

Federal statistics on healthcare benefits and cost trends: an overview

Federal Government statistical agencies provide a variety of healthcare information on diverse aspects of the Nation's healthcare picture

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There are various Federal statistical surveys that attempt to shed light on a major national topic—healthcare availability and costs. Federal agencies—such as the Bureau of Labor Statistics, the Bureau of the Census, the Bureau of Economic Analysis, the National Center for Health Statistics, and the Centers for Medicare and Medicaid Services—collect, analyze, and publish data that address different aspects of the healthcare picture. Some statistical programs such as those conducted by the Bureau of Labor Statistics have as their primary mission the dissemination of statistics. Other agencies, such as the Centers for Medicare and Medicaid Services, publish data in conjunction with their primary mission to provide services and enforce regulations. This article summarizes major Federal healthcare statistical surveys and identifies selected benefit provisions, including incidence of coverage and employer and employee costs. Two types of surveys are examined separately—surveys of establishments (employers) and household surveys. In addition, Federal accounting structures that provide a measurement of aggregate medical costs are reviewed.

Establishment surveys

The two major establishment-type surveys are the Bureau of Labor Statistics' National Compensation Survey (NCS) and the Medical Expenditure Panel Survey Insurance Component (MEPS-IC) conducted by the Agency for Healthcare Research and Quality. Both establishment surveys are conducted annually. Data for the NCS are col-

lected by personal visit initially and updated by mail and telephone; the MEPS's data are collected primarily by mail. Both survey types obtain some detailed provisions from benefit plan documents rather than directly from respondents. Tables 1 through 4 present examples of selected published data from the NCS¹ and the MEPS-IC.²

While both establishment surveys collect health insurance data, the focus of each is considerably different. (Note that the NCS reference to "medical care" is comparable to the MEPS' "health care" term.) The NCS is designed to get broad estimates of several types of employee compensation, including wages and salaries, overtime pay, sick leave, vacation benefits, health and retirement benefits, and so forth. The following is a sample of the medical insurance details available from the NCS:

- Incidence of coverage of selected medical services
- Amount of plan deductibles
- Coinsurance rates
- Out-of-pocket expense provisions
- Mental health and substance abuse treatment provisions
- Types of prescription drug coverage
- Brand name drug provisions
- Type of medical plan and financial intermediary
- Cost containment provisions
- Dollar plan maximums
- Employee share of total premiums and average monthly contributions (see table 2)

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The MEPS is designed specifically for in-depth analysis of healthcare benefits.³ It provides, for example, cost of premiums and employees' contributions by private-sector (non-government) data, by industry groupings, and by such characteristics as ownership type and age of firm. (See table 4.) The following is a sample of some other health insurance details available from the MEPS:

- Private-sector data by firm size and selected characteristics
- Private-sector data by firm size and State
- Public-sector data by government type, government size, and census division
- National totals for enrollees and cost of health insurance coverage for the private and public sectors

- Private-sector data by proportion of employees who are full time or low wage and State
- Private-sector data by average wage quartiles and State.

Within each of these categories, tables are subsequently grouped by:

- Establishment-level tables
- Employee-level tables
- Premiums, employee contributions, and enrollment tables for single coverage plans
- Premiums, employee contributions, and enrollment tables for family coverage plans
- Premiums, employee contributions, and enrollment tables for employee-plus-one coverage plans.

Table 1. Percent of workers participating in healthcare benefits, by selected characteristics, private industry, National Compensation Survey, March 2004

Characteristic	Medical care	Dental care	Vision care
All employees	53	37	22
Worker characteristics			
White-collar occupations	59	43	25
Blue-collar occupations	60	40	25
Service occupations	24	16	11
Full-time employees	66	46	27
Part-time employees	11	8	6
Union	81	68	50
Nonunion	50	33	19
Average wage:			
Less than \$15 per hour	40	26	15
\$15 per hour or higher	71	53	33
Establishment characteristics			
Goods-producing	69	49	30
Service-producing	48	33	20
1-99 workers	43	24	14
100 workers or more	64	52	32
Geographic areas			
Metropolitan areas	54	38	23
Nonmetropolitan areas	48	31	18
New England	49	38	17
Middle Atlantic	53	38	24
East North Central	54	39	22
West North Central	51	32	17
South Atlantic	52	35	19
East South Central	52	36	25
West South Central	54	33	20
Mountain	51	38	23
Pacific	55	41	30

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

Household surveys

There are three major Federal household surveys that collect data on healthcare benefits:

- The Current Population Survey (CPS)
- The Survey of Income and Program Participation (SIPP)
- The Medical Expenditure Panel Survey Household Component (MEPS-HC).

The Current Population Survey is a monthly household survey jointly conducted by the Bureau of Labor Statistics and

the Bureau of the Census. Data are collected by personal and telephone interviews. The CPS⁴ is the primary source of information on the labor force characteristics of the U.S. population. Supplemental questions are often added to the regular CPS questionnaire to produce estimates on a variety of topics, including health and employee benefits. Table 5 presents selected demographic information related to health insurance coverage.

