DataWatch

National Health Care Spending Trends: 1988

by Katharine R. Levit, Mark S. Freeland, and Daniel R. Waldo

Each year, expenditures for health in the United States consume larger and larger shares of the nation's output. In 1988, health spending totaled nearly $540 billion. This DataWatch presents revised national health care expenditure estimates for 1960 through 1987 and new estimates for 1988.[1] We also explore trends in out-of-pocket and private insurance expenditures for health care, in conjunction with changes initiated by employers in private health insurance and with patterns of out-of-pocket spending by consumers.

National Health Expenditures In 1988

In 1988, health spending increased 10.4 percent from the previous year (Exhibit 1). Spending for health amounted to 11.1 percent of the gross national product (GNP) in 1988, up from 10.8 percent in 1987 and more than twice the share that it occupied in 1960 (Exhibit 2).

Long-term trends in national health expenditures show rapid growth, even when the effects of economywide price increases are removed from health spending. Between 1960 and 1970, a period characterized by the implementation of Medicare and the rapid spread of private health insurance, real national health expenditures {deflated using the consumer price index for urban workers (CPI-U) all items} grew 7.7 percent per year. Since 1970, real national health expenditures have risen at an average annual rate of 4.9 percent. Despite government and private-sector initiatives in the 1980s to hold down the rate of growth in health spending, real national health expenditures continued to exhibit strong growth, increasing 5.3 percent per year during the decade.

National health expenditures averaged $2,124 for each of the 254

Katharine Levit is an economist in the Office of National Cost Estimates, Health Care Financing Administration (HCFA) Office of the Actuary. In the same office, Mark Freeland, also an economist, is director of the Division of Statistical Analysis; Dan Waldo is director of the Division of Catastrophic Drug Insurance. The DataWatch on national health expenditures is published each year in Health Affairs.

Exhibit 1
National Health Expenditures, By Source Of Funds And Type Of Expenditure, Calendar Year 1988, Billions Of Dollars

		Private					Government		
			Consumer						
Type of expenditure	All sources	All private	Total	Out of pocket	Private insurance	Other private	Total	Federal	State/ local
National health expenditures	$539.9	$312.4	$288.1	$113.2	$174.9	$24.3	$227.5	$157.8	$69.6
Health services and supplies	520.5	304.6	288.1	113.2	174.9	16.5	215.9	149.0	66.9
Personal health care	478.3	284.3	268.4	113.2	155.2	15.9	194.0	143.2	50.8
Hospital care	211.8	96.6	86.3	11.3	75.0	10.3	115.2	86.7	28.5
Physician services	105.1	70.0	69.9	19.9	50.0	0.0	35.2	28.7	6.4
Dentist services	29.4	28.7	28.7	16.3	12.4	-	0.7	0.4	0.3
Other professional services	22.5	18.0	15.4	7.1	8.3	2.6	4.5	3.4	1.0
Home health care	4.4	1.1	0.8	0.5	0.3	0.3	3.3	2.6	0.7
Drugs and other medical nondurables	41.9	37.3	37.3	29.6	7.7	-	4.6	2.2	2.4
Vision products and other medical durables	10.8	8.6	8.6	7.6	1.0	-	2.3	2.0	0.2
Nursing home care	43.1	22.1	21.3	20.8	0.5	0.8	20.9	12.5	8.4
Other personal health care	9.3	1.9	-	-	-	1.9	7.4	4.7	2.7
Program administration and net cost of private health insurance	26.3	20.3	19.7	-	19.7	0.5	6.1	3.9	2.2
Government public health activities	15.9	-	-	-	-	-	15.9	1.9	14.0
Research and construction	19.4	7.8	-	-	-	7.8	11.5	8.8	2.7
Noncommercial research	9.9	0.7	-	-	-	0.7	9.1	7.9	1.2
Construction	9.5	7.1	-	-	-	7.1	2.4	0.9	1.5

Source: Health Care Financing Administration, Office of the Actuary.
Note: Research and development expenditures of drug companies and other manufacturers and providers of medical equipment are excluded from "noncommercial research," being implicitly included in the value of the goods or services being produced. "Other private funds" includes funding through philanthropy and nonpatient revenues, business spending for industrial in-plant health services, and privately financed construction.

