

Health Care Indicators

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This regular feature of the journal includes a discussion of each of the following four topics: community hospital statistics; employment, hours, and earnings in the private health sector; health care prices; and national economic indicators. These statistics are valuable in their own right for understanding the relationship between the health care sector and the overall economy. In addition, they allow us to anticipate the direction and magnitude of health care cost changes prior to the availability of more comprehensive data.

Introduction

This article presents statistics on health care utilization, prices, expenses, employment, and work-hours as well as on national economic activity. Some of these statistics are based on sample surveys conducted monthly or quarterly by Government agencies or private organizations, and are available 1 to 3 months after the completion of the period. They provide the first glimpse at changes occurring within the general economy and the health care sector.

The accompanying tables report selected quarterly statistics for 1989 through the first quarter of 1992, and the calendar year aggregation of quarterly information in the past 3 years. Additional tables show change from the same period 1 year earlier. For quarterly information, this calculation permits analysis of quarterly data to focus on the direction and magnitude of changes, without interference introduced by seasonal fluctuations.

In the national health accounts, indicators such as these play an important role in the estimation of the latest historical year of health care expenditures. Information that is more comprehensive tends to lag behind the close of a calendar year by 9 to 12 months or more. Therefore, we rely extensively on indicators such as these to anticipate and predict changes in health care sector expenditures for the most recent year. Other indicators help to identify specific reasons (e.g., increases in price inflation or declines in utilization) for expenditure change.

In the sections that follow, we will identify important indicators of health care and national economic activity. We will discuss the sources of this information and then describe what these indicators tell us about general economic and health sector activity during the most recent quarter.

Community hospital statistics

Since 1963, the American Hospital Association, in cooperation with member hospitals, has collected data on the operation of community hospitals through its National Hospital Panel Survey. Community hospitals, which comprised over 80 percent of all hospital facilities in the United States in 1990, include all non-Federal, short-term general, and other special hospitals open to the public. They exclude hospital units of institutions; psychiatric facilities; tuberculosis, other respiratory, and chronic disease hospitals; institutions for the mentally retarded; and alcoholism and chemical dependency hospitals.

The survey samples approximately one-third of all U.S. community hospitals. The sample is designed to produce estimates of community hospital indicators by bedsize and region (American Hospital Association, 1963-90). In Tables 1 and 2, statistics covering expenses, utilization, beds, and personnel depict trends in the operation of community hospitals annually since 1982 and quarterly for 1991.

For purposes of national health expenditures (NHE), the survey statistics on revenues (not shown on Table 1) are analyzed in estimating the growth in the largest component of health care costs—community hospital expenditures. This one segment of NHE accounted for 30 percent of all health spending in 1990 (Levit et al., 1991). The survey also identifies important factors influencing expenditure growth patterns, such as changes in the number of beds in operation, number of admissions, length of stay, use of outpatient facilities, and number of surgeries.

Private health sector: Employment, hours, and earnings

The U.S. Bureau of Labor Statistics (BLS) collects monthly information on employment for all workers, and earnings and work-hours for non-supervisory workers in a sample of 350,000 establishments. Data are collected through cooperative agreements with State agencies that also use this information to create State and local area statistics. The survey is designed to collect industry-specific information on wage and salary jobs in non-agricultural industries. It excludes statistics on self-employed persons and on those employed in the military (U.S. Department of Labor, 1991).

Employment in this survey is defined as number of jobs. Persons holding multiple jobs would be counted multiple times. Approximately 5 percent of the population hold more than one job at any point in time. (Other surveys that are household based, such as the Current Population Survey [CPS], also record employment. In the CPS, however, each person's employment status is counted only once, as either employed, unemployed, or not in the labor force.) Once each year, monthly establishment-based employment

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Table 1
Selected community hospital statistics: 1989-92

Item	Calendar year			1989	1990	1991	1991	1991	1991	1992
	1989	1990	1991	Q1	Q1	Q1	Q2	Q3	Q4	Q1
Operating expenses										
Total in millions	\$195,378	\$217,113	\$238,633	\$47,312	\$52,471	\$57,189	\$58,930	\$60,214	\$82,301	\$63,739
Labor in millions	\$106,019	\$117,828	\$128,704	\$25,563	\$28,319	\$30,971	\$31,692	\$32,516	\$33,526	\$34,143
Non-labor in millions	89,359	99,286	109,929	21,749	24,152	26,218	27,238	27,698	28,775	29,597
Inpatient expense in millions	152,147	165,792	178,401	37,286	40,705	43,406	43,979	44,586	46,421	47,495
Amount per patient day	690	765	844	652	712	795	835	866	880	876
Amount per admission	4,586	5,021	5,461	4,384	4,790	5,260	5,375	5,522	5,689	5,683
Utilization										
Admissions in thousands	33,176	33,017	32,670	8,506	8,516	8,253	8,182	8,075	8,160	8,357
Inpatient days in thousands	220,361	216,836	211,475	57,204	57,132	54,578	52,681	51,459	52,756	54,238
Adult length of stay in days	6.6	6.6	6.5	6.7	6.7	6.6	6.4	6.4	6.5	6.5
Surgical operations in thousands	21,383	21,904	21,983	5,380	5,449	5,379	5,572	5,534	5,498	5,608
Outpatient visits in thousands	308,086	326,498	344,116	74,837	79,336	82,471	86,331	87,648	87,666	89,168
Beds in thousands	930	921	912	935	926	915	913	910	909	909
Adult occupancy rate ¹	64.9	64.5	63.5	67.9	68.5	66.3	63.4	61.4	63.1	65.6
Full-time equivalent (FTE) personnel										
Total in thousands	3,162	3,229	3,249	3,136	3,212	3,242	3,244	3,252	3,259	3,277
Number per bed	3.4	3.5	3.6	3.4	3.5	3.5	3.6	3.6	3.6	3.6
Adjusted patient days ² per FTE	89	88	87	23	23	22	22	21	22	22
Adjusted patient days in thousands	282,974	283,959	282,874	72,585	73,647	71,908	70,590	69,496	70,804	72,789

¹Adult occupancy rate is the ratio of average daily census to the average number of beds maintained during the reporting period.

²Adjusted patient days is an aggregate figure reflecting the number of days of inpatient care, plus an estimate of the volume of outpatient services, expressed in units equivalent to an inpatient day in terms of level of effort. It is derived by multiplying the number of outpatient visits by the ratio of outpatient revenue per outpatient visit to inpatient revenue per inpatient day, and adding the product to the number of inpatient days.

NOTES: Q designates quarter of year. Quarterly data are not seasonally adjusted.

SOURCE: American Hospital Association: *National Hospital Panel Survey Reports*. Chicago. Monthly reports for Jan. 1989-Mar. 1992.

statistics are adjusted to benchmarks created from annual establishment census information, resulting in revisions to previously published employment estimates.

Tables 3 and 4 present statistics on employment, average hourly earnings, and average weekly hours in private (non-government) health service establishments. Similar statistics for the all private non-agricultural sector, included on these tables, provide a basis for comparing the economy as a whole with the health sector in employment, earnings, and work-hours. Table 5 summarizes business activity in the health sector and the overall economy by measuring change in the implied non-supervisory work-hours and payroll. Implied work-hours are the product of the number of non-supervisory employees and average weekly hours. Implied non-supervisory payrolls are calculated by multiplying implied work-hours by average hourly earnings.

For purposes of NHE, changes in work-hours by industry combined with changes in prices (discussed in a later section) can be used to gauge the direction and magnitude of expenditure change in specific industries. We use these composite indicators in the estimation of growth in physician and dental expenditures for the most recent period. We study the historical relationship

of changes in this indicator to changes in expenditures and estimate this relationship for the most recent period.

Prices

Consumer prices

BLS publishes monthly information on changes in prices paid by consumers for a fixed market basket of goods and services. Tables 6 and 7 present information on the Consumer Price Index (CPI) for all-urban consumers that measures change in prices faced by 80 percent of the non-institutionalized population in the United States. (The more restrictive wage earner CPI gauges prices faced by wage earners and clerical workers. These workers account for 32 percent of the non-institutionalized population [U.S. Department of Labor, 1990].)

The index reflects changes in prices charged for the same quality and quantity of goods or services purchased in the base period. For most items, the base period of 1982-84 is used to define the share of consumer expenditures purchasing specific services and products. Those shares or weights remain constant in all years, even though consumption patterns of the

Table 2
Percent change in selected community hospital statistics: 1989-92

Item	Calendar year			1989	1990	1991	1991	1991	1991	1992
	1989	1990	1991	Q1	Q1	Q1	Q2	Q3	Q4	Q1
	Annual percent change			Percent change from the same period of previous year						
Operating expenses										
Total	9.9	11.1	9.9	9.7	10.9	9.0	9.7	9.7	11.2	11.5
Labor	10.0	11.1	9.2	9.8	10.8	9.4	9.1	8.6	9.9	10.2
Non-labor	9.8	11.1	10.7	9.5	11.0	8.6	10.3	11.0	12.9	12.9
Inpatient expenses	8.3	9.0	7.6	7.9	9.2	6.6	7.3	7.1	9.3	9.4
Amount per patient day	9.3	10.7	10.3	9.9	9.3	11.6	9.9	10.3	9.3	10.1
Amount per admission	9.3	9.5	8.8	9.9	9.0	10.0	8.9	8.3	7.6	8.0
Utilization										
Admissions	-1.0	-0.5	-1.1	-1.9	0.1	-3.1	-1.4	-1.2	1.6	1.3
Inpatient days	-0.9	-1.6	-2.5	-1.9	-0.1	-4.5	-2.3	-2.9	-0.0	-0.6
Adult length of stay	0.1	-1.1	-1.4	-0.0	-0.2	-1.4	-0.9	-1.8	-1.6	-1.9
Surgical operations	0.6	2.4	0.4	1.3	1.3	-1.3	-0.2	0.7	2.2	4.2
Outpatient visits	4.0	6.0	5.4	3.4	6.0	4.0	4.5	5.1	8.0	8.1
Beds	-1.3	-0.9	-1.0	-1.1	-1.0	-1.2	-1.3	-1.0	-0.7	-0.6
Adult occupancy rate ¹	0.5	-0.4	-0.9	0.2	0.6	-2.3	-0.7	-1.2	0.4	-0.7
Full-time equivalent (FTE) personnel										
Total	1.6	2.1	0.6	1.4	2.4	0.9	0.5	0.3	0.7	1.1
Number per bed	3.0	3.1	1.7	2.5	3.4	2.2	1.8	1.4	1.4	1.7
Adjusted patient days per FTE	-1.0	-1.7	-1.0	-1.6	-0.9	-3.3	-0.8	-0.9	1.0	0.1
Adjusted patient days	0.6	0.3	-0.4	-0.2	1.5	-2.4	-0.2	-0.6	1.7	1.2

¹Change in rate, rather than percent change.

NOTE: Q designates quarter of year.

SOURCE: American Hospital Association: *National Hospital Panel Survey Reports*. Chicago. Monthly reports for Jan. 1989-Mar. 1992.

household may change over time. This type of index is called a fixed weight or Laspeyres index.

CPIs for health care goods and services depict price changes for out-of-pocket expenditures made by consumers directly. The composite CPI for medical care weights together product- or service-specific CPIs in proportion to household out-of-pocket expenditures for these items. For example, the composite medical care CPI measures inflation for the 5 percent of hospital expenditures that are made out-of-pocket by consumers; the remaining 95 percent of the costs of hospital care paid by private health insurers, Medicare, Medicaid, and other payers are not weighted into the CPI for medical care. In addition, some medical care sector indexes measure changes in list or charged prices, rather than the prices actually received by providers after discounts are deducted. In several health care areas, received or transaction prices are difficult to capture, although BLS is making advances in this area.

In the NHE, a combination of CPIs for selected medical care items and input price indexes for hospitals and nursing homes are used as measures of inflation for the health industry. The indexes are used to develop a personal health care fixed-weight price index to depict price changes affecting the entire health care industry more accurately than does the overall CPI medical care index (Levit et al., 1991).

Background on input price indexes

In 1979, the Health Care Financing Administration (HCFA) developed the hospital input price index to measure the pure price changes associated with expenditure changes for hospital services. In the early 1980s, the skilled nursing facility (SNF) and home health agency (HHA) input price indexes, often referred to as "market baskets," were developed to price a consistent set of goods and services over time. They have played an important role in helping to set payment percent increases and in understanding the contribution of input price increases to growing health expenditures.