The Survey of Income and Program Participation⁵ is conducted by the Bureau of the Census and provides information on the source and amount of income, labor force information,

Table 2. Percent of medical insurance participants required to contribute and percentage and amount of premiums paid by employees, by selected characteristics, private industry, National Compensation Survey, March 2004

Characteristic	Single coverage			Family coverage		
	Employee contribution required (percent)	Employee share of premium (percent)	Average monthly contribution	Employee contribution required (percent)	Employee share of premium (percent)	Average monthly contribution
All employees	76	18	\$67.57	89	31	\$264.59
Worker characteristics						
White-collar occupations	78	19	69.07	91	32	271.60
Blue-collar occupations	70	16	63.15	84	28	242.81
Service occupations	81	21	72.40	91	35	294.58
Full-time employees	76	18	67.05	89	31	263.65
Part-time employees	71	21	78.61	83	33	284.66
Union	57	11	56.53	67	17	195.12
Nonunion	79	20	68.98	93	33	273.51
Average wage:						
Less than \$15 per hour	79	20	70.27	92	34	275.81
\$15 per hour or higher	73	17	65.22	86	28	255.05
Establishment characteristics						
Goods-producing	74	16	59.89	85	26	221.25
Service-producing	77	19	70.63	90	33	281.44
1-99 workers	67	18	74.02	87	36	307.78
100 workers or more	83	18	63.33	90	27	231.23
Geographic areas						
Metropolitan areas	76	18	67.56	89	30	262.99
Nonmetropolitan areas	76	18	67.62	90	32	274.02
New England	84	20	69.37	91	26	224.98
Middle Atlantic	73	17	67.43	84	27	246.61
East North Central	76	18	67.73	84	27	252.62
West North Central	77	18	66.60	86	30	258.23
South Atlantic	79	21	72.02	95	35	293.72
East South Central	79	19	64.16	94	33	247.83
West South Central	81	19	66.49	97	36	288.84
Mountain	79	18	64.04	89	32	269.86
Pacific	65	16	65.19	85	31	260.51

¹ The average is presented for all covered workers in plans stating a flat monthly cost and excludes workers without the plan provision.

NOTE: Average contributions in this table are limited to participants who are required to contribute to medical insurance costs. The employee share of premium category includes workers who do not have to make a contribution

as well as employees who do have to contribute. The employee contributions referred to in table 4 include employees who do not contribute to medical insurance premiums as well as those who do. Dashes indicate data did not meet publication criteria.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

program participation and eligibility data, and general demographic characteristics to measure the effectiveness of existing Federal, State, and local programs. Data are collected by personal interviews with telephone follow-ups. Data are used to estimate future costs and coverage for government programs, such as food stamps, and to provide improved statistics on the distribution of income in the country. The survey design is a continuous series of national panels, with a sample of household interviews lasting about 2 1/2 to 4 years. Table 6 presents selected published data from the SIPP.

The MEPS Household Component Survey (HC),⁶ a nationally representative survey of the U.S. civilian noninstitutionalized population, collects medical expenditure data at both the person and household levels. The MEPS-HC collects detailed data on demographic characteristics, health conditions, health status, use of medical care services, charges and payments, access to care, satisfaction with care, health insurance coverage, income, and employment. In addition to collecting data at the person and household levels, expenditure data for the sampled households are then collected from the doctors, hospitals, and phar-

Table 3. Percent of private-sector employees that are enrolled in health insurance plans at establishments that offer health insurance by selected firm size and selected characteristics, Medical Expenditure Panel Survey (Insurance Component), United States, 2001

Characteristic	All firm sizes	1,000 or more employees	Less than 50 employees	50 or more employees
United States	62.2	64.4	60.5	62.6
Industry group:				
Agriculture, fishing, forestry	59.5	64.7	52.6	64.4
Mining and manufacturing	80.4	84.0	71.2	81.8
Construction	64.9	71.3	66.6	63.2
Utilities and transportation	72.7	73.9	63.2	73.6
Wholesale trade	75.4	80.0	69.7	77.3
Financial services and real estate	72.8	73.5	71.3	73.0
Retail trade	47.6	42.4	58.8	44.7
Professional services	65.8	67.2	66.0	65.8
Other services	41.9	45.1	41.9	42.0
Ownership:				
For profit, incorporated	63.3	64.8	62.2	63.6
For profit, unincorporated	57.1	61.0	56.5	57.4
Nonprofit	58.5	63.1	53.9	59.5
Unknown	62.7	62.9	95.8	62.3
Age of firm:				
Less than 5 years	53.9	68.2	57.0	50.4
5–9 years	52.0	39.4	58.2	46.3
10–19 years	56.0	53.1	59.8	53.1
20 or more years	63.2	64.3	62.2	63.5
Unknown	67.0	67.1	56.3	67.1
Multi/single status:				
2 or more locations	63.6	64.5	58.2	63.8
1 location only	59.2	58.9	60.7	57.2
Full-time employees:				
Less than 25 percent	18.3	21.1	16.9	18.8
25–49 percent	31.4	34.4	29.3	31.8
50–74 percent	50.0	55.4	46.4	50.9
75 percent or more	70.7	72.3	69.2	71.1
Unknown	64.2	64.8	71.9	64.0
Union presence:				
No union employees	60.7	62.4	60.1	60.9
Has union employees	67.7	68.7	66.0	67.8
Unknown	64.2	64.8	71.9	64.0
Percent of low-wage ¹ employees:				
50% or more low wage	36.4	35.7	37.4	36.1
Less than 50% low wage	68.6	69.3	67.8	68.9
Unknown	66.1	66.5	54.2	66.4

¹ Defined as earning \$9.50 per hour or less.

SOURCE: Agency for Healthcare Research and Quality.

macies used by these households. The primary collection method uses Computer Aided Telephone Interviewing (CATI) techniques. Table 7 presents selected data on the health insurance status of the population under age 65.