Exhibit 2
National Health Expenditures, Aggregate And Average Annual Growth, By Type Of Expenditure, Selected Calendar Years 1960–1988, Billions Of Dollars

Spending category	1960	1970	1980	1985	1986	1987	1988	1960–88
National health expenditures	$27.1	$74.4	$249.1	$420.1	$450.5	$488.8	$539.9	
Health services/supplies	25.4	69.1	237.8	404.7	434.5	471.6	520.5	
Personal health care	23.9	64.9	218.3	367.2	397.7	434.7	478.3	
Hospital care	9.3	27.9	102.4	167.9	179.3	193.7	211.8	
Physician services	5.3	13.6	41.9	74.0	82.1	93.0	105.1	
Dentist services	2.0	4.7	14.4	23.3	24.7	27.1	29.4	
Other professional services	0.6	1.5	8.7	16.6	18.3	20.2	22.5	
Home health care	0.0	0.1	1.3	3.8	4.0	4.2	4.4	
Drugs and other nondurable medical products	4.2	8.8	20.1	32.3	35.6	38.6	41.9	
Vision products/other medical durables	0.8	2.0	5.0	8.4	9.5	9.8	10.8	
Nursing home care	1.0	4.9	20.0	34.1	36.7	39.7	43.1	
Other personal health care	0.7	1.4	4.6	6.8	7.6	8.4	9.3	

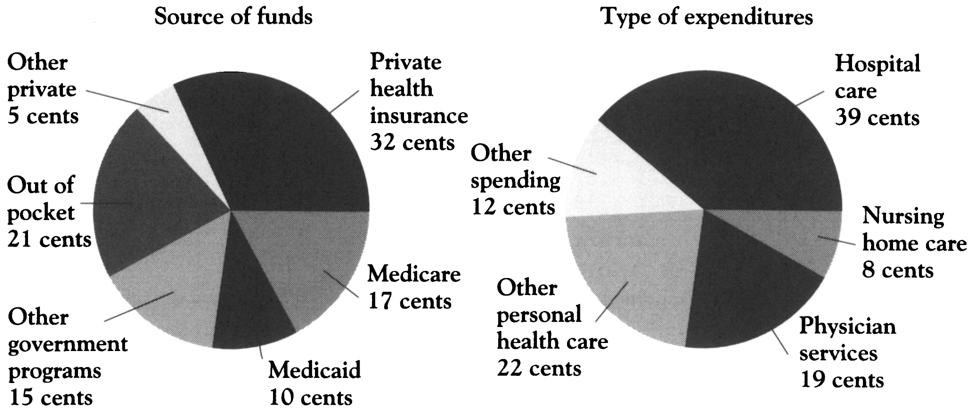
Exhibit 2
National Health Expenditures, Selected Calendar Years 1960–1988 (cont.)

Spending category	1960	1970	1980	1985	1986	1987	1988	1960–88
Program administration and net cost of private health insurance	1.2	2.8	12.2	25.2	23.4	22.4	26.3	
Govt. public health	0.4	1.4	7.2	12.3	13.5	14.5	15.9	
Research and construction	1.7	5.3	11.3	15.4	16.0	17.2	19.4	
Research	0.7	2.0	5.4	7.8	8.5	9.0	9.9	
Construction	1.0	3.4	5.8	7.6	7.4	8.2	9.5	
Addenda:								
National health expenditures as a percent of GNP	5.3%	7.3%	9.1%	10.5%	10.6%	10.8%	11.1%	
National health expenditures per capita (dollars)	$143	$346	$1,059	$1,700	$1,806	$1,941	$2,124	
Growth (average annual percent change from previous period shown)								
National health expenditures		10.6%	12.8%	11.0%	7.2%	8.5%	10.4%	11.3%
Health services/supplies		10.5	13.2	11.2	7.4	8.5	10.4	11.4
Personal health care		10.5	12.9	11.0	8.3	9.3	10.0	11.3
Hospital care		11.7	13.9	10.4	6.8	8.1	9.3	11.8
Physician services		9.9	11.9	12.1	10.9	13.3	13.1	11.3
Dentist services		9.1	11.9	10.1	6.4	9.6	8.5	10.2
Other professional services		9.6	19.1	13.9	10.0	10.2	11.6	13.8
Drugs and other nondurable medical products		7.6	8.6	9.9	10.2	8.7	8.5	8.5
Vision products/other medical durables		9.6	9.4	11.0	13.6	3.4	10.1	9.7
Nursing home care		17.4	15.2	11.3	7.5	8.2	8.5	14.5
Other personal health care		7.1	12.8	8.4	11.2	10.5	10.5	9.7
Home health care		14.5	25.1	23.3	3.7	4.9	5.9	18.6
Program administration and net cost of private health insurance		9.0	16.0	15.5	-7.2	-4.2	17.7	11.8
Govt. public health		13.9	18.0	11.3	9.6	7.8	9.1	14.3
Research and construction		12.1	7.8	6.4	3.7	7.8	12.6	9.1
Research		10.9	10.8	7.4	9.6	4.9	10.1	9.9
Construction		12.8	5.6	5.4	-2.4	11.1	15.3	8.4