The input price indexes, or market baskets, are Laspeyres or fixed-weight indexes that are constructed in two steps. First, a base period is selected. For example, for the prospective payment system (PPS) hospital input price index, the base period is 1987. Cost categories, such as food, fuel, and labor, are identified and their 1987 expenditure amounts determined. The proportion or share of total expenditures included in specific spending categories is calculated. These proportions are called cost or expenditure weights. There are 28 expenditure categories in the 1987-based hospital PPS input price index.

Second, a price proxy is selected to match each expenditure category. The purpose of the price proxy is to measure the rate of price increase of the goods or services in that expenditure category. The price proxy index for each spending category is multiplied by the expenditure weight for the category. The sum of these

Table 3
Employment, hours, and earnings in private¹ health service establishments, by selected type of establishment: 1989-92

Type of establishment and measure	Calendar year			1989 Q1	1990 Q1	1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1
	1989	1990	1991							
Health services (SIC 80)										
Total employment in thousands	7,483.7	7,831.2	8,177.2	7,356.0	7,675.7	8,035.1	8,127.8	8,238.6	8,307.5	8,356.6
Non-supervisory workers:										
Employment in thousands	6,654.1	6,962.4	7,271.3	6,542.0	6,822.2	7,144.0	7,228.2	7,327.1	7,386.2	7,429.3
Average weekly hours	32.5	32.5	32.5	32.4	32.4	32.4	32.5	32.7	32.6	32.8
Average hourly earnings	\$9.82	\$10.40	\$10.96	\$9.62	\$10.24	\$10.73	\$10.90	\$11.04	\$11.15	\$11.23
Offices and clinics of medical doctors (SIC 801)										
Total employment in thousands	1,273.7	1,342.9	1,397.8	1,247.8	1,317.0	1,372.5	1,390.0	1,411.0	1,417.7	1,420.1
Non-supervisory workers:										
Employment in thousands	1,052.0	1,108.4	1,149.8	1,031.3	1,086.5	1,129.9	1,145.3	1,160.5	1,163.3	1,167.1
Average weekly hours	31.9	31.8	31.9	31.8	31.8	31.8	31.9	31.9	32.0	32.2
Average hourly earnings	\$9.78	\$10.58	\$11.13	\$9.54	\$10.32	\$11.00	\$11.07	\$11.14	\$11.30	\$11.21
Offices and clinics of dentists (SIC 802)										
Total employment in thousands	501.2	514.0	527.4	492.7	510.0	519.3	524.7	531.2	534.4	533.0
Non-supervisory workers:										
Employment in thousands	438.6	450.6	463.3	431.3	447.2	456.0	461.0	467.3	469.0	466.6
Average weekly hours	28.5	28.4	28.3	28.4	28.3	28.3	28.3	28.2	28.3	28.5
Average hourly earnings	\$9.41	\$10.14	\$10.62	\$9.25	\$9.89	\$10.47	\$10.58	\$10.64	\$10.77	\$10.90
Nursing and personal care facilities (SIC 805)										
Total employment in thousands	1,360.7	1,419.4	1,498.8	1,339.5	1,389.9	1,466.8	1,487.8	1,512.9	1,527.5	1,535.9
Non-supervisory workers:										
Employment in thousands	1,230.3	1,282.5	1,352.8	1,211.1	1,255.3	1,324.0	1,342.5	1,365.8	1,379.0	1,386.3
Average weekly hours	31.8	32.1	32.1	31.6	31.7	32.0	32.0	32.4	32.2	32.2
Average hourly earnings	\$6.80	\$7.24	\$7.56	\$6.65	\$7.09	\$7.46	\$7.52	\$7.59	\$7.66	\$7.75
Private hospitals (SIC 806)										
Total employment in thousands	3,440.2	3,550.1	3,656.7	3,397.8	3,499.4	3,616.0	3,636.7	3,675.0	3,699.1	3,725.1
Non-supervisory workers:										
Employment in thousands	3,146.9	3,249.7	3,354.0	3,108.1	3,201.5	3,314.2	3,334.9	3,371.7	3,395.1	3,419.1
Average weekly hours	34.0	34.2	34.2	33.9	34.2	34.0	34.2	34.4	34.3	34.4
Average hourly earnings	\$11.21	\$11.79	\$12.50	\$10.97	\$11.63	\$12.16	\$12.43	\$12.66	\$12.75	\$12.85
All private non-agricultural establishments										
Total employment in thousands	90,550	91,478	89,930	88,615	90,189	88,827	89,929	90,649	90,314	88,256
Non-supervisory workers:										
Employment in thousands	73,400	74,108	72,705	71,632	72,921	71,594	72,696	73,408	73,125	71,212
Average weekly hours	34.6	34.5	34.3	34.3	34.2	33.8	34.3	34.6	34.5	34.1
Average hourly earnings	\$9.65	\$10.01	\$10.33	\$9.54	\$9.89	\$10.22	\$10.29	\$10.34	\$10.46	\$10.52
Employment in thousands										
All hospitals	4,741.9	4,861.6	4,963.6	4,698.0	4,803.3	4,913.7	4,939.8	4,985.9	5,014.8	5,050.9
Private hospitals (SIC 806)	3,440.2	3,550.1	3,656.7	3,397.8	3,499.4	3,616.0	3,636.7	3,675.0	3,699.1	3,725.1
Federal hospitals	227.4	239.2	234.1	225.6	232.2	230.8	233.5	235.7	236.4	237.5
State hospitals	442.4	426.2	414.0	448.5	429.9	417.7	415.8	411.7	410.9	411.8
Local hospitals	632.0	646.1	658.7	626.1	641.8	649.2	653.8	663.6	668.4	676.5

¹Excludes hospitals, clinics, and other health-related establishments run by all governments.

NOTES: Data presented here incorporate conversion to the 1987 Standard Industrial Classification (SIC) and an historical reconstruction of components back to the inception of the series, whenever possible. Q designates quarter of year. Quarterly data are not seasonally adjusted.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington, U.S. Government Printing Office. Monthly reports for Jan. 1989-June 1992.

Table 4
Percent change in employment, hours, and earnings in private¹ health service establishments,
by selected type of establishment: 1989-92

Type of establishment and measure	Calendar year			1989 Q1	1990 Q1	1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1
	1989	1990	1991							
	Annual percent change			Percent change from the same period of previous year						
Health services (SIC 80)										
Total employment	5.1	4.6	4.4	5.5	4.3	4.7	4.4	4.3	4.3	4.0
Non-supervisory workers:										
Employment	5.2	4.6	4.4	5.8	4.3	4.7	4.4	4.4	4.3	4.0
Average weekly hours	0.1	0.3	-0.0	-0.3	0.2	-0.2	0.2	-0.3	0.2	1.3
Average hourly earnings	6.7	5.9	5.3	6.9	6.4	4.9	5.8	5.5	5.1	4.6
Offices and clinics of medical doctors (SIC 801)										
Total employment	5.8	5.4	4.1	5.9	5.5	4.2	3.9	4.1	4.1	3.5
Non-supervisory workers:										
Employment	6.0	5.4	3.7	6.6	5.3	4.0	3.7	3.7	3.6	3.3
Average weekly hours	1.0	-0.4	0.4	0.4	0.2	-0.2	1.2	0.0	0.7	1.4
Average hourly earnings	7.9	8.1	5.2	7.4	8.2	6.7	5.8	4.5	3.9	1.8
Offices and clinics of dentists (SIC 802)										
Total employment	3.4	2.6	2.6	2.9	3.5	1.8	2.1	3.0	3.4	2.6
Non-supervisory workers:										
Employment	3.3	2.7	2.8	2.6	3.7	2.0	2.3	3.4	3.6	2.3
Average weekly hours	-0.1	-0.2	-0.4	-0.8	-0.4	0.0	-0.1	-1.1	-0.6	0.7
Average hourly earnings	6.6	7.8	4.7	7.0	7.0	5.8	4.9	4.0	4.2	4.1
Nursing and personal care facilities (SIC 805)										
Total employment	3.5	4.3	5.6	3.4	3.8	5.5	5.6	5.8	5.4	4.7
Non-supervisory workers:										
Employment	3.6	4.2	5.5	3.5	3.7	5.5	5.4	5.7	5.4	4.7
Average weekly hours	0.9	0.9	0.1	0.4	0.4	0.8	0.3	-0.5	-0.3	0.8
Average hourly earnings	7.4	6.5	4.4	7.8	6.7	5.3	4.5	4.2	3.7	3.9
Private hospitals (SIC 806)										
Total employment	4.4	3.2	3.0	5.3	3.0	3.3	3.0	2.8	2.9	3.0
Non-supervisory workers:										
Employment	4.5	3.3	3.2	5.5	3.0	3.5	3.2	3.0	3.1	3.2
Average weekly hours	0.0	0.7	-0.0	-0.5	0.9	-0.6	0.1	-0.1	0.5	1.2
Average hourly earnings	6.7	5.2	6.0	7.1	6.0	4.6	6.5	6.7	6.2	5.6
All private non-agricultural establishments										
Total employment	2.7	1.0	-1.7	3.4	1.8	-1.5	-2.1	-1.8	-1.4	-0.6
Non-supervisory workers:										
Employment	2.8	1.0	-1.9	3.6	1.8	-1.8	-2.3	-2.0	-1.4	-0.5
Average weekly hours	-0.3	-0.3	-0.6	-0.1	-0.4	-1.1	-0.7	-0.6	0.1	0.8
Average hourly earnings	4.0	3.7	3.1	4.1	3.7	3.3	3.3	3.0	3.0	2.9
Employment										
All hospitals	3.1	2.5	2.1	3.7	2.2	2.3	1.5	2.2	2.4	2.8
Private hospitals (SIC 806)	4.4	3.2	3.0	5.3	3.0	3.3	3.0	2.8	2.9	3.0
Federal hospitals	-5.5	5.2	-2.1	-9.8	2.9	-0.6	-11.1	1.6	2.8	2.9
State hospitals	-0.9	-3.7	-2.8	1.3	-4.1	-2.8	-2.8	-3.0	-2.7	-1.4
Local hospitals	2.1	2.2	2.0	2.1	2.5	1.1	1.4	2.3	3.0	4.2

¹Excludes hospitals, clinics, and other health-related establishments run by all governments.

NOTE: Data presented here incorporate conversion to the 1987 Standard Industrial Classification (SIC) and an historical reconstruction of components back to the inception of the series whenever possible.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1989-June 1992.

Table 5
Percent change in implied non-supervisory payrolls and work-hours in private¹ health service establishments, by selected type of establishment: 1989-92

Type of establishment	Calendar year			1989 Q1	1990 Q1	1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1
	1989	1990	1991							
	Annual percent change			Percent change from the same period of previous year						
Private health service establishments (SIC 80)										
Payrolls	12.4	11.1	10.0	12.7	11.2	9.6	10.6	9.8	9.8	10.2
Work-hours	5.3	4.9	4.4	5.4	4.5	4.5	4.6	4.0	4.5	5.4
Offices and clinics of medical doctors (SIC 801)										
Payrolls	15.5	13.5	9.6	14.9	14.2	10.7	11.0	8.4	8.5	6.6
Work-hours	7.1	5.0	4.2	7.1	5.6	3.8	4.9	3.7	4.4	4.7
Offices and clinics of dentists (SIC 802)										
Payrolls	10.0	10.5	7.2	9.0	10.5	7.9	7.1	6.4	7.3	7.3
Work-hours	3.2	2.6	2.4	1.8	3.3	2.0	2.2	2.3	2.9	3.0
Nursing and personal care facilities (SIC 805)										
Payrolls	12.3	12.0	10.2	12.1	11.0	12.0	10.4	9.6	8.9	9.7
Work-hours	4.5	5.1	5.6	4.0	4.1	6.4	5.7	5.2	5.0	5.6
Private hospitals (SIC 806)										
Payrolls	11.6	9.3	9.4	12.5	10.1	7.7	10.1	9.9	10.0	10.2
Work-hours	4.6	4.0	3.2	5.0	3.9	2.9	3.3	2.9	3.6	4.4
All private non-agricultural establishments										
Payrolls	6.6	4.4	0.6	7.7	5.2	0.3	0.2	0.4	1.6	3.2
Work-hours	2.5	0.7	-2.4	3.5	1.4	-2.9	-3.0	-2.6	-1.3	0.3

¹Excludes hospitals, clinics, and other health-related establishments run by all governments.

