

# Health Care Indicators

by Suzanne W. Letsch, Brenda T. Maple, Cathy A. Cowan, and Carolyn S. Donham

*This regular feature of the journal includes a section on 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 provide indicators of the direction and magnitude of health care costs prior to the availability of more comprehensive data.*

## Community hospital statistics

The American Hospital Association's panel survey of community hospitals reported expenses totaling \$57 billion in the first quarter of 1991 (Table 1). This amount represents a 9.0-percent increase from the first quarter of 1990, which is the lowest rate experienced in 3 years (Table 2). Labor costs, which account for 54 percent of operating expenses, increased 9.4 percent. Non-labor costs increased at a slightly slower rate, up 8.6 percent.

The lowered growth rate of operating expenses can be attributed to a slowdown in inpatient care, which accounts for over three-fourths of operating expenses. As hospitals continue to struggle to cut costs, more care is delivered in the less costly outpatient setting. While expenses for inpatient care rose 6.6 percent from the first quarter of 1990 to the first quarter of 1991, expenses for outpatient care rose at more than twice that rate, up 17.0 percent.<sup>1</sup>

Inpatient expenses totaled \$43 billion in the first quarter of 1991, with the average admission costing \$5,259 and the average inpatient day costing \$795. The average length of stay for adults was 6.6 days.

Admissions and inpatient days, two measures of inpatient utilization, both experienced declines when compared with the same period of the previous year. Such a decline had not been seen since 1985, when the implementation of the prospective payment system (PPS) was affecting hospitals (Figure 1). This decline in utilization may have been caused by events associated with the war in the Persian Gulf. Declines in admissions and inpatient days most affected the under 65-year-old age group, the group most likely affected by the war. For the first quarter of 1991, the number of admissions and days were down 4.0 and 5.5 percent respectively for inpatients under age 65. For the same period, admissions and

inpatient days were down 1.5 and 3.3 percent for inpatients age 65 years and older.<sup>2</sup> The general economic slowdown also contributed to the declines. Uncertainty and apprehension about economic stability in the United States may have caused people to postpone elective surgery or other hospital-related care.

During the first quarter of 1991, community hospitals operated an average of 915,000 beds with an average of 66.3 percent occupied at any one time (Table 1). Reductions in the number of available inpatient beds has not kept up with declining utilization. As a result, the adult occupancy rate for the first quarter of 1991 experienced the biggest drop in over 5 years, falling 2.2 points (Figure 2). Changes in occupancy rates were measured as a change in level rather than percent. To remove any seasonal affects, change is measured from the same period one year earlier.

More than 5 million surgical operations were performed in community hospitals during the first quarter of 1991, including surgeries performed in both inpatient and outpatient settings. This represents a decline of 1.3 percent, another indication of decreasing hospital utilization. Outpatient visits, which include services delivered in clinics and emergency rooms, increased 4.0 percent from the first quarter in 1990 to the first quarter in 1991, somewhat slower than the same rate in any quarter of 1990.

Community hospitals employed about 3.2 million full-time equivalent (FTE) workers during the first quarter of 1991. This amount increased 0.9 percent from the same quarter in 1990, which is the slowest rate of growth in 3 years, most likely because of decreasing utilization of hospital services. As patient days have fallen, the number of adjusted patient days per FTE has decreased 3.3 percent.

## Private health sector: Employment, hours, and earnings

Employment in the health services sector continued to exhibit stronger growth than did employment in the rest of the economy. Table 3 shows levels of employment, hours, and earnings in private (non-government) health service establishments. For comparison to the rest of the economy, levels are also shown for all private non-agricultural establishments. These data are drawn from the Bureau of Labor Statistics (BLS) "Establishment" survey of the private non-agricultural sector.

Data for the second quarter of 1989 and later differ from those previously published, reflecting revisions made by BLS during their annual benchmark. Revisions to employment levels in the health services sector were substantial when compared with other industries as well as with previous revisions. Despite the downward revisions, growth in health services employment continues to outpace that in all private employment. In the first quarter of 1991,

<sup>2</sup> Utilization data by age group does not appear on tables but is available separately from the American Hospital Association.