Source: Health Care Financing Administration, Office of the Actuary.
Note: Per capita figures are derived using July 1 Social Security area population estimates.

million people in the United States and its territories in 1988. Of that amount, 89 percent was for medical goods and services, 1 percent covered government and philanthropic program administration, 3 percent was spent on public health activities, and almost 4 percent was retained by private health insurers for operating expenses and profits. The remaining amount (less than 4 percent) covered noncommercial research and construction of medical facilities.

Exhibit 3
The Nation's Health Dollar In 1988



Source: Health Care Financing Administration, Office of the Actuary, data from the Office of National Cost Estimates, 1990.
Note: "Other private" includes industrial in-plant health services, nonpatient revenues, and privately financed construction. "Other personal health care" includes dental, other professional services, home health, drugs, and durable medical equipment. "Other spending" is for program administration and the net cost of private health insurance, government public health, research, and construction.

Hospital and physician care accounted for more than half of all health care expenditures in 1988 (Exhibit 3). Hospital care spending increased 9.3 percent from 1987 to $211.8 billion; spending for physician services increased 13.1 percent, to $105.1 billion—half the amount spent for hospital services.

Three-fifths of health expenditures are paid from private sources. Private health insurance benefits in 1988 amounted to $155.2 billion, 11.0 percent more than in 1987; premiums increased 11.9 percent, to a level of $174.9 billion. Americans paid $113.2 billion out of pocket for health in 1988, 10.5 percent more than in 1987 (Exhibit 4).

Although government health expenditures have been fairly constant as a share of total health spending, they represent a significant, and growing, share of government budgets. Federal health spending in 1988 ($157.8 billion) accounted for 14 percent of all federal expenditures; Medicare and Medicaid alone accounted for 10.4 percent. The proportion of state and local government budgets that is devoted to health is lower than for the federal government and has not grown as rapidly. Still, it reached 10.7 percent in 1988, when these governments spent $69.6 billion for health.

Changes In Consumer Spending For Health Care

Shift away from out-of-pocket spending. Despite the apparent stabil-

Exhibit 4
National Health Expenditures, Aggregate And Growth, By Source Of Funds, Selected Calendar Years 1960–1988, Billions Of Dollars

Source of funds	1960	1970	1980	1985	1986	1987	1988	1960–88
National health expenditures	$27.1	$74.4	$249.1	$420.1	$450.5	$488.8	$539.9	
Private funds	20.5	46.7	143.9	245.2	259.8	280.5	312.4	
Consumer	19.2	42.3	131.8	225.8	239.7	258.7	288.1	
Out of pocket	13.3	25.6	58.4	91.7	96.8	102.4	113.2	
Private health insurance	5.9	16.7	73.4	134.1	142.9	156.2	174.9	
Other private	1.3	4.4	12.1	19.3	20.0	21.8	24.3	
Government	6.7	27.7	105.2	174.9	190.7	208.3	227.5	
Federal funds	2.9	17.7	72.0	123.4	132.8	144.0	157.8	
Medicare	-	7.6	37.5	71.9	77.1	83.4	91.8	
Medicaid	-	2.9	14.5	23.1	25.4	27.9	31.1	
Other federal	2.9	7.3	19.9	28.4	30.4	32.6	35.0	
State and local	3.7	9.9	33.2	51.5	57.9	64.3	69.6	
Medicaid	-	2.5	11.6	18.6	19.8	22.9	24.1	
Other state and local	3.7	7.5	21.6	32.9	38.1	41.5	45.6	
Addendum: Total Medicaid	-	5.3	26.1	41.8	45.1	50.8	55.1	
Growth (average annual percent change from previous period shown)								
National health expenditures		10.6%	12.8%	11.0%	7.2%	8.5%	10.4%	11.3%
Private funds		8.6	11.9	11.2	6.0	8.0	11.4	10.2
Consumer		8.2	12.0	11.4	6.2	7.9	11.4	10.2
Out of pocket		6.7	8.6	9.4	5.6	5.8	10.5	7.9
Private health insurance		11.0	15.9	12.8	6.5	9.3	11.9	12.9
Other private		13.3	10.7	9.9	3.6	9.0	11.2	11.2
Government		15.3	14.3	10.7	9.1	9.2	9.2	13.4
Federal funds		19.8	15.0	11.4	7.6	8.4	9.6	15.3
Medicare		-	17.3	13.9	7.3	8.2	10.0	-
Medicaid		-	17.6	9.8	9.5	10.1	11.3	-
Other federal		9.6	10.6	7.3	6.9	7.5	7.3	9.3
State and local		10.2	12.8	9.2	12.5	11.1	8.2	11.0
Medicaid		-	16.8	9.8	6.4	15.6	5.2	-
Other state and local		7.1	11.2	8.8	16.0	8.8	9.9	9.3
Addendum: Total Medicaid		-	17.3	9.8	8.1	12.5	8.5	-