Establishment vs. household surveys

Why are there separate establishment and household surveys covering what appears to be the same health topics? Each

survey type provides information that is unavailable or not readily available from the other. Establishment surveys provide more accurate data on the costs and details of health plans than do household surveys; however, the latter are better vehicles for obtaining demographic data such as age, sex, race, and marital status.⁷ A question also is raised on the rationale for conducting multiple establishment and multiple household surveys. The answer again is that each survey is

Table 4. Average annual single and family premiums, average employee contribution and percent of total per enrolled employee at private-sector establishments that offer health insurance, by selected characteristics, Medical Expenditure Panel Survey (Insurance Component), United States, 2001

Characteristic	Single coverage			Family coverage		
	Total cost	Employee contribution	Employee percent ¹	Total cost	Employee contribution	Employee percent ¹
United States	\$2,889	\$498	17.3	\$7,509	\$1,741	23.2
Industry group:						
Agriculture, fishing, forestry	2,709	449	16.6	6,859	1,106	16.1
Mining and manufacturing	2,738	423	15.5	7,308	1,311	17.9
Construction	2,632	442	16.8	7,154	1,839	25.7
Utilities and transportation	2,817	393	14.0	7,362	1,271	17.3
Wholesale trade	2,735	427	15.6	7,331	1,650	22.5
Financial services and real estate	2,944	539	18.3	7,878	1,913	24.3
Retail trade	2,774	643	23.2	7,171	2,234	31.1
Professional services	2,992	439	14.7	7,746	1,921	24.8
Other services	3,062	607	19.8	7,735	2,088	27.0
Ownership:						
For profit, incorporated	2,821	512	18.1	7,463	1,701	22.8
For profit, unincorporated	3,032	472	15.6	7,775	2,359	30.3
Nonprofit	3,182	443	13.9	7,759	1,757	22.6
Unknown	2,839	499	17.6	7,416	1,671	22.5
Age of firm:						
Less than 5 years	3,013	509	16.9	7,684	2,126	27.7
5-9 years	2,819	544	19.3	7,408	2,340	31.6
10-19 years	2,838	499	17.6	7,570	1,996	26.4
20 or more years	2,956	495	16.7	7,544	1,714	22.7
Unknown	2,747	493	17.9	7,415	1,586	21.4
Multi/single status:						
2 or more locations	2,857	521	18.2	7,476	1,644	22.0
1 location only	2,947	459	15.6	7,601	2,013	26.5
Full-time employees:						
Less than 25 percent	2,670	601	22.5	7,046	1,829	26.0
25-49 percent	2,744	631	23.0	7,065	1,676	23.7
50-74 percent	3,019	551	18.3	7,524	1,963	26.1
75 percent or more	2,882	481	16.7	7,533	1,716	22.8
Union presence						
No union employees	2,860	511	17.9	7,648	1,966	25.7
Has union employees	2,938	408	13.9	7,070	1,186	16.8
Unknown	3,149	569	18.1	7,730	1,598	20.7
Percent of low-wage ² employees						
50% or more low wage	2,813	610	21.7	7,113	2,227	31.3
Less than 50% low wage	2,923	465	15.9	7,626	1,802	23.6
Unknown	2,860	512	17.9	7,426	1,571	21.2

¹ Percents may vary slightly due to rounding.

² Defined as earning \$9.50 per hour or less.

SOURCE: Agency for Healthcare Research and Quality.

designed and funded for specific purposes, even though broad subjects, such as healthcare, may be the concern of different agencies. For example, as noted, the MEPS household survey focuses on such details as the health status of individuals, their access to and use of healthcare services, and their income and employment status. The SIPP household survey, while producing selected healthcare statistics, collects data used to estimate future costs for government programs such as the food stamps program.

Trends in healthcare costs

There are several Federal Government agencies that provide estimates on trends in health care costs. BLS publishes information from the NCS and the Consumer Price Index (CPI). The

Bureau of Economic Analysis from the Department of Commerce, and the Centers for Medicare and Medicaid Services from the Department of Health and Human Services, also provide information on healthcare trends.

Bureau of Labor Statistics. The NCS provides trends in employer costs through the Employment Cost Index (ECI) and the Employer Costs for Employee Compensation (ECEC). The ECI measures the rate of change in employee compensation, which includes employer costs for benefits, including health insurance.⁸ The ECEC measures the average cost per employee hour worked that employers pay for employee compensation, including health insurance benefits. The ECI and ECEC provide data for the civilian economy, which includes

Table 5. Percent of people with health insurance coverage for the entire year and type of coverage by selected characteristics, Current Population Survey, 2002

Characteristic	Total	Covered by private or government health insurance								Not covered
		Total	Private health insurance			Government health insurance				
			Total	Employment	Direct purchase	Total	Medicaid	Medicare	Military care	
Total	100	84.8	69.6	61.3	9.3	25.7	11.6	13.4	3.5	15.2
Sex										
Male	100	83.3	69.6	62.2	8.6	23.6	10.5	11.9	3.8	16.7
Female	100	86.1	69.6	60.4	10.0	27.8	12.7	14.9	3.2	13.9
Race and ethnicity										
White alone or in combination	100	85.8	72.3	63.2	10.1	24.8	9.8	14.2	3.5	14.2
White alone	100	85.8	72.4	63.3	10.2	24.7	9.6	14.4	3.5	14.2
White alone, not Hispanic	100	89.3	77.4	67.3	11.4	24.6	7.7	15.8	3.8	10.7
Black alone or in combination	100	80.1	54.2	50.4	4.3	33.8	23.4	10.3	3.6	19.9
Black alone	100	79.8	54.0	50.3	4.4	33.7	23.1	10.5	3.5	20.2
Asian alone or in combination	100	82.0	69.1	60.6	9.5	18.7	10.6	8.1	2.8	18.0
Asian alone	100	81.6	68.7	60.0	9.8	18.4	10.4	8.5	2.3	18.4
Hispanic (of any race)	100	67.6	46.0	42.4	3.7	26.1	20.2	6.4	1.8	32.4
Age										
Under 18 years	100	88.4	67.5	63.0	5.3	26.8	23.9	.7	2.9	11.6
18 to 24 years	100	70.4	60.4	48.9	5.7	13.6	10.6	.7	2.8	29.6
25 to 34 years	100	75.1	67.5	63.2	5.3	10.1	7.1	1.2	2.3	24.9
35 to 44 years	100	82.3	75.4	70.7	6.4	9.6	6.2	2.0	2.5	17.7
45 to 64 years	100	86.5	77.7	71.2	9.1	13.6	5.9	5.6	4.2	13.5
65 years and older	100	99.2	60.4	33.8	29.6	95.8	9.6	95.3	6.6	.8
Nativity										
Native	100	87.2	71.9	63.3	9.6	26.5	11.8	13.7	3.8	12.8
Foreign born	100	66.6	52.2	46.0	7.1	19.9	10.5	11.3	1.5	33.4
Naturalized citizen	100	82.5	64.8	56.3	9.8	27.6	9.8	20.7	2.5	17.5
Not a citizen	100	56.7	44.4	39.6	5.4	15.1	10.9	5.5	.9	43.3
Region										
Northeast	100	87.0	71.7	64.1	8.4	26.0	12.2	14.7	1.8	13.0
Midwest	100	88.3	76.4	67.4	10.0	23.3	9.7	13.3	2.1	11.7
South	100	82.5	65.9	58.0	9.1	27.4	11.8	14.1	4.9	17.5
West	100	82.9	66.9	58.3	9.6	25.4	12.8	11.6	4.1	17.1