<sup>1</sup> Outpatient expenses are calculated by subtracting inpatient expenses from total expenses on Table 1, and then growth rates can be calculated.

For inquiries concerning market basket data, contact Brenda T. Maple, Room L-1 1705 Equitable Building, 6325 Security Boulevard, Baltimore, Maryland 21207, (301) 966-7954. For all other inquiries, contact Carolyn S. Donham, Room L-1, 1705 Equitable Building, 6325 Security Boulevard, Baltimore, Maryland 21207, (301) 966-7947.

Reprint requests: Carolyn S. Donham, Room L-1, 1705 Equitable Building, 6325 Security Boulevard, Baltimore, Maryland 21207.

health services employment grew 5.2 percent from the first quarter of 1990, while all private non-agricultural employment declined 0.9 percent (Table 4). This decline in total private employment parallels a similar decline in real gross national product for the same period (Figure 3).

Nearly 8.1 million people were employed on a full-time or part-time basis in private health service establishments during the first quarter of 1991 (Table 3). While growth in private health sector employment outpaced the rest of the economy, the revised estimates show more moderate growth rates for 1990 than those previously published, and a slight deceleration in growth for the first quarter of 1991 (Table 4).

Within the health care sector, nursing and personal care facilities were the only type of establishment to show continued acceleration in employment growth in the first quarter of 1991, up 5.6 percent from the first quarter of 1990. Employment in offices and clinics of medical doctors showed the strongest growth of any type of health care establishment, although it was slightly less than it had been in the previous period. Employment in offices and clinics of dentists, the slowest growing type of health service, was up only 1.6 percent from the first quarter of 1990 to the first quarter of 1991. Employment in private hospitals, which includes nearly one-half of all health sector employment, increased 3.1 percent during this period.<sup>3</sup>

Although health sector workers constitute only 9 percent of all private employment, strong growth in the health sector has an impact on overall employment. If health sector employees were not counted in total employment, the decline in the first quarter of 1991 from the same period in 1990 would be 1.4 percent. Including health sector workers in the total minimizes this decline in employment to only 0.9 percent (Table 4).

Non-supervisory workers in health service establishments earn slightly more per hour while working less hours per week than do workers in all private non-agricultural establishments. Non-supervisory health sector workers earned \$10.74 per hour and worked an average of 32.4 hours per week in the first quarter of 1991 (Table 3).

Implied non-supervisory work-hours and payroll growth, developed from the BLS establishment survey data, are composite measures of business activity. Implied work-hours are the product of the number of non-supervisory employees and average weekly hours. In the first quarter of 1991, work-hours in all private establishments decreased 2.0 percent from the same quarter in 1990 (Table 5). This is the largest decline experienced since 1982, which is the last time the general economy experienced a recession. In sharp contrast, work-hours in health service establishments increased 5.2 percent during the same time period. Work-hours in nursing and personal care facilities were the fastest growing of any health service, up 6.6 percent, with work-hours in offices and clinics of medical doctors close behind, up 6.4 percent.

<sup>3</sup> Among the downward revisions, employment in private hospitals was most affected. Previously published estimates show a growth rate of 6.0 percent from 1989 to 1990, while revised estimates show a growth rate of 3.1 percent.

Implied non-supervisory payroll (calculated by multiplying implied work-hours by average hourly earnings) for health service establishments has not shown the slowdown seen in other industries. In the first quarter of 1991, payroll in health service establishments increased 10.3 percent from the first quarter of 1990. For the same period, payroll in all private establishments increased only 1.2 percent. Within the health sector, payrolls in offices and clinics of medical doctors increased the most, up 13.7 percent, and payroll in nursing and personal care facilities increased 12.0 percent (Table 5).

## Prices

### Consumer prices

Prices paid for consumer goods and services, as measured by the Consumer Price Index (CPI) for all urban consumers, grew 5.3 percent in the first quarter of 1991 compared with the first quarter of 1990. In contrast, the prices paid by consumers of medical goods and services rose 9.6 percent for the same period (Figure 4). Medical care prices have consistently grown at a more rapid pace than all other items since the second quarter of 1981 (Tables 6 and 7).