Source: Health Care Financing Administration, Office of the Actuary.

ity of public and private financing shares in this decade, consumer resources have shifted from out-of-pocket payments to those handled by private insurance. In 1960, out-of-pocket payments were 2.7 times greater than private insurance benefits. By 1980, they were 90 percent of the size of insurance benefits; that percentage continued to fall through the 1980s, reaching 73 percent in 1988.[2]

Although private health insurance has grown relative to out-of-pocket spending over the past three decades, the extent and timing of that reallocation has varied across services. For example: (1) Hospital care, the earliest service against which consumers were heavily insured, entered the 1960s with 37 percent of consumer payments coming out of pocket; the rest was channeled through insurers. After Medicare began, the con-

sumer share of hospital payments dropped, as did out-of-pocket payments relative to insurance. By 1967, 23 percent of hospital consumer spending came from out-of-pocket sources. Many Medicare beneficiaries kept insurance coverage but shifted from policies providing primary coverage to those covering Medicare coinsurance and deductibles. Throughout the 1980s, the out-of-pocket share of consumer purchases was roughly constant at about 13 percent.

(2) The out-of-pocket share of consumer payments for physician services has declined steadily, from 68 percent in 1960 to 28 percent in 1988. The effect of Medicare's implementation was less marked for physician services than it was for hospital care. Unlike the case of hospital care, the out-of-pocket share continued to fall throughout the 1980s. (3) The out-of-pocket share of dentist services dropped rapidly from the mid-1970s through the early 1980s; the declines on either side of that period were modest. That middle period reflected considerable change in employer-sponsored insurance.

(4) Private health insurance has made steady inroads in consumer payments for drugs and other medical goods (both durable and nondurable), but out-of-pocket payments still represent the bulk of consumer spending for such goods. Almost 90 percent of 1988 private insurance benefits in this category were for prescription drugs. Pharmacy surveys indicate that 21 percent of prescriptions were paid directly by third parties other than Medicaid in 1988 and that 61 percent were self-pay; comparable figures for 1987 were 17 percent and 65 percent, respectively.[3] However, some "self-pay" prescriptions are subsequently reimbursed under a major medical plan. Combining direct insurance payments with a portion of self-pay later reimbursed by private health insurance yields estimates consistent with figures from the national health expenditures. These figures show that out-of-pocket spending accounted for slightly more than half of all prescription drug expenditures and for two-thirds of all consumer (insurance and out-of-pocket) expenditures for drugs.[4]

Possible explanations. There are a number of possible explanations for the reallocation of consumer payments from direct out-of-pocket to private insurance. First, it may reflect consumers' desire to insure against potentially high medical bills. There is enough uncertainty surrounding individuals' health events, particularly accidents and catastrophic illnesses, that the monetary difference between a health insurance premium and expected insurance benefits is of less consequence to the consumer than are the monetary and other costs associated with an uninsured catastrophic event. Second, the decision to insure against medical events may also reflect a propensity to "prepay" medical expenses; by making fixed periodic payments, consumers avoid the volatility of actual expen-

ditures. Third, there may also be a misconception on the part of consumers that, by purchasing insurance (especially through the workplace), they can insulate themselves from the rising costs associated with health care. In fact, those costs are eventually passed back to consumers in the aggregate, in the form of either reduced money wages, fewer nonhealth fringe benefits, or higher product prices.[5] These costs appear to be an acceptable consequence in the eyes of U.S. workers, as workplace-sponsored insurance continues to be a high priority in labor/management negotiations.