SOURCE: U.S. Census Bureau.

the total private nonfarm economy and State and local governments, excluding households and the Federal Government. In December 2003, data were obtained from about 8,300 establishments in the private sector and 800 sample establishments in State and local government. Although both use the same data source, the ECI uses fixed employment weights based on the Bureau's Occupational Employment Statistics survey to derive industry and occupation series indexes. Since March 1995, 1990 employment counts have been used. The ECEC, on the other hand, produces cost levels and is calculated by using current, rather than fixed, employment weights.

The ECI is designed to measure how compensation paid by employers would have changed over time if the industry/occupation composition of employment had not changed from the base period, while the ECEC is designed to measure the current cost for employee compensation. While the ECEC provides information about average compensation in the economy at a point in time, the ECI should be used to examine changes in benefit costs over time. However, by comparing the ECEC at

different points in time, a measure of the change in average compensation in the labor market can be observed. For health insurance costs, for example, the change could indicate a shift in firms providing health insurance benefits, a change in the composition of premium costs between employer and employee, or a change in employee participation.⁹ The share of total compensation accounted for by health insurance in private industry rose from 6.0 percent in March 1991 to 6.6 percent in March 2004. Table 8 provides estimates on annual benefit and health insurance cost trends from the ECI and ECEC from March 1991 to March 2004.

The Consumer Price Index (CPI) is a measure of the average change in the prices paid by urban consumers for a market basket of goods and services purchased for day to day living.¹⁰ The current CPI uses a market basket developed from detailed expenditure information collected from the Consumer Expenditure Survey. The 1998 CPI revision used information provided by families and individuals on what they actually bought over the years 1993 through 1995. Altogether, more

Table 6. Health insurance coverage types by age, sex, and employment status, Survey of Income and Program Participation, 1997

[Numbers in thousands]

Characteristic	15 years and older		15-44		45-64		65 and older	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Total	208,059	100.0	120,784	100.0	55,211	100.0	32,064	100.0
Employed	131,290	63.1	87,603	72.5	39,485	71.5	4,202	13.1
Current employer	69,845	53.2	45,261	51.7	23,619	59.8	965	23.0
Previous employer	3,336	2.5	1,295	1.5	1,479	3.7	562	13.4
Spouse's employer	21,033	16.0	13,306	15.2	7,323	18.5	404	9.6
Other relative's employer	5,500	4.2	5,342	6.1	126	.3	31	.7
Privately purchased or								
military-related	8,727	6.6	4,602	5.3	2,601	6.6	1,524	36.3
Public health insurance	3,503	2.7	2,387	2.7	468	1.2	649	15.4
No health insurance	19,345	14.7	15,411	17.6	3,868	9.8	67	1.6
Unemployed	5,527	2.7	4,445	3.7	970	1.8	112	.4
Previous employer	708	12.9	485	10.9	199	20.5	24	21.8
Spouse's employer	702	12.7	485	10.9	209	21.6	7	6.4
Other relative's employer	425	7.7	425	9.6	(¹)	(¹)	(¹)	(¹)
Privately purchased or								
military-related	339	6.1	233	5.2	54	5.5	52	46.4
Public health insurance	790	14.3	672	15.1	89	9.2	28	25.4
No health insurance	2,564	46.4	2,145	48.3	419	43.2	-	-
Not in labor force	71,241	34.2	28,736	23.8	14,756	26.7	27,749	86.5
Previous employer	11,246	15.8	1,902	6.6	2,938	19.9	6,405	23.1
Spouse's employer	14,164	19.9	6,137	21.4	4,780	32.4	3,248	11.7
Other relative's employer	6,799	9.5	6,567	22.9	114	.8	118	.4
Privately purchased or								
military-related	14,482	20.3	2,228	7.8	1,654	11.2	10,600	38.2
Public health insurance	15,672	22.0	5,419	18.9	3,078	20.9	7,176	25.9
No health insurance	8,878	12.5	6,483	22.6	2,193	14.9	202	.7

¹ Represents zero or rounds to zero.

SOURCE: U.S. Census Bureau.

than 30,000 individuals and families provided expenditure information for use in determining the importance, or weight, of more than 2,000 categories in the CPI index structure. Using Consumer Expenditure Survey data from 1999 through 2000, the CPI began an ongoing 2-year weight revision with the publication of the 2002 indexes.

