main revisions occurred in the Medicare estimates. Because these estimates are based on bills received to date, with estimates for bills that will be received after the end of the year, there will be historical changes as more data are collected.

In addition, estimates from BEA were realigned to more closely resemble our

taxonomy. Estimates for temporary disability insurance (TDI) were included in BEA's estimate of employer health insurance premiums. Because we estimated TDI separately, we removed those costs from BEA's estimates for the entire time series.

Calculations of the burden borne by the business and public sectors also differ from previously published articles. This is mainly the result of BEA's benchmarking of the National Income and Product Accounts.

In the discussion on employer costs, public employment health care costs were combined with private employment costs. In the analysis of all employer real compensation costs per worker, we used counts of full-time and part-time employees. However, these two groups do not have the same participation rate for health benefits. According to the EBS in 1990, only 6 percent of part-time employees in small establishments participated in employer-sponsored medical care benefit plans, compared with 67 percent of the full-time employees (U.S. Department of Labor, 1991). Part-time employees in medium to large firms had a 28 percent participation rate in 1991, whereas full-time employees participated 83 percent of the time (U.S. Department of Labor, 1992). Ideally, we would like to look at the full-time and part-time workers' compensation separately because their access to health care benefits differ, but such data are not available. Therefore, any alteration in the mix of full-time and part-time workers will affect this analysis.

SUMMARY

As health care costs grew during the last 26 years, the responsibility of sponsoring the payment of it shifted. In 1965, households paid for most of their health care out of pocket. In the late 1960s and early 1970s, responsibility for health care costs shifted to business which purchased insurance for employees, and to governments through the Medicare and Medicaid programs. More recently, the responsibility shifted more toward governments. This recent shift, combined with the recession, caused health care to become a major issue facing governments in this country today.

The burden of health care costs affected different sponsors of health care in different ways. Households, for the most part, managed to avoid an increasing direct burden of rising health care costs: They have consistently paid approximately 5 percent of income after taxes for out-of-pocket health expenditures and health insurance premiums during the past 8 years. Likewise, business has not felt the entire effect of rising health care costs, since it was able to pass on some of the cost to employees by substituting higher fringe benefits for lower wage growth, substituting capital for labor costs, and eliminating or reducing employer-paid health insurance benefits for employees or retirees. Additional cost-saving and utilization reduction programs initiated by individual businesses may also have dampened cost growth for business.

Governments, however, found it hard to escape rising health care cost burdens, as health care spending jumped to more than 20 percent of revenues in 1991. Rising Medicaid health care costs and declining government revenues due to the recession combined to pressure governments into action. Facing reduced access to care by many Medicaid recipients, lack

of any insurance coverage for a rising percentage of their citizens, the strangling effects of health care costs on future economic growth, and doubt about their future ability to pay for health care, governments at all levels initiated health reform discussions and began to plan seriously for major changes in the financing and provision of health care. States have begun investigating and developing new programs to attack State-specific problems, whereas the Federal government has made health care reform one of its top agenda items in 1993.

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Reprint requests: Anna Long, Office of National Health Statistics, L-1, EQ05, 6325 Security Boulevard, Baltimore, Maryland 21207.