Employer-Sponsored Health Insurance

Employers sponsor a significant portion of private health insurance coverage in this nation. Private health insurance covered 181.4 million people in 1987, 81 percent of whom obtained coverage through an employer-sponsored health insurance plan.[6] Of all full-time employees employed in medium and large firms, 90 percent participated in employer-sponsored health insurance in 1988.[7]

Employers experienced a steady increase in the cost of health care over the past three decades. Expenditures by business for health care (primarily the employer share of health insurance premiums) grew to over 6 percent of total employer compensation costs in 1987, up from 2 percent in 1965.[8] Business has experimented with alternative methods of providing this popular fringe benefit to contain the cost spiral. For example: (1) Employees faced increased cost sharing of premiums. The proportion of full-time employees in medium and large firms whose health care premiums were completely financed by their employer dropped by about one-third between 1980 and 1988 (from 72 percent to 51 percent for single policyholders and from 51 to 32 percent for family policyholders). This drop was concentrated between 1982 and 1986 and may have been in response to a cumulative premium increase of nearly 60 percent between 1979 and 1982. (2) Employee deductibles have increased. In 1980, only 8 percent of full-time workers in medium and large firms who participated in employer-sponsored health insurance plans had a deductible greater than $100. By 1988, 40 percent of such workers had deductibles greater than $100, with 9 percent having deductibles in excess of $200 (Exhibit 5). (3) Use of health maintenance organizations (HMOs) and preferred provider organizations (PPOs) increased. In 1980, 3 percent of full-time workers in medium and large firms who were covered by employer-sponsored health insurance participated in HMOs, growing to 19 percent of workers by 1988.[9] Similarly, PPO participation gained a foothold, growing from 1 percent in 1986 to 7 percent in 1988.[10]

Exhibit 5
Percent Of Full-Time Employees With Employer-Sponsored Health Insurance Coverage, By Amount Of Deductible For Health Care Benefits, 1980–1988

Type and amount of deductible	1980	1982	1984	1988
Total	100%	100%	100%	100%
With annual deductible	100	100	99	94
$100 or less	85	85	72	51
Greater than $100	8	7	22	40
$101–$200	NA	NA	NA	31
Greater than $200	NA	NA	NA	9
Based on earnings	5	6	5	3
Without annual deductible	–[a]	0	1	6
Deductible not on annual basis	–[a]	–[a]	–[a]	1
No deductible	–[a]	0	1	5

Source: U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in Medium and Large Firms*, annual bulletins for 1980 and 1988 (Washington, D.C.: U.S. Government Printing Office).
[a] Comparable data not available from published source.

Despite these measures, the share of personal health care paid by private health insurance as measured in the national health accounts continued to grow throughout the 1980s, exceeding the growth in overall health expenditures in almost every year. Some of the very changes instituted by employers to save money may have contributed to cost increases. For instance, the cost-saving aspects of premium cost sharing may have been mitigated by its psychological effects on employees. Once workers directly pay for a portion of premiums, some may reason that they have to use it to "get their money's worth." Employees and their dependents may feel less need to use a benefit for which they do not pay directly.

The PPO/HMO participation rates may explain the increase in the proportion of workers who face no deductible for employer-sponsored health coverage (Exhibit 5). One of the inducements to participation comes in the form of no or low deductible and copayment requirements for services, which reduces employees' out-of-pocket expenditure for services at the time when services are delivered.

Other contributing factors. Other factors have contributed to the rising costs of insurance premiums. First, there is the issue of "benefit creep"—the steady expansion of services covered by employer-sponsored private health insurance.[11] During the 1980s, coverage of hospital services, surgery, physician visits, and prescription drugs were well-established benefits provided to almost all full-time workers in medium and large firms. Other services have emerged, however, considerably expanding the scope of health insurance policies. For example, the proportion of full-time workers participating in employer-sponsored health care who

received dental coverage was higher in 1988 than in 1980, and the proportion of workers with coverage for vision services, treatment for alcohol and drug abuse, home health, and hospice care expanded significantly (Exhibit 6).

In some cases, these expansions were mandated by state governments anxious to deal with problems associated with drug abuse and mental health. In other cases, employers interested in avoiding state-mandated premium taxes opted to self-insure health care benefits. In the process of switching from traditional insurance to self-insurance, employers realized onetime savings in health care costs, which, in some cases, were passed along to employees as expanded benefits. To entice employees into HMOs and PPOs, expanded benefits were also offered.

Employers often find it more difficult to contain benefit outlay increases for expanded services once they are offered. Fewer utilization review and fee profile systems exist to monitor and control costs for these expanded services than for traditional covered services such as hospital and physician care. Compounding the problem, other plans offered by the same employer tend to add these expanded services to remain competitive. Also, businesses competing for the same employees feel a need to keep benefit packages competitive, particularly in tight labor markets. In so doing, aggregate benefits and premiums rise, adding fuel to the spiraling costs.