The CPI reflects spending patterns for two population groups: All urban consumers (CPI-U) and Urban Wage Earn-

ers and Clerical Workers (CPI-W). The CPI-U represents about 87 percent of the total U.S. population. It is based on the expenditures of almost all residents of metropolitan areas. It excludes the spending patterns of persons in non-metropolitan areas, farm families, persons in the Armed Forces, and those in institutions such as prison inmates. The CPI-W's population represents about 32 percent of the total U.S. population and is a subset of the CPI-U's population.

Table 7. Health insurance coverage of the civilian noninstitutionalized population under age 65, Medical Expenditure Panel Survey (Household Component), United States, first half of 2002

Population characteristic	Population in thousands	Percent distribution		
		Private	Public only	Uninsured
Total ¹	247,523	67.9	13.5	18.5
Employment status				
Employed	133,479	78.6	3.5	17.9
Not employed	48,923	49.6	22.8	22.7
Sex				
Male	122,942	68.3	12.0	19.7
Female	124,581	67.5	15.1	17.4
Race/ethnicity				
Hispanic	35,454	43.4	20.5	36.1
Black	31,777	52.7	27.0	20.4
White	166,748	76.0	9.3	14.6
Other	13,544	68.0	15.6	16.3
Hispanic male	18,251	44.2	17.4	38.4
Black male	14,866	53.1	24.4	22.5
White male	83,148	76.2	8.4	15.3
Other male	6,677	68.5	14.2	17.3
Hispanic female	17,203	42.5	23.7	33.8
Black female	16,911	52.2	29.2	18.5
White female	83,600	75.7	10.3	14.0
Other female	6,867	67.6	17.0	15.4
Marital status²				
Married	98,352	80.3	4.9	14.9
Widowed	3,282	56.0	20.2	23.8
Divorced	20,493	64.2	12.5	23.3
Separated	3,946	45.7	20.7	33.6
Never married	56,852	59.1	12.4	28.6
Perceived health status				
Excellent	84,060	71.6	12.3	16.1
Very good	81,487	72.3	10.2	17.5
Good	59,080	63.3	14.9	21.8
Fair	17,076	54.1	23.3	22.7
Poor	5,594	40.4	37.4	22.3
Census region				
Northeast	46,026	73.3	13.1	13.6
Midwest	56,152	75.0	10.2	14.8
South	87,689	63.2	14.8	22.1
West	57,656	64.1	15.3	20.7

¹ Includes persons with unknown employment, unknown marital and unknown perceived health status.

² For individuals ages 16 and older.

NOTE: The estimates in this table cover the civilian noninstitutionalized

population under age 65. Percents may not add to 100 because of rounding.

SOURCE: Center for Financing, Access and Cost Trends, Agency for Health-care Research and Quality: Medical Expenditure Panel Survey, Household Component, 2002.

Table 8. Trends in private industry employer health insurance costs, National Compensation Survey, March 1991 to March 2004

Date	ECEC private industry costs (cents per hour worked)		ECEC private industry costs (annual percent change)		ECI private industry (annual percent change)	
	All benefits	Health insurance	All benefits	Health insurance	All benefits	Health insurance
March						
1991	\$4.27	\$0.92	–	–	5.8	11.5
1992	4.55	1.02	6.6	10.9	6.3	10.3
1993	4.80	1.10	5.5	7.9	5.6	8.1
1994	4.94	1.14	2.9	3.6	4.4	5.7
1995	4.85	1.06	–1.8	–6.3	2.9	1.6
1996	4.91	1.04	1.2	–1.7	1.6	–3
1997	4.94	.99	.6	–4.4	2.0	0.2
1998	5.02	1.00	1.6	1.8	2.3	2.2
1999	5.13	1.03	2.2	2.6	2.2	3.7
2000	5.36	1.09	4.5	5.9	5.5	7.6
2001	5.63	1.16	5.0	8.0	5.0	8.1
2002	5.90	1.31	4.8	12.6	4.8	10.5
2003	6.22	1.45	5.4	11.2	6.1	9.8
2004	6.65	1.53	6.9	5.5	7.0	9.3

NOTE: Dash indicates percent change is not applicable.

SOURCE: Bureau of Labor Statistics, National Compensation Survey.

Table 9. Trends in healthcare prices, Consumer Price Index, March 1991 to March 2004

Date	CPI All items (1982–84=100)		CPI Medical care (1982–84=100)		CPI Medical care services (1982–84=100)		CPI Medical care commodities (1982–84=100)	
	Index	Percent change	Index	Percent change	Index	Percent change	Index	Percent change
March								
1991	135.0	–	173.7	–	173.8	–	173.2	–
1992	139.3	3.2	187.3	7.8	187.4	7.8	186.7	7.8
1993	143.6	3.1	198.6	6.0	199.7	6.6	193.9	3.9
1994	147.2	2.5	208.3	4.9	210.4	5.4	199.1	2.7
1995	151.4	2.9	218.4	4.9	221.8	5.4	203.7	2.3
1996	155.7	2.9	226.6	3.8	230.7	4.0	208.9	2.6
1997	160.0	2.8	233.4	3.0	237.7	3.0	214.7	2.8
1998	162.2	1.4	239.8	2.8	244.8	3.0	218.5	1.8
1999	165.0	1.7	248.3	3.6	253.1	3.4	227.7	4.2
2000	171.2	3.8	258.1	4.0	263.2	4.0	236.3	3.8
2001	176.2	2.9	270.0	4.6	275.9	4.8	244.9	3.6
2002	178.8	1.5	282.0	4.5	288.9	4.7	254.1	3.8
2003	184.2	3.0	294.2	4.3	302.6	4.8	261.4	2.9
2004	187.4	1.7	307.5	4.5	318.4	5.2	267.3	2.3

NOTE: Dash indicates percent change is not applicable.