NOTES: Data presented here incorporate conversion to the 1987 Standard Industrial Classification (SIC) and an historical reconstruction of components back to the inception of the series, whenever possible. Q designates quarter of year. Quarterly data not seasonally adjusted.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1989-June 1992.

products (weights multiplied by the price index) over all cost categories yields the composite input price index for any given time period, usually a fiscal year or a calendar year. The percent change in the input price index is an estimate of price change over time for a fixed quantity of goods and services purchased by a provider.

The input price indexes are estimated on a historical basis and forecasted out several years. The HCFA-chosen price proxies are forecasted under contract with Data Resources, Inc./McGraw Hill (DRI). Following every calendar year quarter, in March, June, September, and December, DRI updates its macroeconomic forecasts of wages and prices based on updated historical information and revised forecast assumptions.

The methodology and price proxy definitions used in the input price indexes are described in the *Federal Register* notices that accompany the revisions of the PPS, HHA, and SNF cost limits. A description of the current PPS input price index was published

September 4, 1990 (*Federal Register*). The latest HHA regulatory input price index was published December 9, 1991 (*Federal Register*), and the latest SNF input price index was published April 1, 1991 (*Federal Register*).

Each input price index is presented in two tables: The first is a percent-change table, and the second provides the actual index numbers from which the percentages were computed. The hospital input price index for PPS is in Tables 8 and 9. The SNF input price index is in Tables 10 and 11. The HHA input price index is in Tables 12 and 13.

The PPS input price index has been revised, and a new base year of 1987 has been selected (Tables 8 and 9). Effective October 1, 1990, the new PPS input price index was used to set the fiscal year 1991 market basket value for the update of the prospective payment rates. This revision also included changes in certain variables used for price proxies. Periodically, the various input price indexes are revised so that the cost weights will reflect changes in the mix of goods and services that providers purchase.

Table 6
Selected items of the Consumer Price Index for all urban consumers: 1989-92

Item	Calendar year			1989	1990	1991	1991	1991	1991	1992
	1989	1990	1991	Q1	Q1	Q1	Q2	Q3	Q4	Q1
All items	124.0	130.7	136.2	121.7	128.0	134.8	135.6	136.7	137.7	138.7
All items less medical care	122.4	128.8	133.8	120.2	126.3	132.6	133.3	134.3	135.1	136.0
Apparel and upkeep	118.6	124.1	128.7	116.6	120.8	126.3	128.8	128.0	131.7	130.5
Energy	94.3	102.1	102.4	89.4	96.5	103.2	101.7	103.1	101.8	99.3
Food and beverages	124.9	132.1	136.8	122.7	130.7	136.1	137.4	136.8	136.9	138.3
Housing: shelter	132.8	140.0	146.3	130.4	136.9	144.6	145.4	147.2	147.9	149.8
Medical care	149.2	162.8	177.0	145.0	157.4	172.4	175.3	178.7	181.7	185.9
Medical care services ¹	148.9	162.7	177.1	144.8	157.1	172.6	175.2	178.7	181.8	186.1
Professional services	146.4	156.1	165.7	143.4	152.2	162.3	164.5	167.0	169.1	172.3
Physicians' services	150.0	160.8	170.5	146.8	156.5	167.4	169.3	171.6	173.6	177.2
Dental services	146.0	155.8	167.4	143.0	152.3	162.7	165.5	169.4	172.1	174.7
Hospital and related services	160.5	178.0	196.1	154.6	171.5	190.9	193.2	197.9	202.3	208.1
Hospital room	158.1	175.4	191.9	152.8	169.7	187.3	189.5	193.3	197.4	202.8
Other inpatient services ²	128.9	142.7	158.0	123.9	136.7	153.7	155.4	159.5	163.3	168.0
Outpatient services ²	124.7	138.7	153.4	119.9	134.0	148.9	151.1	155.1	158.5	163.5
Medical care commodities	150.8	163.4	176.8	146.0	158.5	171.7	175.4	178.9	181.0	184.9
Prescription drugs	165.2	181.7	199.7	159.4	175.5	192.9	197.6	202.4	205.6	210.9
Non-prescription drugs and medical supplies ²	114.6	120.6	126.2	111.7	118.0	124.1	125.9	127.2	127.8	129.3
Internal and respiratory over-the-counter drugs	138.7	145.9	152.4	135.4	142.6	150.4	151.9	153.7	153.7	155.3
Non-prescription medical equipment and supplies	131.1	138.0	145.0	127.6	135.2	141.4	144.8	145.9	148.0	150.1

¹Includes net cost of private health insurance not shown in professional or hospital and related services.

²December 1986 = 100.

NOTES: 1982-84 = 100.0 unless noted. Q designates quarter of year. Quarterly data not seasonally adjusted.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics: *CPI Detailed Report*. Washington, U.S. Government Printing Office. Monthly reports for Jan. 1989-Mar. 1992.

Table 7
Percent change in selected items of the Consumer Price Index for all urban consumers: 1989-92

Item	Calendar year			1989	1990	1991	1991	1991	1991	1992
	1989	1990	1991	Q1	Q1	Q1	Q2	Q3	Q4	Q1
	Annual percent change			Percent change from the same period of previous year						
All items	4.8	5.4	4.2	4.8	5.2	5.3	4.8	3.9	3.0	2.9
All items less medical care	4.6	5.2	3.9	4.6	5.0	5.0	4.6	3.6	2.6	2.6
Apparel and upkeep	2.8	4.6	3.7	4.5	3.6	4.5	2.9	3.9	3.7	3.4
Energy	5.7	8.2	0.4	2.8	8.0	6.9	4.5	-0.7	-8.1	-3.7
Food and beverages	5.7	5.8	3.6	5.9	6.5	4.1	4.7	3.1	2.4	1.6
Housing: shelter	4.5	5.4	4.5	4.3	5.0	5.6	4.9	3.7	3.8	3.6
Medical care	7.7	9.1	8.7	7.1	8.5	9.6	9.0	8.5	8.0	7.8
Medical care services ¹	7.6	9.3	8.9	7.2	8.5	9.8	9.2	8.5	8.0	7.9
Professional services	6.4	6.8	6.2	6.7	6.2	6.6	6.1	5.9	6.0	6.2
Physicians' services	7.3	7.2	6.0	7.7	6.6	7.0	5.9	5.5	5.5	5.9
Dental services	6.2	6.7	7.5	6.3	6.5	6.8	7.2	7.8	8.1	7.4
Hospital and related services	11.5	10.9	10.2	11.3	10.9	11.3	10.8	9.8	8.9	9.0
Hospital room	10.3	10.9	9.4	10.6	11.1	10.4	10.0	8.9	8.4	8.3
Other inpatient services	13.1	10.7	10.7	13.0	10.3	12.5	11.5	10.2	8.9	9.3
Outpatient services	10.9	11.2	10.6	9.7	11.8	11.1	10.8	10.7	9.8	9.8
Medical care commodities	7.8	8.4	8.2	7.2	8.5	8.4	8.1	8.4	7.8	7.7
Prescription drugs	8.7	10.0	9.9	7.9	10.1	9.9	9.7	10.1	9.8	9.3
Non-prescription drugs and medical supplies	6.0	5.2	4.7	5.8	5.6	5.2	4.8	5.0	3.7	4.2
Internal and respiratory over-the-counter drugs	6.1	5.2	4.5	6.1	5.3	5.5	4.8	5.0	2.6	3.3
Non-prescription medical equipment and supplies	5.8	5.3	5.0	5.5	5.9	4.6	4.8	5.0	5.8	6.2

¹Includes net cost of private health insurance not shown in professional or hospital and related services.

NOTE: Q designates quarter of year.

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics: *CPI Detailed Report*. Washington, U.S. Government Printing Office. Monthly reports for Jan. 1989-Mar. 1992.

Table 8

Percent change in four-quarter averages in the prospective payment system hospital input price index, by expense category: 1989-92

Expense category ¹	Base year weights 1987 ²	Four quarters ending							
		1989 Q1	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4
Total	100.000	5.4	5.6	5.5	5.4	5.1	4.9	4.8	4.9
Wages and salaries	52.212	4.8	4.8	4.9	4.9	4.9	5.0	5.0	5.0
Employee benefits	9.497	6.3	6.5	6.7	6.9	7.4	7.7	7.8	7.9
Other professional fees	1.649	4.7	4.6	4.5	4.6	4.6	4.7	4.8	4.8
Energy and utilities	2.376	-2.0	0.1	3.6	8.4	9.7	7.7	8.1	10.6
Fuel oil, coal, and other fuel	0.625	-9.5	-7.1	1.9	17.9	22.4	19.6	21.9	25.9
Electricity	1.143	1.6	2.4	2.7	3.2	3.1	3.1	2.7	3.0
Natural gas	0.343	-0.6	2.0	5.6	6.0	4.9	2.1	-1.2	-2.0
Motor gasoline	0.229	-0.9	6.0	9.6	13.5	16.3	7.7	11.1	21.0
Water and sewerage maintenance	0.036	5.7	6.0	6.0	6.1	6.2	6.4	6.6	6.7
Professional liability insurance	1.433	22.5	17.0	9.7	0.6	-2.2	-1.6	-0.6	-0.1
All other	32.839	5.9	6.4	6.3	5.8	4.9	4.1	3.6	3.6
Other products	21.788	6.6	7.2	6.8	6.1	4.9	3.8	3.3	3.3
Pharmaceuticals	3.873	8.1	8.5	9.0	9.1	9.3	9.5	9.2	8.9
Food	3.299	5.0	5.4	5.0	4.5	3.9	3.8	4.1	3.9
Direct purchase	2.111	5.4	6.0	5.2	4.5	3.5	3.3	3.7	3.5
Contract service	1.188	4.3	4.4	4.5	4.6	4.6	4.7	4.7	4.7
Chemicals and cleaning products	3.126	13.9	14.5	11.7	7.5	2.2	-2.0	-3.1	-1.4
Surgical and medical instruments	2.672	2.3	3.4	3.9	4.1	3.9	3.3	3.0	2.6
Photographic supplies	2.623	3.9	5.9	7.7	8.8	8.0	6.6	5.1	3.7
Rubber and plastics	2.323	6.1	5.4	4.2	3.0	2.0	1.1	0.7	0.9
Paper products	1.399	9.8	9.5	8.2	6.5	4.6	2.7	1.7	1.2
Apparel	1.142	2.7	2.3	2.0	2.1	2.5	2.9	3.0	2.7
Minor machinery and equipment	0.497	2.9	3.2	3.5	3.7	3.6	3.4	3.1	2.8
Miscellaneous products	0.833	3.3	4.3	4.8	5.1	5.2	4.5	4.6	4.9
Other services	11.051	4.5	4.8	5.1	5.0	4.9	4.6	4.3	4.3
Business services	3.845	4.2	4.5	5.0	5.4	5.5	5.3	4.9	4.5
Computer and data processing	1.992	7.0	6.8	7.2	7.5	7.6	7.5	6.9	6.4
Transportation and shipping	1.233	3.3	4.3	4.7	5.0	5.1	3.8	4.1	5.6
Telephone	0.967	-0.3	0.0	0.8	1.0	1.2	1.1	0.4	0.4
Blood services	0.588	4.7	7.9	8.0	5.5	3.1	1.1	0.3	0.1
Postage	0.372	13.5	9.8	6.3	3.1	0.0	0.0	0.0	0.0
Other—labor intensive	1.233	3.8	4.0	3.9	3.7	3.6	3.7	3.9	4.0
Other—non-labor intensive	0.800	4.3	4.6	4.8	4.8	4.9	4.8	5.0	5.4

See footnotes at end of table.