Exhibit 6
Percent Of Full-Time Employees With Employer-Sponsored Health Care Coverage, By Category Of Benefits Covered, Selected Years 1980–1988

Benefit category	1980	1982	1988
Hospital[a]	100%	100%	98%
Surgery	100	100	98
Physician visits in hospital	100	100	98
Physician office visits	94	95	98
Prescription drugs	97	97	94
Dental	56	68[b]	66
Vision	21	22	35
Alcohol abuse	NA	50	80
Drug abuse	NA	37	74
Home health	NA	37[c]	76
Hospice	NA	11[d]	38

Source: U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in Medium and Large Firms*, annual bulletins for 1980, 1982, 1983, 1984, and 1988 (Washington, D.C.: U.S. Government Printing Office).
[a] Includes room and board and miscellaneous services.
[b] Peaked at 77 percent in 1984.
[c] Figure reported for 1983 (first year reported).
[d] Figure reported for 1984 (first year reported).

A second factor contributing to rising private health insurance costs is that expansion of coverage reduced the effect of increased deductibles. Services previously financed out of pocket now contributed toward meeting the deductible, after which a portion of the bill, never before covered by private health insurance, would be paid by insurance. The effect of deductible increases was diluted; the out-of-pocket share of spending decreased, and the private health insurance payments share increased.

Third, the increases in insurance deductibles cited earlier have not been sufficient to transfer purchasing responsibility to the consumer. The average deductible actually increased less than medical prices in the 1980s.[12] Because health care spending increased more rapidly than price inflation, deductibles simply did not keep pace. Personal health care expenditures rose 103 percent per capita between 1980 and 1988, while the average deductible per policy (for those policies with deductible requirements) rose only 57 percent.

Fourth, by offering their employees a choice of insurance plans, employers may have unwittingly introduced increases in premiums, rather than reductions. Managed care plans (such as staff-model HMOs and some PPOs) may attract a healthier patient base (favorable risk selection), but the premiums they charge may reflect health care use closer to that of the entire population. On the other hand, traditional fee-for-service plans may attract heavy users with established patient/provider relationships (adverse risk selection). Plans with adverse risk selection must raise premiums to cover higher usage; those healthier patients who do not wish to pay the higher cost are driven elsewhere, and a vicious cycle of cost increases could be established. Plan hopping by workers seeking to optimize their own situation can generate more premium costs than does use of a single plan for all workers.[13] In addition, when both spouses are employed, employers with more attractive policies from the worker's point of view subsidize employers with less attractive policy offerings. This interemployer plan hopping has the same effect on aggregate premiums that intraemployer plan hopping has on a single employer's premiums.

In their attempt to contain the cost of employer-sponsored health insurance, employers have experimented with many options. Through 1988, however, these options do not appear to have had a major impact on curbing the health insurance cost spiral.

Out-Of-Pocket Spending

Data collected in a survey of out-of-pocket spending by the noninstitutionalized population show that the burden of health spending on family

budgets has diminished over the past twenty-eight years. However, that burden, measured as the share of income after taxes, is not the same for all age groups.

The U.S. Bureau of Labor Statistics Consumer Expenditure Survey (CE) shows that "consumer units" (households) spent an average of $25,892 in 1988 (Exhibit 7).[14] Of that, an average of $1,298 was for health care, about 5 percent of all their out-of-pocket expenditures. This proportion of total spending has remained about the same since 1972–1973, and was only slightly higher (6 percent) in 1960–1961.

As defined in the CE, health care expenditures include the consumer share of spending for private health insurance premiums as well as out-of-pocket spending for medical care services and products. In this respect, it differs from the out-of-pocket spending category of the national health accounts, which excludes insurance premiums.

On the other hand, because the CE covers only the noninstitutional population, very few nursing home expenditures are captured in the survey. In the national health expenditures estimates, out-of-pocket expenditures for nursing home care account for 18 percent of all out-of-pocket spending for health. Those nursing home expenditures that are

Exhibit 7
Average Annual Expenditures, In Current Dollars, And Percent Distribution Of Expenditures By Consumer Units, By Age Of Reference Person, Selected Years 1960–1988