SOURCE: Bureau of Labor Statistics, Consumer Price Index, All Urban Consumers, U.S. city average, not seasonally adjusted.

Medical care is one of the major item groups within the Consumer Price Index. This major group consists of medical care commodities and medical care services. Medical care services, the major component of medical care, includes physician, dental, eye care, and other medical professional services, inpatient and outpatient hospital care, and nursing home services. Medical care commodities include prescription and non-prescription

drugs and medical equipment and supplies. Weights for CPI medical care reflect household expenditures for health insurance premiums, as well as out-of-pocket medical expenses not covered by health insurance. The CPI does not include employer-paid insurance premiums or government-paid healthcare such as Medicare Part A.¹¹ Table 9 provides estimates on annual price trends from the CPI from March 1991 to March 2004.

Bureau of Economic Analysis. The Bureau of Economic Analysis (BEA) is an agency of the Department of Commerce, which along with the Bureau of the Census, are part of the Economics and Statistics Administration. The cornerstone of BEA's estimates is the National Economic Accounts, which feature the estimates of gross domestic product and related measures.¹²

The National Economic Accounts are aggregations of accounts belonging to four sectors of the economy: business, personal, government, and foreign. For each sector, three accounts are created—a production account that records the production attributable to that sector; an appropriation account that records the sources of that sector's income; and a savings-investment account that records the sector's net increase in assets or liabilities. Taken together, these sector accounts constitute a double-entry system in which an outlay recorded in one account is also recorded as a receipt in another account.

The National Income and Product Accounts (NIPA) are a combination of the sector accounts designed to display the value and composition of national output and the distribution of incomes generated by its production. The NIPA consists of seven accounts: (1) the domestic income and product account; (2) the private enterprise income account; (3) personal income and outlay account; (4) the government receipts and expenditures account; (5) the foreign transactions current account; (6) the domestic capital account; and (7) the foreign transactions capital account.¹³

In producing NIPA estimates, BEA relies primarily on data based on information gathered by regulatory or tax agencies

for other purposes as well as data from other statistical agencies, such as BLS and the Bureau of the Census. Comprehensive data on health insurance are difficult to obtain because employer-provided health insurance has no single administrative source of data. Final estimates are based on a combination of regulatory information, survey data, and trade sources. MEPS is the primary data source for the employer cost of the employee health insurance component and for the medical care and hospitalization insurance component of personal consumption expenditures. Estimates from the Employer Cost for Employee Compensation published by BLS are used to estimate the annual growth rate of employer expenditures. Wage data from the BLS annual tabulations of wages and salaries of employees covered by State unemployment insurance reports are also used.

Within the personal income and outlays account is the Personal Consumption Expenditures for medical care. Included within this account are costs (in current dollars) for physicians, dentists, and other professional services; costs for hospital visits and nursing homes; and health insurance and workers' compensation costs. Changes in current dollar expenditures can be decomposed into quantity and price components. Quantities or "real" measures and prices are expressed as index numbers with the reference year 2000, currently equal to 100. Annual changes in quantities and prices are calculated using a Fisher formula that incorporates weights from two adjacent years.¹⁴ The NIPA produces a "chained weighted" measure that updates the weights for every period. For example, the growth rate between 1992 and 1993 is computed using prices that prevailed in 1992 and 1993, while the growth rate

Table 10. Trends in healthcare costs, Bureau of Economic Analysis, National Economic Accounts, March 1991 to March 2003

Date	Personal consumption expenditures for medical care (millions of dollars)		Index for personal consumption expenditures for medical care (2000=100)	
	Millions of dollars	Percent change	Index	Percent change
March 1991	\$590,667	—	72.655	—
1992	656,587	11.2	76.633	5.5
1993	703,754	7.2	80.483	5.0
1994	741,349	5.4	83.911	4.3
1995	789,806	6.5	87.485	4.3
1996	821,476	4.0	89.624	2.5
1997	859,878	4.7	92.031	2.7
1998	911,398	6.0	94.247	2.4
1999	944,276	3.6	96.491	2.4
2000	1,003,564	6.3	98.934	2.5
2001	1,084,582	8.1	102.819	3.9
2002	1,175,209	8.4	105.410	2.9
2003	1,272,391	8.3	108.369	2.8

NOTE: Dash indicates percent change is not applicable.

SOURCE: Bureau of Economic Analysis, National Economic Accounts,

National Income and Product Accounts tables, Table 2.4.4U Chain-Type Price Indexes for Personal Consumption Expenditures, Medical care; Table 2.4.5U Personal Consumption Expenditures by Type of Product, Medical Care.

between 1997 and 1998 is computed using prices that prevailed in 1997 and 1998. Chain-type estimates provide the best available method for comparing the level of a given series at two points in time. Table 10 provides estimates on trends in healthcare costs from the National Economic Accounts from March 1991 to March 2003.

Centers for Medicare and Medicaid Services. The Centers for Medicare and Medicaid Services (CMS) is an agency of the Department of Health and Human Services. The CMS publishes the National Health Accounts (NHA), an annual series of statistics presenting total national health expenditures.¹⁵ The NHA consists of categories defining the sources of healthcare dollars and the establishments from which services are purchased with these funds. Funding sources are broadly classified into private health insurance, out-of-pocket spending, and specific government programs such as Medicare and Medicaid. A small portion of expenditures is estimated for other private revenues, such as philanthropic giving and revenues received for nonhealth activities. Behind each NHA source of funding is a sponsor, designated as business, households, governments, and other private funds, who provides the financial support with which healthcare bills are paid. The difference between the source of funds and the sponsor can be illustrated using private health insurance. Although private health insurers pay claims on the behalf of individuals, the premiums are paid or sponsored by employers (business, government, and households). Although private health insurance is considered a private source of funding, in the NHA, the payments are categorized into business, household, and government sponsor categories. The NHA is compatible with the National Income and Product Accounts published by BEA.