Table 8—Continued

Percent change in four-quarter averages in the prospective payment system hospital input price index, by expense category: 1989-92

Expense category ¹	Base year weights 1987 ²	Four quarters ending							
		1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
Total	100.000	4.8	4.6	4.3	3.7	3.4	3.2	3.2	3.3
Wages and salaries	52.212	4.9	4.8	4.6	4.3	4.2	4.0	3.8	3.7
Employee benefits	9.497	7.5	7.2	7.0	6.5	6.4	6.2	6.1	6.0
Other professional fees	1.649	4.7	4.6	4.5	4.3	4.3	4.2	4.1	4.1
Energy and utilities	2.376	9.7	10.7	7.5	-1.9	-5.4	-6.8	-7.1	-3.6
Fuel oil, coal, and other fuel	0.625	21.1	21.7	11.4	-11.3	-18.3	-19.2	-17.7	-8.3
Electricity	1.143	4.3	5.6	7.1	7.1	5.4	3.1	0.4	-0.4
Natural gas	0.343	-2.5	-1.7	-0.9	-1.6	-2.3	-3.6	-3.8	-4.5
Motor gasoline	0.229	17.9	18.9	8.4	-11.2	-15.5	-16.7	-14.3	-6.2
Water and sewerage maintenance	0.036	6.5	6.6	6.9	7.3	7.6	7.5	6.8	6.1
Professional liability insurance	1.433	-0.4	-2.0	-2.5	1.3	2.5	4.2	5.7	5.0
All Other	32.839	3.6	3.5	3.2	2.4	1.8	1.6	1.7	2.2
Other products	21.788	3.4	3.3	2.8	1.9	1.2	1.0	1.2	1.8
Pharmaceuticals	3.873	8.4	8.1	8.3	8.4	8.1	7.8	7.0	6.6
Food	3.299	3.7	2.8	1.8	1.2	0.8	0.9	1.5	1.9
Direct purchase	2.111	3.2	2.0	0.7	0.0	-0.5	-0.2	0.9	1.8
Contract service	1.188	4.5	4.1	3.8	3.4	3.1	2.7	2.4	2.2
Chemicals and cleaning products	3.126	0.9	2.6	2.3	-1.3	-4.0	-5.1	-4.2	-1.9
Surgical and medical instruments	2.672	2.2	2.0	1.7	1.5	1.5	1.7	1.7	1.8
Photographic supplies	2.623	2.3	1.1	-0.3	-1.4	-1.2	-0.9	-0.2	0.5
Rubber and plastics	2.323	1.3	1.7	1.9	1.3	0.4	-0.2	-0.4	-0.2
Paper products	1.399	1.1	0.5	-0.4	-1.5	-2.7	-2.6	-1.6	-0.1
Apparel	1.142	2.4	2.2	2.1	2.1	1.8	1.5	1.3	1.2
Minor machinery and equipment	0.497	2.6	2.5	2.3	1.9	1.4	1.0	0.8	0.8
Miscellaneous products	0.833	4.5	4.6	3.8	2.1	1.3	0.7	0.6	1.1
Other services	11.051	4.2	4.1	3.8	3.4	3.1	2.8	2.8	3.0
Business services	3.845	4.2	3.7	3.3	3.1	3.2	3.2	3.4	3.7
Computer and data processing	1.992	5.8	5.0	3.9	2.9	2.0	1.6	1.9	2.6
Transportation and shipping	1.233	5.8	6.5	5.7	2.8	1.4	0.7	0.6	1.8
Telephone	0.987	0.4	0.6	1.3	1.6	1.7	1.8	1.7	1.6
Blood services	0.588	0.3	0.2	-0.1	1.0	2.7	3.9	5.0	4.0
Postage	0.372	2.7	6.7	10.8	14.8	13.1	8.8	4.9	1.2
Other—labor intensive	1.233	4.0	3.9	4.1	4.1	4.1	4.0	3.6	3.5
Other—non-labor intensive	0.800	5.4	5.5	5.0	4.2	3.6	3.3	3.2	3.3

¹For data sources used to estimate the input price index relative weights and choice of price proxies, see the *Federal Register* (1990).

²Category weights may not sum to total because of rounding.

NOTES: Data for 1989, 1990, and 1991 are historical. Data for 1992 are partly historical and partly forecasted. Q designates quarter of year. Percent change data shown are four-quarter moving averages. The following is an example of how a percent change is calculated: Use the quarterly index levels shown in Tables 9, 11, and 13. Choose the four-quarter period ending for which you would like to calculate the percent change (e.g., year-end 1991: Quarter 3). Count back three quarters so that you have a total of four (e.g., 1991: Quarter 3; 1991: Quarter 2; 1991: Quarter 1; 1990: Quarter 4). Average these four quarters (add the index levels and divide by 4). Now, take the four quarters previous to the four quarters that you just used (e.g., 1990: Quarter 3; 1990: Quarter 2; 1990: Quarter 1; 1989: Quarter 4). Average these four quarters. Finally, compute a percent change using the two averages.

SOURCES: Health Care Financing Administration, Office of the Actuary; Data from the Office of National Health Statistics, Division of Health Cost Analysis. Second quarter 1992 forecasts were made by Data Resources, Inc./McGraw-Hill.

Table 9

Quarterly index levels of the prospective payment system hospital input price index, by expense category: 1989-92

Expense category ¹	Base year weights 1987 ²	Four quarters ending							
		1989 Q1	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4
Total	100.000	110.0	111.2	112.5	113.6	115.3	116.3	118.0	119.6
Wages and salaries	52.212	108.9	109.9	111.6	112.8	114.4	115.5	117.2	118.5
Employee benefits	9.497	111.4	113.3	115.6	117.3	120.7	122.2	124.3	126.4
Other professional fees	1.649	108.8	109.6	111.4	112.3	114.1	114.9	116.7	117.8
Energy and utilities	2.376	102.5	107.9	108.3	109.6	112.4	108.4	119.1	133.8
Fuel oil, coal, and other fuel	0.625	107.3	111.3	106.9	126.9	132.5	111.4	136.4	189.2
Electricity	1.143	99.5	102.4	108.7	102.1	102.2	105.4	110.7	106.7
Natural gas	0.343	102.4	102.7	101.7	100.3	103.7	98.5	96.5	100.2
Motor gasoline	0.229	102.7	133.4	119.3	112.7	121.1	127.9	146.7	170.5
Water and sewerage maintenance	0.036	110.7	112.1	114.5	115.9	118.1	119.7	122.2	123.3
Professional liability insurance	1.433	130.7	126.2	129.4	130.3	130.8	132.0	131.4	122.0
All other	32.639	110.9	112.3	112.7	113.5	114.8	115.8	116.7	118.3
Other products	21.788	112.2	113.6	113.7	114.5	115.7	116.6	117.5	119.2
Pharmaceuticals	3.873	116.4	119.0	121.7	123.9	127.6	130.4	131.7	134.0
Food	3.299	108.5	109.3	110.1	110.9	112.4	114.2	114.9	114.6
Direct purchase	2.111	108.8	109.3	109.8	110.4	112.0	114.0	114.3	113.4
Contract service	1.188	108.0	109.2	110.6	111.7	113.0	114.7	115.8	116.7
Chemicals and cleaning products	3.126	125.2	125.0	121.0	119.6	118.7	118.3	119.9	128.9
Surgical and medical instruments	2.672	104.9	106.6	106.4	107.4	108.2	109.1	109.3	109.7
Photographic supplies	2.623	109.3	111.4	112.6	113.8	115.2	115.3	116.6	116.6
Rubber and plastics	2.323	110.0	110.7	110.5	110.4	110.9	111.1	111.0	112.6
Paper products	1.399	116.2	117.8	117.6	118.1	118.0	118.7	118.9	119.5
Apparel	1.142	104.0	104.6	105.7	106.6	107.5	107.8	108.4	108.8
Minor machinery and equipment	0.497	105.4	106.3	107.3	107.9	108.9	109.4	110.0	110.7
Miscellaneous products	0.833	106.6	108.7	108.6	109.9	112.1	112.3	113.9	116.9
Other services	11.051	108.2	109.8	110.6	111.5	113.0	114.3	115.2	116.6
Business services	3.845	107.9	109.1	110.3	111.3	113.1	114.6	115.1	115.6
Computer and data processing	1.992	114.3	116.7	118.8	120.5	122.2	124.7	126.2	127.4
Transportation and shipping	1.233	107.4	111.3	110.3	110.7	112.7	113.4	116.2	122.0
Telephone	0.987	99.7	100.6	100.8	100.1	100.9	101.1	100.2	100.9
Blood services	0.588	105.8	105.6	105.4	105.5	105.5	105.8	106.0	105.5
Postage	0.372	113.5	113.5	113.5	113.5	113.5	113.5	113.5	113.5
Other—labor intensive	1.233	106.5	107.1	108.1	109.6	110.5	111.6	112.4	114.0
Other—non-labor intensive	0.800	108.3	110.0	110.9	112.0	113.9	115.1	117.1	119.0

See footnotes at end of table.

Table 9—Continued

Quarterly index levels of the prospective payment system hospital input price index, by expense category: 1989-92

Expense category ¹	Base year weights 1987 ²	Four quarters ending							
		1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
Total	100.000	120.3	121.0	122.2	123.1	123.9	125.0	126.4	127.6
Wages and salaries	52.212	119.6	120.6	122.2	123.3	124.2	125.2	126.7	127.8
Employee benefits	9.497	128.8	130.4	132.6	134.1	136.8	136.2	140.5	142.0
Other professional fees	1.649	119.0	120.0	121.8	122.8	123.9	125.0	126.7	127.9
Energy and utilities	2.376	119.4	113.3	116.6	115.6	109.3	110.8	112.9	114.9
Fuel oil, coal, and other fuel	0.625	141.3	114.5	119.9	129.7	108.2	112.1	115.0	128.1
Electricity	1.143	110.4	114.1	119.0	111.4	111.8	113.4	115.5	112.5
Natural gas	0.343	103.0	97.8	94.4	97.3	99.3	92.3	91.5	91.8
Motor gasoline	0.229	128.7	126.2	125.6	122.3	110.7	118.1	121.0	121.5
Water and sewerage maintenance	0.036	125.4	128.2	132.0	133.1	134.7	136.9	138.9	139.7
Professional liability insurance	1.433	129.1	129.3	131.1	133.2	133.8	135.3	138.0	141.7
All other	32.839	118.8	119.1	119.1	119.7	120.3	121.3	122.2	123.3
Other products	21.788	119.5	119.5	119.3	119.8	120.0	121.2	122.1	123.1
Pharmaceuticals	3.873	137.4	141.3	143.4	145.3	146.9	151.2	152.0	154.9
Food	3.299	115.1	115.5	115.3	115.7	116.0	117.3	118.3	118.9
Direct purchase	2.111	113.8	113.7	112.9	113.1	113.3	115.1	116.4	116.8
Contract service	1.188	117.4	118.6	119.6	120.2	120.7	121.0	121.8	122.6
Chemicals and cleaning products	3.126	123.7	119.8	117.0	117.3	115.3	115.9	118.6	119.1
Surgical and medical instruments	2.672	110.1	110.7	111.0	111.0	112.3	112.9	112.5	112.9
Photographic supplies	2.623	114.8	114.1	114.1	114.3	115.2	114.4	115.0	115.3
Rubber and plastics	2.323	113.6	112.9	112.4	112.4	112.1	112.5	112.9	113.0
Paper products	1.399	119.4	117.1	115.8	115.7	115.0	116.0	117.3	119.2
Apparel	1.142	109.7	110.3	110.6	110.7	110.8	111.6	112.1	112.2
Minor machinery and equipment	0.497	111.7	111.9	111.8	111.9	112.2	112.6	112.9	113.3
Miscellaneous products	0.833	118.0	116.1	116.1	116.6	116.4	117.0	117.8	119.0
Other services	11.051	117.5	118.5	118.8	119.7	120.8	121.6	122.5	123.7
Business services	3.845	117.1	118.3	118.2	119.0	121.4	122.3	122.6	123.8
Computer and data processing	1.992	127.7	129.0	128.9	129.3	129.1	131.1	133.2	135.1
Transportation and shipping	1.233	119.3	118.6	119.1	120.2	119.8	120.3	121.8	123.7
Telephone	0.987	102.1	102.2	102.5	103.0	103.4	103.8	104.2	104.6
Blood services	0.588	106.1	105.8	105.3	110.2	113.7	110.4	109.5	110.5
Postage	0.372	125.7	131.9	131.9	131.9	131.9	131.9	131.9	131.9
Other—labor intensive	1.233	114.5	116.0	117.6	118.5	119.1	119.9	121.4	122.8
Other—non-labor intensive	0.800	119.9	120.7	121.6	122.5	123.4	124.7	125.9	126.8

¹For data sources used to estimate the input price index relative weights and choice of price proxies, see the *Federal Register* (1990).