Growth in prices of all items less medical care decelerated during the first quarter of 1991 to 5.0 percent, reversing the acceleration trend of the previous calendar years. Major price components of apparel and upkeep, energy, and food and beverages also slowed in growth. Housing prices grew 5.6 percent between the first quarter of 1990 and the first quarter of 1991, 0.2 percentage points faster than the previous quarter.

Growth in overall medical care prices slightly accelerated during the first quarter of 1991. Prices for medical care services maintained consistent growth of 9.8 percent for the last two quarters. The first quarter of 1991, the initial glimpse at 1991 data, indicates that the growth of prices for professional services is similar to that exhibited in the three previous calendar years. Prices for physician and dental services also maintained the same growth rates and trends shown in previous years.

Hospital and related services grew 11.3 percent in the first quarter of 1991, up from 11.1 percent in the fourth quarter of 1990. This acceleration in price growth for most hospital related services is attributed to the subcomponent of other inpatient services. This category includes price changes in pharmacy, laboratory tests, radiology, and operating room charges contained in an inpatient hospital bill. Growth in prices of other inpatient services accelerated from 11.7 percent in the fourth quarter of 1990 to 12.5 percent in the first quarter of 1991. This first quarter growth is almost 2.0 percentage points faster than the price growth in the same subcomponent for calendar year 1990.

Another element, net cost of private health insurance, contributes to the growth of prices for medical care services. This element accounts for the difference between earned premiums and incurred benefits and includes administrative costs, net additions to reserves, rate credits and dividends, premium taxes, and profits or losses.

Medical care commodity prices experienced accelerated growth in the first quarter of 1991, up from 8.2 percent in the fourth quarter of 1990 to 8.4 percent although growth during the first quarter of 1991 was the same as that of calendar year 1990. Prescription drug prices grew 9.9 percent between the first quarter of 1990 and the first quarter of 1991, almost reaching the double digit growth shown in the first two quarters of 1990. Non-prescription drugs and medical supply prices maintained a 5.2-percent growth for the second consecutive quarter.

## Background on input price indexes

In 1979, the Health Care Financing Administration (HCFA) developed the hospital input price index which was designed 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 PPS hospital input price index, the base period is 1987. A set of 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 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). Each quarter, 1 month after the end of a calendar quarter (February, May, August, and November), DRI updates its macroeconomic forecasts of wages and prices based on updated historical information and revised forecast assumptions. Some of the data in Tables 8 through 13 are forecasted and are expected to change as more recent historical data become available and subsequent quarterly forecasts are received.

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*, 1990). The latest HHA regulatory input price index was published October 18, 1988 (*Federal Register*, 1988), and the latest SNF input price index was published April 1, 1991 (*Federal Register*, 1991).

## Current data

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.

## Data highlight

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.

In addition to the hospital input price indexes, HCFA has developed the Medicare Economic Index (MEI) which has been used since 1975 to measure increases in the prices of economic inputs in physicians' offices under Medicare. The MEI was used from 1975 to 1986 to restrain increases in Medicare Part B payments for physician office services. In recent years Congress has used the MEI as its main reference point in setting annual increases in payments. The MEI is composed of two main components: physician general earnings and physician practice expenses.

Physicians' payments are based on the premise of a reasonable charge. Prior to January 1, 1992, reasonable charges were the lowest of either the physician's actual charge for service, the physician's customary charge for service, or the prevailing charges of physicians for similar services in the locality (section 1842(b)(3) of the Social Security Act). Medicare payments for physician services under Part B are restrained by capping prevailing charges using the MEI.

A new MEI with a base year of 1989 is being proposed to correspond with Medicare physician payment reform which is to begin January 1, 1992. The proposed MEI includes new cost weights (Figure 5), expanded expenditure categories, new price proxies, and a different method of adjusting for productivity. It increases the number of expenditure categories from 7 in the current MEI to 10. The current MEI uses one category for wages and fringe benefits for both physicians' own time and non-physician employees. The revised MEI makes wages and fringe benefits separate cost categories. For these revised categories, new external price proxies were used to apply a rate of increase consistent with wages and fringe benefit trends in the general economy. Another change in the proposed MEI is to incorporate a residential rent index in the physician office rental price proxy to measure changes

in the cost of office space. HCFA has also proposed a 10-year moving average productivity adjustment as opposed to the current single year adjustment. This will create a more stable measure of productivity.