The NHA includes the National Health Expenditures, historical and projected, and the State Health Expenditures. The National Health Expenditure survey measures spending for healthcare in the United States by type of service delivered (hospital care, physician services, nursing home care, and so forth) and the source of funding for those services (private health insurance, Medicare, Medicaid, out-of-pocket spending, and so forth). Total health expenditures are broadly classified into private health insurance, out-of-pocket spending, and specific government programs such as Medicare and Medicaid. A small portion of expenditures is estimated for other private revenues such as philanthropic giving and revenues received by some healthcare providers from nonhealth activities such as the operation of cafeterias and gift shops. Private health expenditures include out-of-pocket expenses, private insurance, and “other private revenues” described above. Private health insurance expenditures are the cost of premiums earned by private health providers. See the box below for the definitions used by the National Health Expenditure Survey.

The primary source for estimating private and State and local government contributions to employer-sponsored health insurance plans is the MEPS-IC survey sponsored by the Agency for Healthcare Research and Quality. Employer-paid premiums were estimated forward using the annual growth in private health premiums derived from the Employer Costs for Employee Compensation component of the NCS. The U.S. Office of Personnel Management supplied estimates of the premium amounts paid by Federal employers on behalf of their employees and retirees. Tables 11 and 12 provide estimates on expenditures and trends in healthcare costs from the National Health Expenditures Survey from 1993 to 2002.

Table 11. Per capita health expenditures and growth in private health costs and private health insurance, National Health Expenditures Survey, 1993–2002

Year	Per capita health expenditures			Average annual percent growth from previous year		
	Per capita amount	Private health expenditures	Private health insurance expenditures	Per capita growth	Private health expenditure growth	Private health insurance growth
1993	\$3,381	\$1,895	\$989	8.5	6.4	–
1994	3,534	1,922	–	5.5	2.4	–
1995	3,698	1,993	1,078	5.7	4.7	–
1996	3,847	2,061	1,119	5.0	4.4	3.8
1997	4,007	2,161	1,171	5.1	5.8	4.7
1998	4,179	2,285	1,243	5.3	6.7	6.2
1999	4,402	2,411	1,319	6.3	6.5	6.1
2000	4,670	2,550	1,422	7.1	6.7	7.8
2001	5,021	2,716	1,545	8.5	7.5	8.7
2002	5,440	2,941	1,679	9.3	9.3	8.6

NOTE: Dash indicates data not available.

SOURCE: Centers for Medicare and Medicaid Services, National Health Expenditures Survey.

Definitions used in the National Health Expenditure Survey

Out of pocket expenditures

Direct spending by consumers for all healthcare goods and services. Included is the amount paid for services not covered by insurance and the amount of coinsurance and deductibles required by private health insurance and by public programs such as Medicare and Medicaid. Enrollee premiums for private health insurance and Medicare are not included, as are coinsurance and deductible amounts paid by supplementary Medicare policies.

Private health insurance

Individually purchased and employer-sponsored insurance premiums paid for by a variety of plans, including traditional healthcare plan (Blue Cross and Blue Shield) premiums, managed care, and self-insured plans. Managed care plans include Health Maintenance Organizations (HMOs), Preferred Provider Organizations (PPOs), and Point of Service Plans (POSS). Self-insured plans are offered by employers who directly assume the major cost of health insurance for their employees. Some self-insured plans bear the entire risk, while others insure against large claims by purchasing stop-loss insurance plans. Stop-loss coverage limits the amount an employer will have to pay for each person (individual limit) or for the total expense of the company (group limit).

Other private funds

Revenues received for which no direct patient care services are rendered. The most widely recognized source of other private funds is philanthropy. Philanthropic support may be direct from individuals, obtained through fund-raising organizations such as the United Way, or obtained from foundations or corporations. For some institutions, other private funds

include income from the operation of gift shops, cafeterias, parking lots, as well as investment income.

Medicare

Payments from the Federal health insurance program for people aged 65 and older and those with certain disabilities. Medicare coverage provides for acute hospital care, physician services, brief stays in skilled nursing facilities, and short-term skilled homecare related to a medical problem. Coverage is restricted to medical care, and does not include prescription drugs or custodial care at home or in nursing homes.

Medicaid

Payments from a Federal-State program that covers health services for low-income individuals and families. Coverage and eligibility requirements vary by State. Medicaid is the largest source of funding for medical and health-related services for people with limited income and the primary payer of nursing home care.

Other public funds

All other healthcare expenditures channeled through any program established by public law. For example, expenditures under workers' compensation programs and direct healthcare costs for the Department of Defense, Department of Veteran Affairs, and Indian Health Service. Also included are State and local hospitals, home health agencies, and school health subsidies. Premiums paid by enrollees for Medicare Supplementary Medical Insurance are included as a public expenditure; however, Medicare coinsurance and deductibles are included under out-of-pocket payments because they are paid directly by the beneficiary to the provider of the service.