²Category weights may not sum to total because of rounding.

NOTES: Data for 1989, 1990, and 1991 are historical. Data for 1992 are partly historical and partly forecasted. Q designates quarter of year.

SOURCES: Health Care Financing Administration, Office of the Actuary; Data from the Office of National Health Statistics, Division of Health Cost Analysis. Second quarter 1992 forecasts were made by Data Resources, Inc./McGraw-Hill.

Table 10
Percent change in four-quarter averages in the skilled nursing facility input price index, by
expense category: 1989-92

Expense category ¹	Base year weights 1977 ²	Four quarters ending							
		1989 Q1	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4
Total	100.000	5.8	6.3	6.5	6.6	6.5	6.3	6.3	6.3
Wages and salaries	63.020	6.3	7.0	7.3	7.4	7.1	7.0	6.8	6.6
Employee benefits	7.600	6.2	6.1	5.6	5.0	4.9	4.9	5.0	5.4
Food	9.740	5.1	5.8	5.5	5.2	4.8	4.5	4.7	4.5
Direct purchase	4.930	5.4	6.0	5.2	4.5	3.5	3.3	3.7	3.5
Contract service	4.810	4.9	5.7	5.8	5.8	6.0	5.6	5.5	5.3
Fuel and other energy	4.270	1.2	1.6	2.3	3.7	5.6	5.9	6.7	8.8
Electricity	1.210	1.6	2.1	2.8	2.8	3.1	2.9	2.5	2.4
Natural gas	0.910	1.2	2.4	2.9	2.8	2.0	1.2	0.5	0.1
Fuel oil and coal	1.660	-0.6	-0.9	0.2	4.2	9.8	11.3	14.5	20.4
Water and sewerage maintenance	0.490	5.7	6.0	6.0	6.1	6.2	6.4	6.6	6.7
All other	15.370	5.1	5.4	5.5	5.6	5.6	5.6	5.7	6.0
Drugs	1.500	8.1	8.5	9.0	9.1	9.3	9.5	9.2	8.9
Supplies	3.280	4.3	4.6	4.7	4.8	4.9	4.7	5.0	5.4
Health services	1.210	7.4	7.4	7.4	7.3	7.1	7.1	7.1	7.2
Other business services	4.590	4.7	4.8	4.9	4.9	5.0	5.1	5.1	5.3
Miscellaneous	4.790	4.3	4.6	4.7	4.8	4.9	4.7	5.0	5.4

Expense category ¹	Base year weights 1977 ²	Four quarters ending							
		1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
Total	100.000	6.0	5.5	5.0	4.3	3.9	3.7	3.7	3.9
Wages and salaries	63.020	6.2	5.5	5.0	4.4	4.1	4.0	4.0	4.3
Employee benefits	7.600	5.7	6.1	6.2	6.2	5.7	5.2	4.8	4.6
Food	9.740	3.8	3.0	2.2	1.6	1.4	1.4	1.8	2.2
Direct purchase	4.930	3.2	2.0	0.7	0.0	-0.5	-0.2	0.9	1.8
Contract service	4.810	4.3	3.8	3.4	3.0	3.0	2.9	2.7	2.7
Fuel and other energy	4.270	7.3	7.2	5.7	0.6	-1.7	-2.4	-2.2	-0.5
Electricity	1.210	2.5	2.6	3.2	3.6	2.9	2.4	2.0	1.2
Natural gas	0.910	0.1	0.6	1.1	1.2	0.5	0.2	-0.1	-0.7
Fuel oil and coal	1.660	15.7	14.9	9.8	-3.9	-9.0	-10.3	-9.3	-4.1
Water and sewerage maintenance	0.490	6.5	6.6	6.9	7.3	7.6	7.5	6.8	6.1
All other	15.370	5.9	5.9	5.6	5.1	4.7	4.4	4.2	4.1
Drugs	1.500	8.4	8.1	8.3	8.4	8.1	7.8	7.0	6.6
Supplies	3.280	5.4	5.5	5.1	4.2	3.6	3.2	3.1	3.2
Health services	1.210	7.3	6.9	6.5	6.0	5.7	5.8	6.0	6.2
Other business services	4.590	5.3	5.3	5.2	4.8	4.6	4.3	4.0	3.9
Miscellaneous	4.790	5.4	5.5	5.1	4.2	3.6	3.2	3.1	3.2

¹For data sources used to estimate the input price index relative weights and choice of price proxies, see the *Federal Register* (1991).

²Category weights may not sum to total because of rounding.

NOTES: Data for 1989, 1990, and 1991 are historical. Data for 1992 are partly historical and partly forecasted. Q designates quarter of year. Percent change data shown are four-quarter moving averages. The following is an example of how a percent change is calculated: Use the quarterly index levels shown in Tables 9, 11, and 13. Choose the four-quarter period ending for which you would like to calculate the percent change (e.g., year-end 1991: Quarter 3). Count back three quarters so that you have a total of four (e.g., 1991: Quarter 3; 1991: Quarter 2; 1991: Quarter 1; 1990: Quarter 4). Average these four quarters (add the index levels and divide by 4). Now, take the four quarters previous to the four quarters that you just used (e.g., 1990: Quarter 3; 1990: Quarter 2; 1990: Quarter 1; 1989: Quarter 4). Average these four quarters. Finally, compute a percent change using the two averages.

SOURCES: Health Care Financing Administration, Office of the Actuary; Data from the Office of National Health Statistics, Division of Health Cost Analysis. Second quarter 1992 forecasts were made by Data Resources, Inc./McGraw-Hill.

Table 11

Quarterly index levels in the skilled nursing facility input price index, by expense category: 1989-92

Expense category ¹	Base year weights 1977 ²	Four quarters ending							
		1989 Q1	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4
Total	100.000	203.5	205.9	209.0	212.4	216.6	219.1	221.8	225.6
Wages and salaries	63.020	203.4	205.7	209.5	213.3	217.0	220.4	223.0	226.2
Employee benefits	7.600	210.7	212.9	215.3	217.6	221.5	223.9	226.9	230.2
Food	9.740	172.0	173.9	174.9	176.9	180.6	182.1	182.8	183.5
Direct purchase	4.930	158.1	158.7	159.1	160.9	162.8	165.4	165.7	165.2
Contract service	4.810	186.3	189.5	191.1	193.3	198.8	199.2	200.4	202.3
Fuel and other energy	4.270	201.3	202.8	203.8	209.0	221.3	211.4	217.7	238.1
Electricity	1.210	198.6	201.3	200.7	203.8	205.1	207.0	203.6	207.6
Natural gas	0.910	224.0	223.4	225.0	226.6	226.8	222.1	223.6	227.8
Fuel oil and coal	1.660	182.0	183.3	184.1	193.5	222.5	197.4	213.8	260.3
Water and sewerage maintenance	0.490	231.1	234.0	239.0	241.9	248.5	249.9	255.1	257.5
All other	15.370	221.0	224.3	226.9	229.6	233.9	237.0	240.4	244.2
Drugs	1.500	271.5	277.7	283.8	289.1	297.6	304.3	307.2	312.5
Supplies	3.280	201.0	204.1	205.7	207.8	211.3	213.5	217.2	220.8
Health services	1.210	250.9	254.5	258.7	261.8	267.5	273.2	277.9	281.3
Other business services	4.590	231.9	234.4	237.1	240.0	243.8	246.7	249.6	253.3
Miscellaneous	4.790	201.0	204.1	205.7	207.8	211.3	213.5	217.2	220.8

Expense category ¹	Base year weights 1977 ²	Four quarters ending							
		1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
Total	100.000	227.7	229.1	231.0	233.1	235.4	237.9	240.6	243.2
Wages and salaries	63.020	228.4	230.2	232.5	234.5	237.4	239.8	242.8	245.6
Employee benefits	7.600	235.7	238.7	240.8	243.0	246.8	249.5	251.8	254.2
Food	9.740	184.4	185.1	185.1	186.4	186.6	188.5	190.2	191.9
Direct purchase	4.930	165.4	165.1	163.7	164.8	164.7	166.5	168.2	169.8
Contract service	4.810	203.9	205.5	207.0	208.4	209.0	211.0	212.7	214.6
Fuel and other energy	4.270	230.7	219.7	219.6	224.1	219.6	221.3	223.2	225.4
Electricity	1.210	213.3	213.6	211.2	215.0	216.1	215.7	215.7	215.8
Natural gas	0.910	229.8	224.9	226.2	230.2	226.3	225.5	226.2	226.5
Fuel oil and coal	1.660	234.8	207.1	205.7	211.5	200.3	204.1	207.4	212.2
Water and sewerage maintenance	0.490	261.7	267.6	275.6	277.9	281.3	285.8	290.0	291.5
All other	15.370	247.2	249.9	252.3	254.7	257.2	260.4	262.7	265.4
Drugs	1.500	320.6	329.7	334.5	338.9	342.7	352.6	354.6	361.3
Supplies	3.280	222.5	223.9	225.4	227.4	229.0	231.0	232.9	234.9
Health services	1.210	286.2	289.4	293.3	296.7	303.0	307.8	312.0	315.3
Other business services	4.590	256.4	259.2	261.8	264.1	266.8	269.4	272.0	274.4
Miscellaneous	4.790	222.5	223.9	225.4	227.4	229.0	231.0	232.9	234.9

¹For data sources used to estimate the input price index relative weights and choice of price proxies, see the *Federal Register* (1991).

²Category weights may not sum to total because of rounding.

NOTES: Data for 1989, 1990, and 1991 are historical. Data for 1992 are partly historical and partly forecasted. Q designates quarter of year.

SOURCES: Health Care Financing Administration, Office of the Actuary; Data from the Office of National Health Statistics, Division of Health Cost Analysis. Second quarter 1991 forecasts were made by Data Resources, Inc./McGraw-Hill.

Table 12

Percent change in four-quarter averages in the home health agency input price index, by expense category: 1989-92

Expense category ¹	Base year weights 1976 ²	Four quarters ending							
		1989 Q1	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4
Total	100.000	6.4	6.3	6.4	6.2	6.0	5.8	5.5	5.3
Wages and salaries	65.140	7.1	6.9	6.9	6.7	6.4	6.2	5.6	5.2
Employee benefits	7.900	6.2	6.1	5.6	5.0	4.9	4.9	5.0	5.4
Transportation	4.870	3.3	4.3	4.7	5.0	5.1	3.8	4.1	5.6
Office costs	2.790	4.7	4.8	4.9	4.9	5.0	5.1	5.1	5.3
Rent	1.350	3.8	3.8	3.8	3.9	4.0	4.1	4.2	4.2
Non-rental space occupancy	1.170	1.3	1.6	2.3	3.8	5.7	6.0	6.8	8.9
Medical and nursing supplies	2.810	4.3	4.9	5.4	5.8	5.9	5.9	5.7	5.3
Contract services	6.870	6.4	6.4	6.4	6.2	6.0	5.8	5.4	5.3
Miscellaneous	7.100	4.3	4.6	4.7	4.8	4.9	4.7	5.0	5.4

Expense category ¹	Base year weights 1976 ²	Four quarters ending							
		1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
Total	100.000	5.0	5.3	5.6	5.6	5.6	5.1	4.6	4.4
Wages and salaries	65.140	4.8	5.1	5.6	6.0	6.3	5.8	5.1	4.8
Employee benefits	7.900	5.7	6.1	6.2	6.2	5.7	5.2	4.8	4.6
Transportation	4.870	5.8	6.5	5.7	2.8	1.4	0.7	0.6	1.8
Office costs	2.790	5.3	5.3	5.2	4.8	4.6	4.3	4.0	3.9
Rent	1.350	4.2	4.1	3.9	3.5	3.3	3.0	2.6	2.4
Non-rental space occupancy	1.170	7.4	7.3	5.8	0.6	-1.7	-2.4	-2.2	-0.5
Medical and nursing supplies	2.810	4.9	4.7	4.7	5.0	5.5	5.5	5.4	5.0
Contract services	6.870	5.0	5.3	5.6	5.6	5.6	5.1	4.6	4.5
Miscellaneous	7.100	5.4	5.5	5.1	4.2	3.6	3.2	3.1	3.2

¹For data sources used to estimate the input price index relative weights and choice of price proxies, see the *Federal Register* (1989).