	All ages			Under age 65			Age 65 and over		
Spending category	1960–61	1972–73	1988	1960–61	1972–73	1988	1960–61	1972–73	1988
Total	$5,626	$9,512	$25,892	$6,168	$10,493	$28,131	$3,315	$5,590	$17,297
Food	1,235	1,596	3,748	1,344	1,735	4,052	766	1,039	2,581
Housing	1,461	2,551	8,053	1,577	2,774	8,709	967	1,661	5,529
Apparel	518	565	1,313	590	646	1,487	212	242	643
Transportation	770	1,597	5,093	867	1,822	5,628	354	699	3,040
Health care[a]	340	482	1,298	349	478	1,089	302	498	2,099
Other	1,302	2,721	6,388	1,440	3,038	7,166	713	1,451	3,404
Percent distribution									
Total	100%	100%	100%	100%	100%	100%	100%	100%	100%
Food	22	17	14	22	17	14	23	19	15
Housing	26	27	31	26	26	31	29	30	32
Apparel	9	6	5	10	6	5	6	4	4
Transportation	14	17	20	14	17	20	11	13	18
Health care[a]	6	5	5	6	5	4	9	9	12
Other	23	29	25	23	29	25	22	26	20
Income after taxes	$5,557	$9,731	$26,149	$6,077	$10,723	$28,579	$3,342	$5,764	$16,816
Income after taxes as a percent of expenditures	98.8%	102.3%	101.0%	98.4%	102.2%	101.6%	100.8%	103.1%	97.2%

Source: Bureau of Labor Statistics, Consumer Expenditure Survey.
Note: Data have been adjusted to maintain definitional consistency across years.
[a] Includes out-of-pocket payments of health insurance premiums.

captured in the CE are not very illuminating, because the noninstitutionalized population's use of nursing home care is infrequent and short term, and the likelihood of sufficient observations of these expenditures in the sample to produce reliable estimates is small.

The burden of health expenditures on consumers can be measured in relation to income after taxes. Expenditures for medical services and supplies declined as a percentage of income after taxes between 1960-1961 and 1988, falling from 4.5 percent to 3.1 percent. Expenditures for health insurance premiums increased slightly, from 1.6 percent of income after taxes in 1960-1961 to 1.8 percent in 1988. For all consumer units on average, health care spending consumed a smaller share of income after taxes in 1988 than it did in 1960-1961 (Exhibit 8).

Spending differs between consumer units where the reference person is under age sixty-five (nonaged households) and those where the reference person is age sixty-five or older (elderly households).[15] Three-quarters of what nonaged households spent in 1988 went for food, housing, clothing, transportation, and health care. Beginning with the 1972-1973 CE, nonaged households spent less, on average, than they accrued in income after taxes: the difference is accumulated in "wealth" in the form of additions to assets.

The share of income after taxes spent for health by nonaged households declined from 5.7 percent in 1960-1961 to 3.8 percent in 1988. This decline can be traced to spending for medical care services and supplies. Growth in these expenditures has not kept pace with growth in income after taxes, while growth in out-of-pocket insurance premium expenditures has. This information confirms that employers have not been able

Exhibit 8
Average Annual Health Expenditures Of Consumer Units, In Current Dollars, By Age Of Reference Person, Selected Years 1960-1988

	All ages			Under age 65			Age 65 and over		
Spending category	1960-61	1972-73	1988	1960-61	1972-73	1988	1960-61	1972-73	1988
Health care	$340	$482[a]	$1,298	$349	$478[a]	$1,089	$302	$498[a]	$2,099
Total insurance premiums	89	151	474	-[b]	141	368	-[b]	187	881
Private insurance premiums	89	133	397	-[b]	139	355	-[b]	110	559
Medicare premiums	NA	17[a]	77	NA	2[a]	13	NA	78	323
Medical services and supplies	251	332	823	-[b]	337	720	-[b]	311	1,218
Prescription drugs	-[b]	47	161	-[b]	42	119	-[b]	68	326
Expenditures as a percentage of income after taxes									
Health care	6.1%	5.0%	5.0%	5.7%	4.5%	3.8%	9.0%	8.6%	12.5%
Health insurance premiums	1.6	1.5	1.8	-	1.3	1.3	-	3.2	5.2
Medical services and supplies	4.5	3.4	3.1	-	3.1	2.5	-	5.4	7.2

Source: Bureau of Labor Statistics, Consumer Expenditure Survey.
[a] Figures for 1972-1973 adjusted to maintain definitional consistency with other years.
[b] Not available from published sources.

to shift health care costs to workers. In fact, the overall "burden" of out-of-pocket expenditures has been reduced between 1972–1973 and 1988.