Table 12. Amount and percent distribution of personal healthcare expenditures by source of funds, National Health Expenditures Survey, selected calendar years 1993–2002

Expenditure category	Year						
	1993	1995	1997	1999	2000	2001	2002
Amount (billions of dollars)							
Total	\$775.8	\$865.7	\$959.2	\$1,065.0	\$1,135.3	\$1,231.4	\$1,304.2
Out-of-pocket payments	146.9	146.5	162.1	184.5	192.6	200.5	212.5
Private health insurance	259.9	288.8	319.2	366.4	398.7	437.2	479.3
Other private funds	38.4	44.2	51.4	56.2	54.2	53.7	56.2
Public funds	330.5	386.2	426.6	457.9	489.8	540.0	592.2
Medicare	144.4	178.6	203.6	206.2	217.5	239.2	259.1
Medicaid	115.7	135.3	151.7	173.7	188.3	207.5	232.4
Other public funds	70.4	72.3	71.3	78.0	84.0	93.3	100.7
Percentage distribution							
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Out-of-pocket payments	18.9	16.9	16.9	17.3	17.0	16.3	15.9
Private health insurance	33.5	33.4	33.3	34.4	35.1	35.5	35.8
Other private funds	5.0	5.1	5.4	5.3	4.8	4.4	4.2
Public funds	42.6	44.6	44.5	43.0	43.1	43.8	44.2
Medicare	18.6	20.6	21.2	19.4	19.2	19.4	19.3
Medicaid	14.9	15.6	15.8	16.3	16.6	16.9	17.3
Other public funds	9.1	8.4	7.4	7.3	7.4	7.6	7.5

SOURCE: Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Statistics Group; U.S. Census Bureau.

Summary

THE STATISTICAL SYSTEM of the United States is highly decentralized, with a myriad of Federal agencies involved in the collection and analysis of health statistics. The missions of agencies differ, with some having a major focus of investigation, regulation, or enforcement, while others such as BLS being

exclusively a statistical agency. These different purposes result in outputs varying in scope of coverage, methodology, and timing. The purpose of this article was to give an overview of the major Federal statistics on healthcare, not to provide an exhaustive list of all surveys and detailed differences in methodology. For more information, visit the Internet sites listed in the Notes section. □

Notes

¹ More information on the National Compensation Survey is available on the Internet at <http://www.bls.gov/ncs/> (visited Sept. 24, 2004).

² More information on the Medical Expenditure Panel Survey (Insurance Component) is available on the Internet at <http://www.meps.ahrq.gov/MEPSDATA/ic/2001/technote2001.pdf> (visited Sept. 24, 2004).

³ For more details on MEPS and NCS comparisons, see William Wiatrowski, Holly Harvey, and Katharine R. Levit, "Employment-Related Health Insurance: Federal Agencies' Roles in Meeting Data Needs," *Health Care Financing Review*, Spring 2002, Volume 23, Number 3, pp. 115–130. The article is available on the Internet at <http://www.cms.hhs.gov/review/02spring/02Springpg115.pdf> (visited Sept. 24, 2004).

⁴ More information on the Current Population Survey is available on the Internet at <http://www.census.gov/prod/2003pubs/p60-223.pdf> (visited Sept. 24, 2004).

⁵ More information on the Survey of Income and Program Participation is available on the Internet at <http://www.census.gov/prod/2003pubs/p70-81.pdf> (visited Sept. 24, 2004).

⁶ More information on the Medical Expenditure Panel Survey (Household Component) is available on the Internet at http://www.meps.ahrq.gov/papers/rf18_02-0006/rf18.pdf (visited Sept. 24, 2004).

⁷ For a full discussion on comparing establishment and household surveys, see Diane E. Herz, Joseph R. Meisenheimer II, and Harriet G. Weinstein, "Health and retirement benefits: data from two BLS surveys," *Monthly Labor Review*, March 2000, pp. 3–20. The article is available on the Internet at <http://www.bls.gov/opub/mlr/2000/03/art1full.pdf> (visited Sept. 24, 2004).

⁸ More information on the methodology of the National Compensation Survey and historical data for the Employment Cost Index and Employer Costs for Employee Compensation is available on the Internet at <http://www.bls.gov/ncs/ect.home.htm> (visited Sept. 24, 2004).

⁹ More information on using and comparing estimates from the ECI and ECEC is available from several articles. See Michael K. Lettau, Mark A. Loewenstein, and Aaron T. Cushner, "Explaining the Differential

Growth Rates of the ECI and the ECEC, “*Compensation and Working Conditions*, Summer 1997, pp. 15–23; Albert E. Schwenk, “Measuring Trends in the Structure and Levels of Employee Costs for Employee Compensation,” *Compensation and Working Conditions*, Summer 1997, pp. 3–14; and Martha A.C. Walker and Bruce J. Bergman, “Analyzing Year-to-Year Changes in Employer Costs for Employee Compensation,” *Compensation and Working Conditions*, Spring 1998, pp. 17–27.

¹⁰ More information on the methodology and historical data for the Consumer Price Index is available on the Internet at <http://www.bls.gov/cpi/home.htm> (visited Sept. 24, 2004).

¹¹ More information on measuring price change for medical care in the CPI is available on the Internet at <http://www.bls.gov/cpi/cpifact4.htm> (visited Sept. 24, 2004).

¹² More information on the methodology and historical data for the National Economic Accounts is available on the Internet at <http://www.bea.doc.gov/bea/mp.htm> and <http://www.bea.doc.gov/bea/dn1.htm> (visited Apr. 1, 2004).

¹³ The number of accounts in NIPA increased to seven with the 2003 benchmark revision. For more information, see Nicole Mayerhauser, Shelly Smith, and David F. Sullivan, “Preview of the 2003 Comprehensive Revision of the National Income and Product Accounts,” *Survey of Current Business*, August 2003, pp. 7–31.

¹⁴ For more information on Fisher formulas and the use of “chained weighted” index in the NIPA, see the news release, “Initial Results of the 2003 Comprehensive Revision of the National Income and Product Accounts,” *Survey of Current Business*, December 2003, Volume 83, Number 12.

¹⁵ More information on the methodology and historical data for the National Health Accounts is available on the Internet at <http://www.cms.hhs.gov/statistics/nhe/default.asp> and <http://www.cms.hhs.gov/statistics/nhe/historical/> (visited Sept. 24, 2004).