²Category weights may not sum to total because of rounding.

NOTES: Data for 1989, 1990, and 1991 are historical. Data for 1992 are partly historical and partly forecasted. Q designates quarter of year. Percent change data shown are four-quarter moving averages. The following is an example of how a percent change is calculated: Use the quarterly index levels shown in Tables 9, 11, and 13. Choose the four-quarter period ending for which you would like to calculate the percent change (e.g., year-end 1991: Quarter 3). Count back three quarters so that you have a total of four (e.g., 1991: Quarter 3; 1991: Quarter 2; 1991: Quarter 1; 1990: Quarter 4). Average these four quarters (add the index levels and divide by 4). Now, take the four quarters previous to the four quarters that you just used (e.g., 1990: Quarter 3; 1990: Quarter 2; 1990: Quarter 1; 1989: Quarter 4). Average these four quarters. Finally, compute a percent change using the two averages.

SOURCES: Health Care Financing Administration, Office of the Actuary: Data from the Office of National Health Statistics, Division of Health Cost Analysis. Second quarter 1992 forecasts were made by Data Resources, Inc./McGraw-Hill.

Table 13

Quarterly index levels of the home health agency input price index, by expense category: 1989-92

Expense category ¹	Base year weights 1978 ²	1989 Q1	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4
	Total	100.000	243.1	245.6	250.2	253.8	257.1	258.4	262.6
Wages and salaries	65.140	252.4	254.4	260.3	264.3	267.4	268.3	272.7	276.3
Employee benefits	7.900	234.2	236.6	239.3	241.8	246.2	248.8	252.1	255.9
Transportation	4.870	202.5	209.7	207.8	208.6	212.5	213.7	219.1	229.9
Office costs	2.790	249.7	252.4	255.3	258.5	262.5	265.7	268.8	272.8
Rent	1.350	214.0	215.6	218.3	221.0	222.6	224.7	227.9	230.2
Non-rental space occupancy	1.170	226.4	228.1	229.4	235.2	249.3	238.0	245.4	268.6
Medical and nursing supplies	2.810	210.9	215.9	218.2	221.7	223.4	228.2	229.6	231.2
Contract services	6.870	243.1	245.6	250.3	253.8	257.2	258.4	262.7	266.8
Miscellaneous	7.100	214.0	217.3	219.0	221.2	225.0	227.3	231.2	235.1

Expense category ¹	Base year weights 1976 ²	1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
	Total	100.000	269.6	274.4	278.7	280.9	282.9	286.0	290.2
Wages and salaries	65.140	279.7	285.9	291.2	293.4	295.3	296.8	303.8	307.7
Employee benefits	7.900	262.0	265.3	267.6	270.0	274.3	277.3	279.9	282.6
Transportation	4.870	224.8	223.4	224.5	226.5	225.7	226.6	229.6	233.2
Office costs	2.790	276.1	279.1	281.9	284.4	287.3	290.0	292.9	295.5
Rent	1.350	231.5	233.5	235.5	237.0	238.5	239.7	240.2	241.4
Non-rental space occupancy	1.170	260.0	247.4	247.5	252.5	247.4	249.4	251.7	254.1
Medical and nursing supplies	2.810	233.6	239.2	241.0	244.6	248.1	251.3	252.6	254.1
Contract services	6.870	269.7	274.4	278.7	281.0	282.9	286.1	290.2	293.8
Miscellaneous	7.100	236.9	238.4	240.0	242.1	243.8	245.9	248.0	250.1

¹For data sources used to estimate the input price index relative weights and choice of price proxies, see the *Federal Register* (1988).

²Category weights may not sum to total because of rounding.

NOTES: Data for 1989, 1990, and 1991 are historical. Data for 1992 are partly historical and partly forecasted. Q designates quarter of year.

SOURCES: Health Care Financing Administration, Office of the Actuary; Data from the Office of National Health Statistics, Division of Health Cost Analysis. Second quarter 1992 forecasts were made by Data Resources, Inc./McGraw-Hill.

Table 14
Selected national economic indicators: 1989-92

Indicator	Calendar year			1989	1990	1991	1991	1991	1991	1992
	1989	1990	1991	Q1	Q1	Q1	Q2	Q3	Q4	Q1
Gross domestic product										
Billions of dollars	\$5,244	\$5,514	\$5,673	\$5,140	\$5,422	\$5,589	\$5,653	\$5,709	\$5,740	\$5,818
Billions of 1987 dollars	\$4,837	\$4,885	\$4,849	\$4,810	\$4,861	\$4,824	\$4,841	\$4,863	\$4,868	\$4,897
Implicit price deflator (1987 = 100.0)	108.4	112.9	117.0	106.9	111.1	115.9	116.8	117.4	117.9	118.8
Employment, hours, and earnings										
Unemployment rate, all workers	5.3	5.5	6.8	5.2	5.3	6.5	6.8	6.8	7.0	7.2
Private non-agricultural workers:										
Total employment in thousands	90,550	91,478	89,930	88,615	90,189	88,827	89,929	90,649	90,314	88,256
Average weekly hours	34.6	34.5	34.3	34.3	34.2	33.8	34.3	34.6	34.5	34.1
Average hourly earnings	\$9.85	\$10.01	\$10.33	\$9.54	\$9.89	\$10.22	\$10.29	\$10.34	\$10.46	\$10.52
Health services workers:										
Total employment in thousands	7,484	7,831	8,177	7,356	7,676	8,035	8,128	8,239	8,307	8,357
Average weekly hours	32.5	32.5	32.5	32.4	32.4	32.4	32.5	32.7	32.6	32.8
Average hourly earnings	\$9.82	\$10.40	\$10.96	\$9.62	\$10.24	\$10.73	\$10.90	\$11.04	\$11.15	\$11.23
Personal income and savings										
Income in billions	\$4,380	\$4,680	\$4,834	\$4,304	\$4,581	\$4,768	\$4,821	\$4,853	\$4,895	\$4,956
Disposable income in billions	\$3,789	\$4,059	\$4,218	\$3,730	\$3,974	\$4,151	\$4,207	\$4,238	\$4,277	\$4,345
Savings in billions	\$166	\$206	\$219	\$193	\$197	\$213	\$229	\$212	\$223	\$213
Personal savings rate	4.4	5.1	5.2	5.2	4.9	5.1	5.4	5.0	5.2	4.9
Prices¹										
Gross domestic product fixed-weight price index (1987 = 100.0)	108.5	113.1	117.6	106.8	111.3	116.3	117.3	118.0	118.7	119.7
Consumer Price Index, all items	124.0	130.7	136.2	121.7	128.0	134.8	135.6	136.7	137.7	138.7
All items less medical care	122.4	128.8	133.8	120.2	126.3	132.6	133.3	134.3	135.1	136.0
Apparel and upkeep	118.6	124.1	128.7	116.6	120.8	126.3	128.8	128.0	131.7	130.5
Energy	94.3	102.1	102.4	89.4	96.5	103.2	101.7	103.1	101.8	99.3
Food and beverages	124.9	132.1	136.8	122.7	130.7	136.1	137.4	136.8	136.9	138.3
Housing: shelter	132.8	140.0	146.3	130.4	136.9	144.6	145.4	147.2	147.9	149.8
Medical care	149.2	162.8	177.0	145.0	157.4	172.4	175.3	178.7	181.7	185.9
Producer price index, ² finished consumer goods	112.1	118.2	120.5	110.0	116.3	120.4	120.4	120.3	120.7	120.2

¹Base period = 1982-84, unless noted.

²Formerly called the "Wholesale Price Index."

NOTES: Q designates quarter of year. Quarterly data are not seasonally adjusted.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis: *Survey of Current Business*. Washington, U.S. Government Printing Office. Monthly reports for Jan. 1989-May 1992; U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington, U.S. Government Printing Office. Monthly reports for Jan. 1989-June 1992.

National economic indicators

National economic indicators provide a context for understanding health specific indicators and how change in the health sector relates to change in the economy as a whole. Tables 14 and 15 present national indicators of output, employment, and inflation.

Gross domestic product (GDP) measures the U.S. economy as the value of output produced within the geographic boundaries of the United States by U.S. or foreign citizens or companies. Constant dollar or "real" GDP removes the effects of prices from the valuation of goods and services produced, so that the growth of real GDP reflects changes in the "physical" output of the economy (U.S. Department of Commerce, 1992).

First quarter indicators

When compared with the same period 1 year earlier, selected hospital inpatient and outpatient utilization

statistics exhibited growth that was similar to the largest growth experienced during the last decade. In the first quarter of 1992, hospital admissions increased by 1.3 percent to 8.4 million (Tables 1 and 2). This growth is entirely attributable to growth in admissions of the population 65 years of age and over, up 4.3 percent, while admissions for the under 65 years of age population continued to drop, down 0.4 percent (Figure 1). The gap in growth rate for admissions between the two age groups widened significantly over the last five quarters, from 2.5 percentage points in the first quarter of 1991, to 7.8 percentage points in the fourth quarter of 1991, and 4.7 percentage points in the first quarter of 1992.

Not only have the admissions grown in the last four quarters, other utilization measures, outpatient visits and surgical operations (Figure 2) have also shown significant growth. This growth is increasing at rates that were prevalent before PPS was implemented in 1983.

The trends in the utilization rates are affected by a variety of factors—the intensity of a flu season in a

Table 15
Percent change in selected national economic indicators: 1989-92

Indicator	Calendar year			1989 Q1	1990 Q1	1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1
	1989	1990	1991							
	Annual percent change			Percent change from the same period of previous year						
Gross domestic product										
Billions of dollars	7.0	5.1	2.9	8.2	5.5	3.1	2.7	2.5	3.3	4.1
Billions of 1987 dollars	2.5	1.0	-0.7	3.3	1.5	-1.2	-1.2	-0.8	0.3	1.5
Implicit price deflator (1987 = 100.0)	4.4	4.1	3.6	4.7	4.0	4.3	3.9	3.3	3.0	2.5
Employment, hours, and earnings										
Unemployment rate, all workers ¹	-0.2	0.3	1.2	-0.5	0.1	1.2	1.5	1.2	1.0	0.8
Private non-agricultural workers:										
Total employment	2.7	1.0	-1.7	3.4	1.8	-1.5	-2.1	-1.8	-1.4	-0.6
Average weekly hours	-0.3	-0.3	-0.6	-0.1	-0.4	-1.1	-0.7	-0.6	0.1	0.8
Average hourly earnings	4.0	3.7	3.1	4.1	3.7	3.3	3.3	3.0	3.0	2.9
Health services workers:										
Total employment	5.1	4.6	4.4	5.5	4.3	4.7	4.4	4.3	4.3	4.0
Average weekly hours	0.1	0.3	-0.0	-0.3	0.2	-0.2	0.2	-0.3	0.2	1.3
Average hourly earnings	6.7	5.9	5.3	6.9	6.4	4.9	5.8	5.5	5.1	4.6
Personal income and savings										
Income	7.5	6.8	3.3	8.5	6.4	4.1	3.6	2.8	2.7	3.9
Disposable income	6.8	7.1	3.9	7.9	6.6	4.5	4.4	3.6	3.4	4.7
Savings	6.7	23.9	6.6	19.1	1.9	8.2	6.0	8.6	3.9	0.0
Personal savings rate ¹	0.0	0.7	0.1	0.5	-0.3	0.2	0.0	0.2	0.0	-0.2
Prices²										
Gross domestic product fixed-weight price index (1987 = 100.0)	4.4	4.3	3.9	4.5	4.2	4.5	4.2	3.6	3.4	2.9
Consumer Price Index, all items	4.8	5.4	4.2	4.8	5.2	5.3	4.8	3.9	3.0	2.9
All items less medical care	4.6	5.2	3.9	4.6	5.0	5.0	4.6	3.6	2.6	2.6
Apparel and upkeep	2.8	4.6	3.7	4.5	3.6	4.5	2.9	3.9	3.7	3.4
Energy	5.7	8.2	0.4	2.8	8.0	6.9	4.5	-0.7	-8.1	-3.7
Food and beverages	5.7	5.8	3.6	5.9	6.5	4.1	4.7	3.1	2.4	1.6
Housing: shelter	4.5	5.4	4.5	4.3	5.0	5.6	4.9	3.7	3.8	3.6
Medical care	7.7	9.1	8.7	7.1	8.5	9.6	9.0	8.5	8.0	7.8
Producer price index, ³ finished consumer goods	5.6	5.5	1.9	5.5	5.7	3.5	3.5	1.7	-1.1	-0.2

¹Change in rate, rather than percent change.