In 1988, elderly households spent a slightly larger share of all expenditures on housing and food than did nonaged households, and a smaller share on transportation and apparel. However, elderly households' share of total out-of-pocket expenditures devoted to health was almost four times as great as that of nonaged households. Since 1972–1973, the elderly have spent more than they take in as measured in income after taxes, indicating that they dipped into "wealth" in the form of savings or other assets accumulated over their lifetimes to meet their financial obligations. In 1988, elderly households spent 12.5 percent of their income after taxes on health care, a significant increase (see Exhibit 8).

Among the most rapidly rising health expenditure items reported by the CE for elderly households are private health insurance premiums and prescription drugs. These grew at annual rates of 11.1 and 10.6 percent per household, respectively, from 1972–1973 through 1988. Prescription drug expenditures account for 27 percent of elderly households' out-of-pocket expenditures for medical services and supplies in 1988, up from 22 percent in 1972–1973. This increase led to considerable congressional interest in prescription drugs and the aged population, including the abortive attempt to cover those drug expenditures under Medicare as part of the catastrophic legislation. Similarly, increases in private health insurance premiums have triggered congressional interest in the insurance industry and "Medigap" policies.

Out-of-pocket nursing home expenditures are underrepresented in the CE, because the institutionalized population is not covered. However, national expenditures for nursing home care increased 12.7 percent per year between 1972 and 1988, with the elderly accounting for most of the use reported. These out-of-pocket expenditures have grown substantially faster than most other items measured by the CE.

The views expressed in this DataWatch are those of the authors, and no endorsement by the Health Care Financing Administration is intended or should be inferred.

NOTES

1. Significant revisions to the national expenditure data have been incorporated into the information presented here in Exhibits 1–3, affecting all years back to 1960. The overall trends, however, remain similar to those previously published. The single most important revision was the direct estimation of out-of-pocket spending, made possible by the availability of new time-series data sources. A detailed explanation of the revisions and their rationale will appear in the Summer 1990 issue of *Health Care Financing Review.*
2. The same pattern is found by an examination of the ratio of out-of-pocket spending to insurance premiums, except that the relative size of out-of-pocket spending is lower throughout the period. In 1960, out-of-pocket payments were 2.3 times the size of private insurance premiums. By 1980, they were 80 percent the size of premiums, and that percentage continued to fall through the 1980s, reaching 65 percent in 1988.
3. S. Siegelman and R. Feierman, "3rd Party Rxs Keep Growing," *American Druggist* 199, no. 5 (May 1989): 36–42.
4. Although coverage of prescription drugs is available to almost all full-time workers in medium and large firms who participate in employer-sponsored health insurance plans, the consumption of drugs by this population cohort (mostly under age sixty-five) is substantially lower than for the elderly cohort, who use three times as many prescriptions per capita as do the rest of the population.
5. K. Levit, M. Freeland, and D. Waldo, "Health Spending and Ability to Pay: Business, Individuals, and Government," *Health Care Financing Review* (Spring 1989): 1–11.
6. M.E. Moyer, "A Revised Look at the Number of Uninsured Americans," *Health Affairs* (Summer 1989): 102–110.
7. U.S. Bureau of Labor Statistics, *Employee Benefits in Medium and Large Firms,* 1988 ed. (Washington, D.C.: U.S. Government Printing Office, August 1989).
8. Levit et al., "Health Spending and Ability to Pay."
9. U.S. Bureau of Labor Statistics, *Employee Benefits in Medium and Large Firms,* 1980 ed. (Washington, D.C.: U.S. GPO, September 1981).
10. BLS, *Employee Benefits in Medium and Large Firms,* 1988 ed.
11. S.B. Jones, "Can Multiple Choice Be Managed to Constrain Health Care Costs?" *Health Affairs* (Fall 1989): 51–59.
12. P.F. Short, "Trends in Employee Health Insurance Benefits," *Health Affairs* (Summer 1988): 186–196.
13. Jones, "Can Multiple Choice Be Managed?"
14. The CE collects information on consumer unit out-of-pocket expenditures of noninstitutionalized persons. The results are used to derive weights for the consumer price index as well as to track trends in consumer spending. In the early historical period, CE was conducted periodically (approximately every ten years); since late 1979, CE has collected information continuously. Beginning in 1972–1973, the survey includes two segments: the quarterly interview survey, which captures large episodic expenditures, and the diary survey, which collects information on small, recurring expenditures—expenditures potentially forgotten during quarterly interviews. The two surveys are integrated annually to produce a complete picture of consumption patterns of consumer units.
15. Reference person typically identifies the person who owns or rents the home.

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.

المنارة للاستشارات

www