²Base period = 1982-84, unless noted.

³Formerly called the "Wholesale Price Index."

NOTE: Q designates quarter of year.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis: *Survey of Current Business*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1988-May 1992; U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1988-June 1992.

given year, the admitting practices of the physicians and hospitals, and changes in the funding mechanisms for certain groups of patients. For example, the 1991-92 flu season consisted mainly of the type A influenza strain. This strain is considered more dangerous to the high-risk groups than the type B strain, and likely caused at least part of the increase in the number of admissions and outpatient visits for persons 65 years of age or over.

In contrast to large increases in admissions, outpatient visits, and surgical operations, inpatient days and adult length of stays (ALOS) continued their negative growth, although at a decelerated pace. Hospitals provided 54.2 million days of inpatient care the first quarter of 1992 resulting in an ALOS of 6.5 days.

Total employment in health services continues to grow at a decelerating rate in the first quarter of 1992 when compared with the first quarter of 1991, adding 322,000 jobs. During the same period, employment in all private non-agricultural establishments declined by

0.6 percent, a slower rate than in the past four quarters, for a total loss of 571,000 jobs (Tables 3 and 4). Health service employment was not affected as severely as employment in all private non-agricultural establishments during the recent recession (Figure 3).

Implied payroll (work-hours times average hourly earnings) in offices and clinics of medical doctors has grown at a decelerating rate since the third quarter of 1989 (Table 5). As expected, work-hours in offices and clinics of medical doctors showed the same trends until the first quarter of 1992 (Figure 4). During this quarter, when compared with the same quarter in the previous year, growth in work-hours accelerated 0.3 percentage points while growth in payroll slowed 1.9 percentage points. The decline in payroll growth was caused by a deceleration in average hourly earnings growth. One possible explanation for this slowdown in hourly earnings despite an increase in work-hours may be the introduction by HCFA of a new Medicare physician fee

Figure 1
Percent change in admissions from the same period of previous year: 1980-92

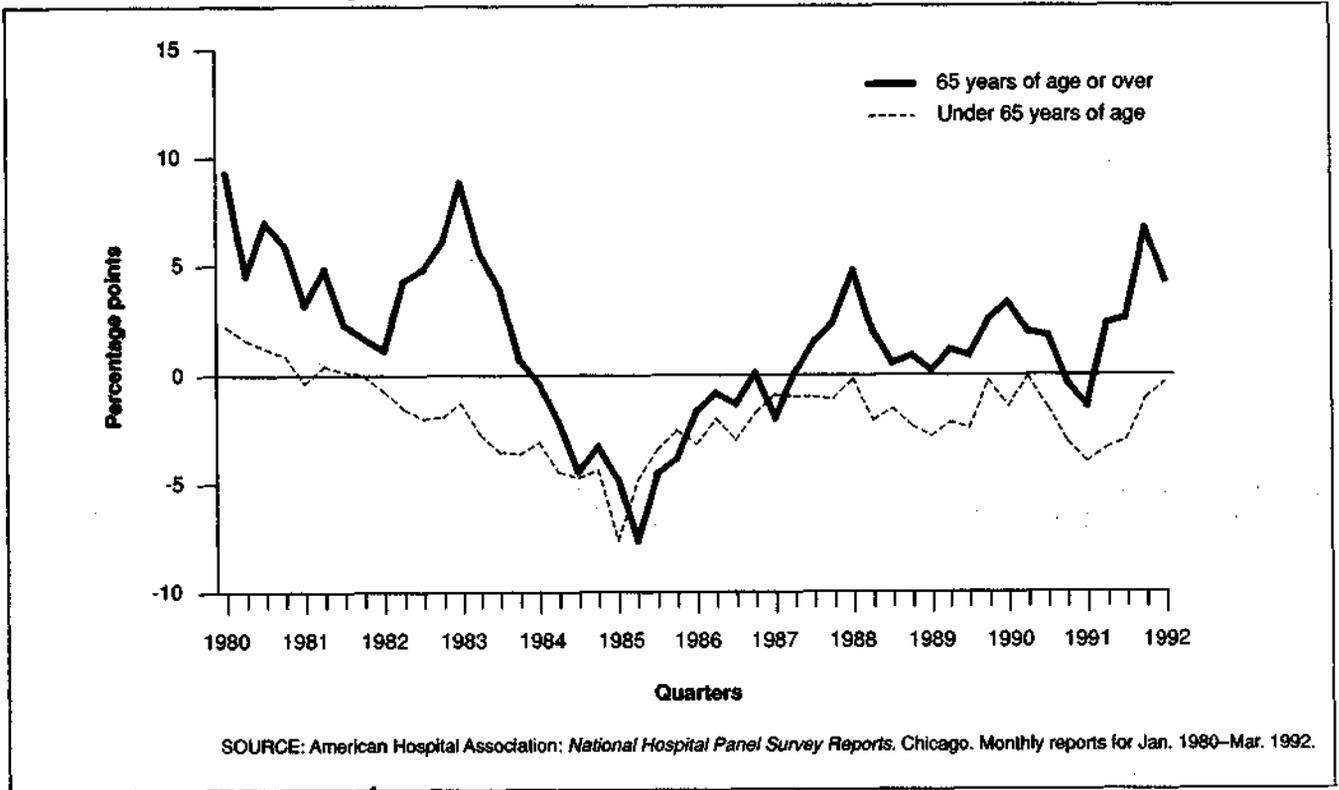


Figure 2
Percent change in outpatient visits and surgical operations from the same period of previous year: 1982-92

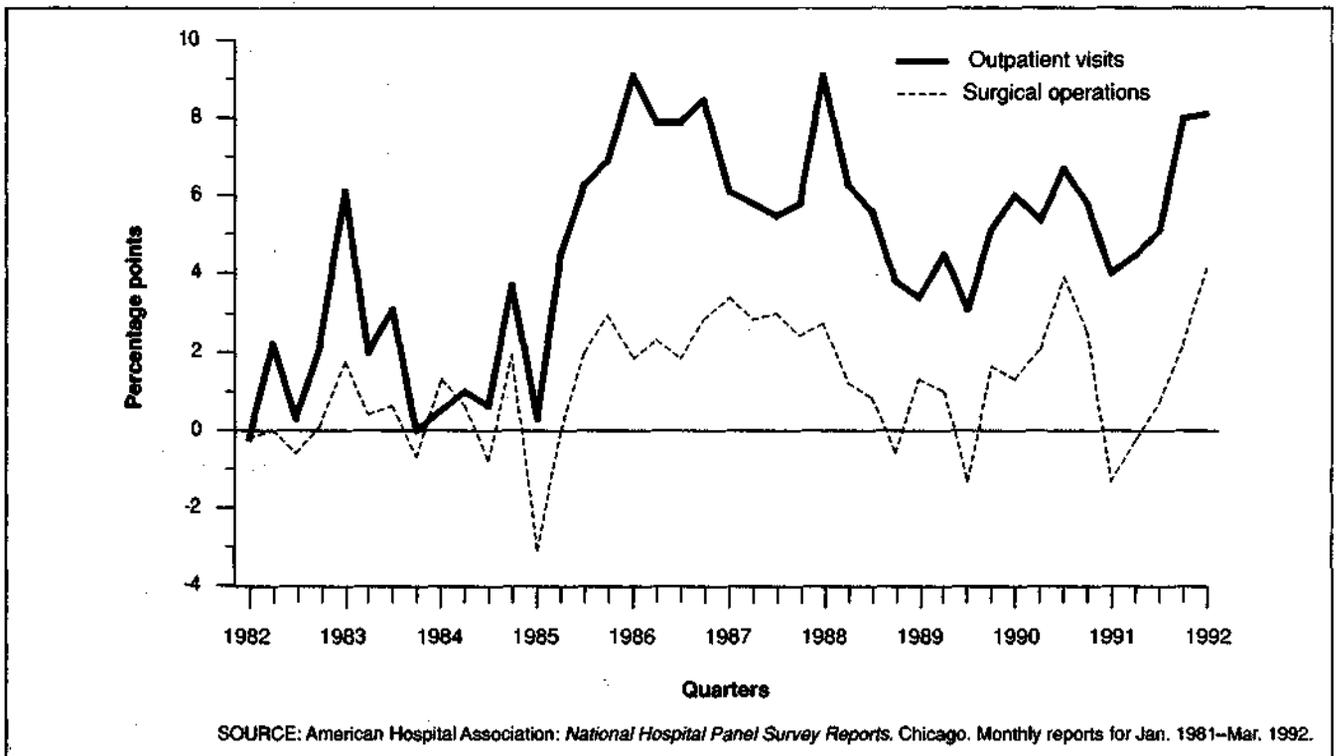


Figure 3
Percent change in employment from the same period of previous year: 1983-92

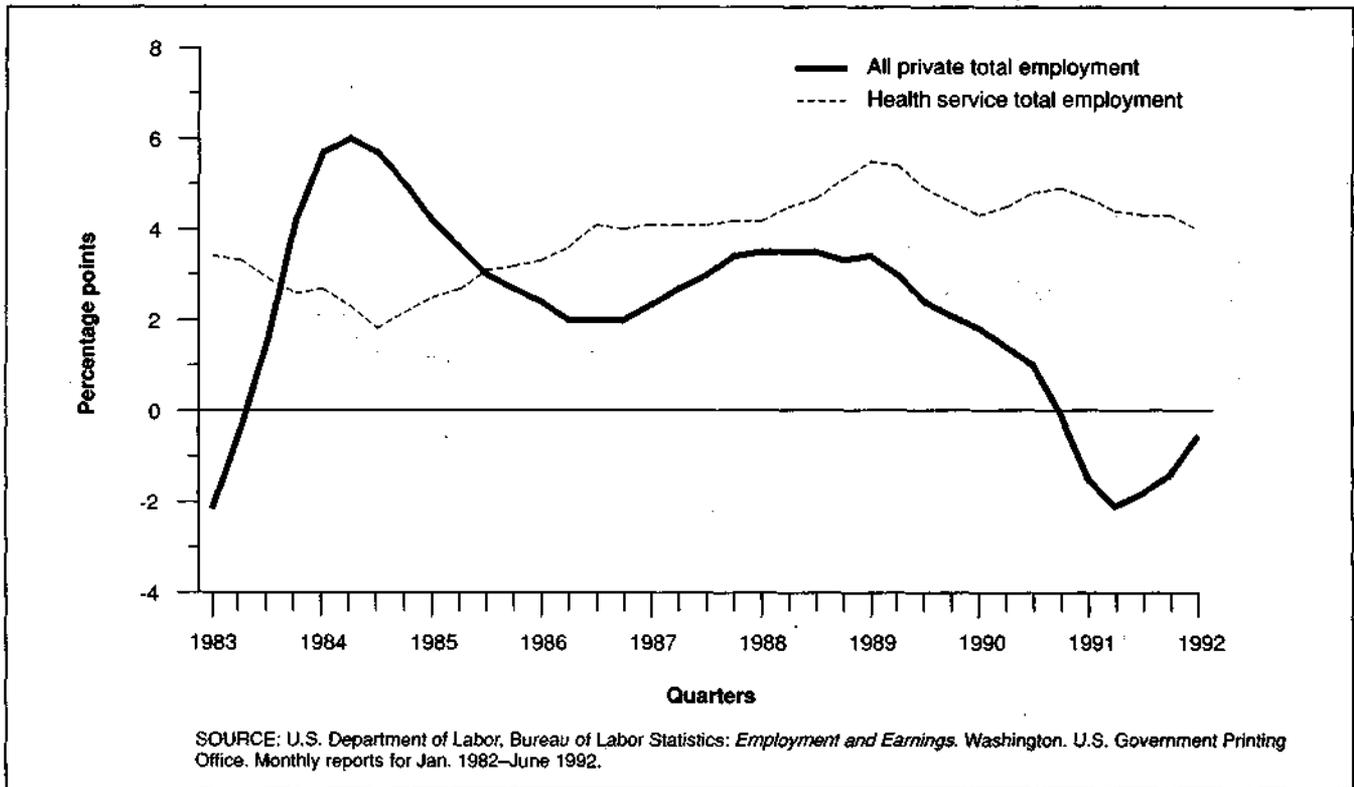


Figure 4
Percent change for non-supervisory work-hours and payroll from the same period of previous year: 1983-92

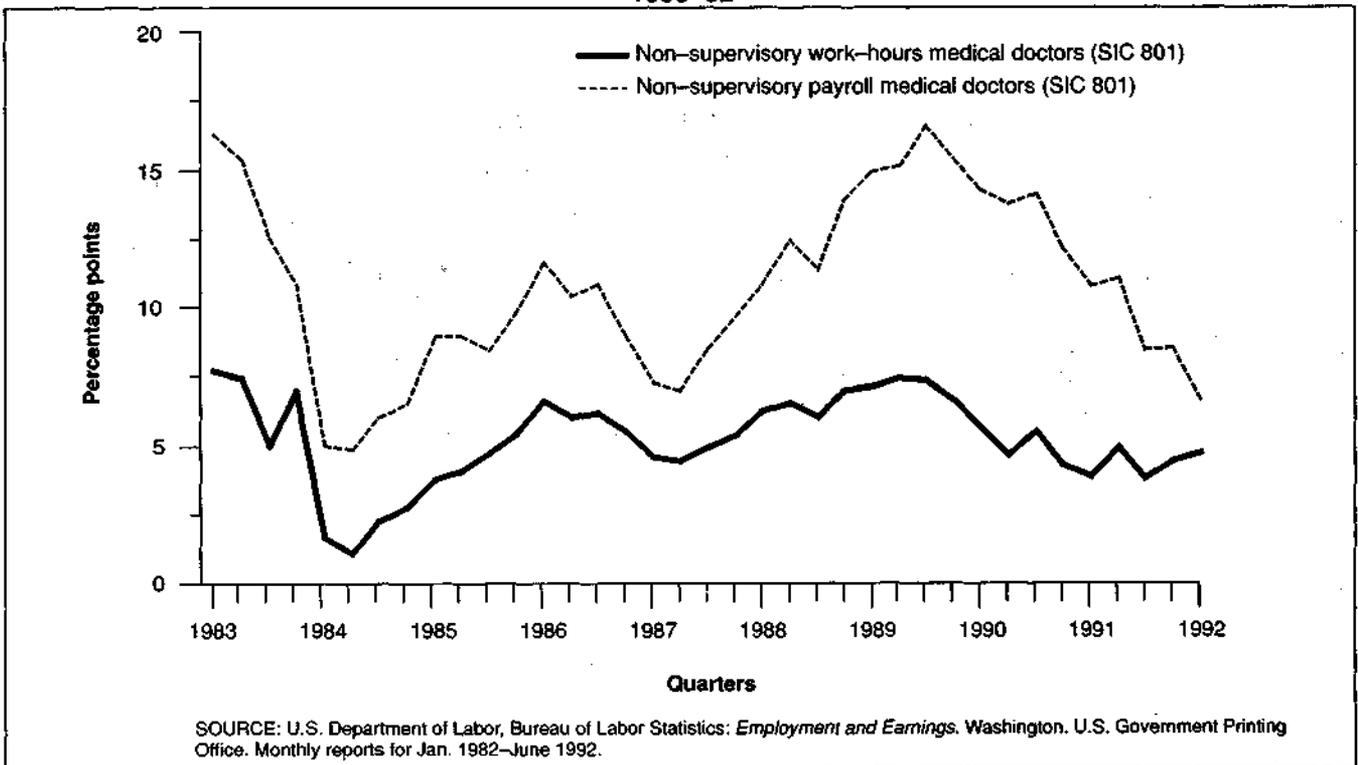


Figure 5
Percent change in measures of price inflation from the same period of previous year: 1982-92

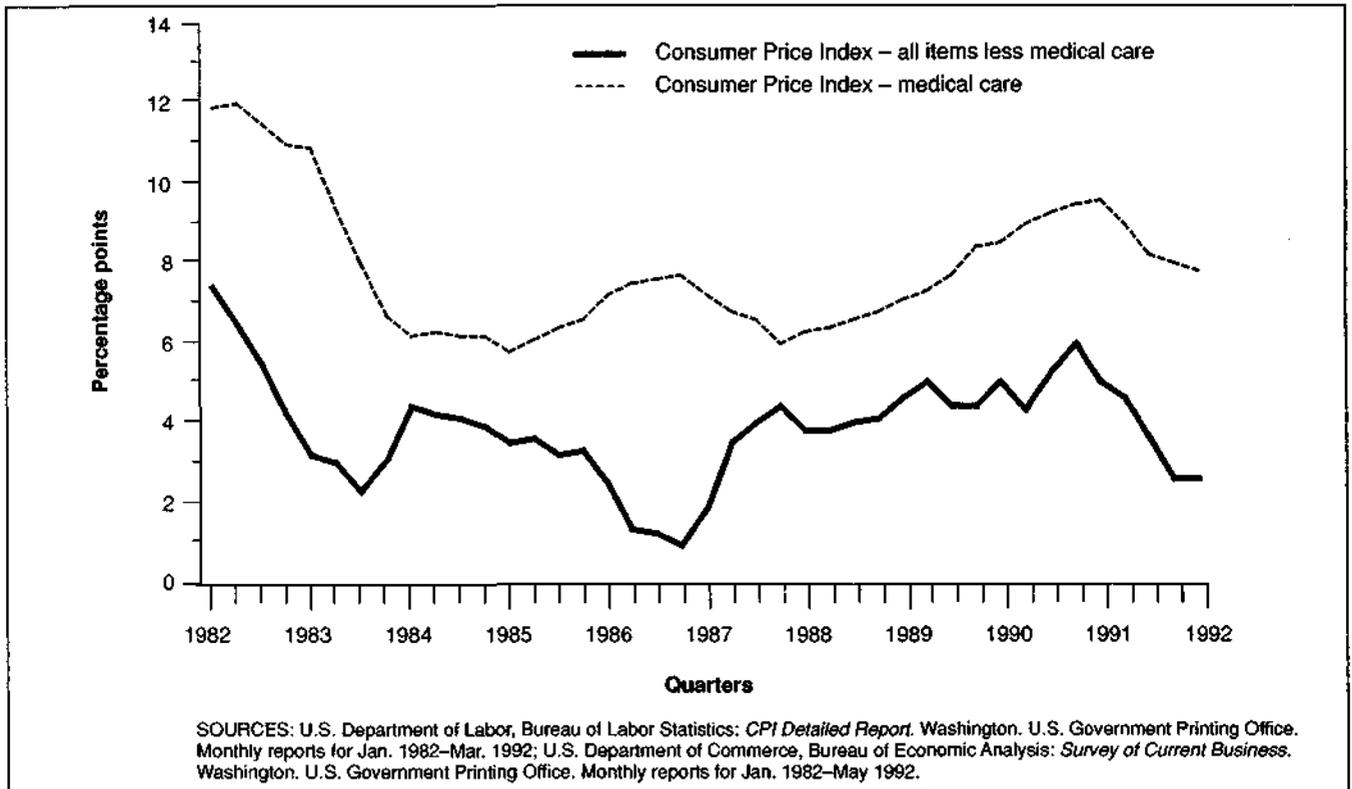
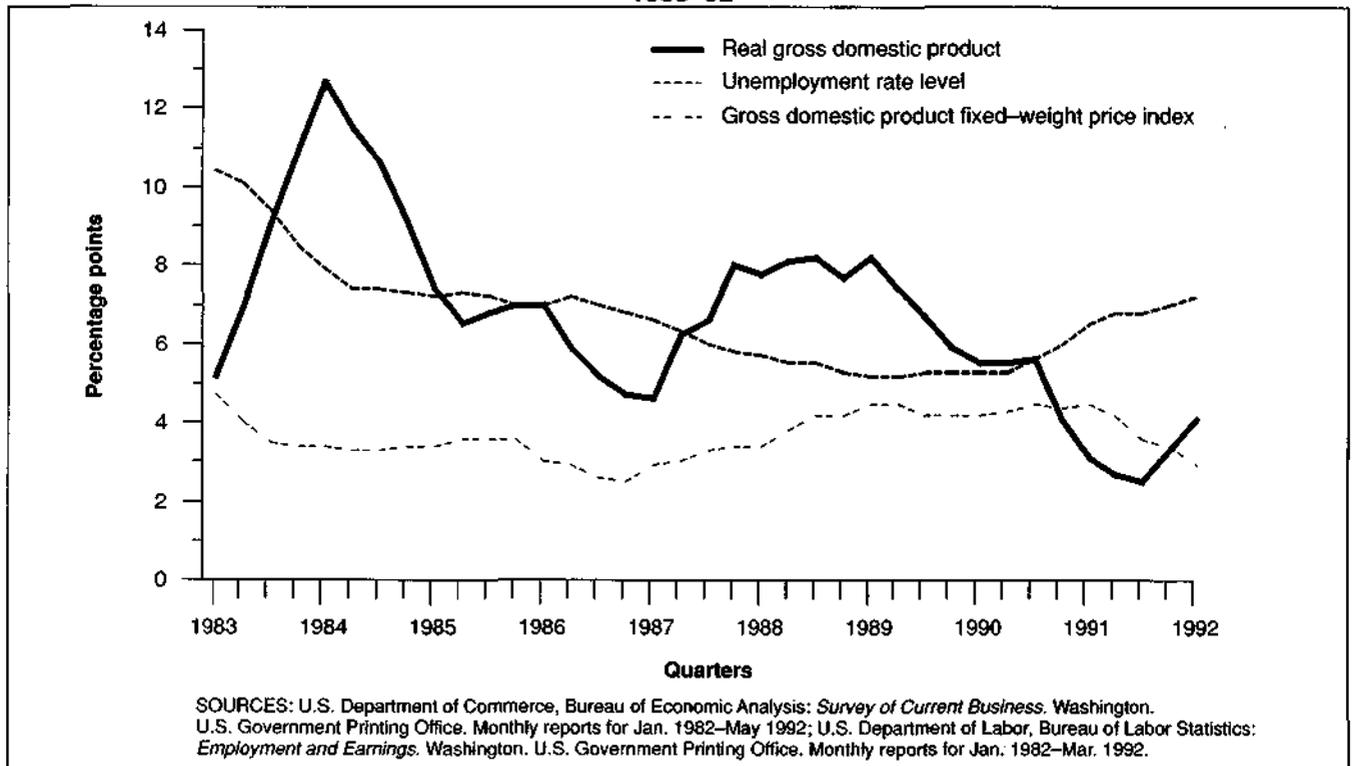


Figure 6
Percent change in indicators of national economic activity from the same period of previous year: 1983-92



schedule in 1992. The uncertainty regarding reimbursement under the new fee schedules could result in physician offices cutting back on expenses. One way to accomplish this is to cut back on higher skilled labor and hire more clerical help, or lower skilled workers at lower pay rates, to handle increased administrative requirements of the new payment system.

The CPI for all items less medical care grew 2.6 percent during the first quarter of 1992 when compared with the first quarter of 1991. The CPI for medical care grew 7.8 percent for the same period (Tables 6 and 7). The growth rates for all price indexes have stabilized for the last two quarters. However, medical care prices are still growing at approximately 3 times the rate of all items less medical care prices (Figure 5).

Overall, the national economic indicators showed a slight upturn in the economy for the first quarter of 1992. Real GDP exhibited positive growth for the second consecutive quarter (Tables 14 and 15). Growth of personal and disposable personal income also accelerated and price growth stabilized. Yet, even while these measures indicated improvement in the economy, employment measures showed the weakness of that recovery. The unemployment rate continued to grow and total employment continued to decline when compared with the same measures 1 year earlier (Figure 6).

The health care industry remained somewhat immune to the recession. Its employment continued to grow while total employment declined, earnings per hour in the health industry rose more than 1.5 times as fast as hourly earnings in the entire economy, and prices for medical care grew 2 to 3 times faster than prices for all items less medical care.

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