The proposed set of changes are designed to create an improved and more refined measure of price changes for physicians' office practices. Index levels for both MEIs correspond closely with one another (Figure 6) as do the percent changes (Figure 7). These factors suggest that the proposed MEI will not produce measures of physicians' office price changes that are very dissimilar from the current MEI.

## National economic indicators

To put health-related economic trends into perspective, this section shifts focus to discuss national indicators of output, employment, and inflation. The recession that began in the fourth quarter of 1990 continued through the first quarter of 1991. Gross national product (GNP) growth decelerated and unemployment rose during this period. In the medical care sector, price growth continued to outstrip the price growth of all other items and employment grew more quickly than total national employment. However the economic slowdown is beginning to be felt in the medical sector, as the hours worked per week by health services employees declined slightly for the second consecutive quarter (Tables 14 and 15).

### Output and income

GNP, the most widely used measure of the Nation's output, reached \$5.6 trillion during the first quarter of 1991. "Real" GNP (also called "constant dollar" or "price-deflated" GNP) showed negative growth for the second consecutive quarter, declining \$26 billion to a level of \$4.1 trillion between the fourth quarter of 1990 and first quarter of 1991.

Personal income maintained a level of \$4.7 trillion in the first quarter of 1991, as it has for the third consecutive quarter. Personal income growth was 3.8 percent higher than the same period one year earlier, continuing the trend of deceleration that began in 1989. Disposable personal income (personal income net of taxes), maintaining a level of \$4.1 trillion, grew 3.4 percent from the same quarter one year earlier, following the same deceleration in growth as personal income. The proportion of personal income that was saved rather than spent (personal savings rate) was 4.1 percent, a drop of 0.8 percentage points between the first quarter of 1990 and the first quarter of 1991. Slow growth in personal income and lower interest rates contributed to the drop in savings rate.

### Employment, unemployment, and earnings

The unemployment rate for all workers had its third consecutive quarter of substantial increase, reflecting the slowdown in growth of the GNP. In the first quarter of 1991 the unemployment rate reached a level of 6.5 percent, up 1.2 percentage points from the same period of the

previous year. Total employment for private non-agricultural workers declined during the first quarter of 1991 to a level of 89.4 million. However, employment in the medical sector continued to grow to reach a level of 8.1 million.

Average weekly hours for private non-agricultural workers, including health services workers, declined each quarter between the third quarter of 1990 and the first quarter of 1991. For private non-agricultural workers, average weekly hours declined 0.5 hours between the fourth quarter of 1990 and the first quarter of 1991, while health services workers' average weekly hours declined 0.2 hours for the same period. The decline in average weekly hours reflects the deceleration of growth in the general economic conditions during the last two quarters. The measure of average weekly hours indicates changes in the economy more quickly than the total employment figures because employers will cut down work-hours sooner than they will lay off workers. Average hourly earnings for private non-agricultural workers and health services workers grew in the first quarter of 1991, but at slower rates than previously recorded.

### Prices

The GNP fixed-weight price index, the most comprehensive measure of price inflation, grew 4.5 percent in the first quarter of 1991, a rate similar to that of calendar year 1990. The GNP implicit price deflator (which reflects changes in the composition of output as well as price inflation) rose 4.1 percent, maintaining the same growth rates as those of calendar years 1989 and 1990. During the first quarter of 1991, the CPI for all items and all urban consumers showed an increase of 5.3 percent. As with the other measures of price inflation, growth in the CPI in the first quarter of 1991 is similar to that recorded for the last 2 calendar years. Growth of 3.3 percent in the Producer Price Index for finished goods showed a deceleration during the first quarter of 1991 compared with the first quarter of 1990.

## References

*Federal Register*: Medicare program; Changes to the inpatient hospital prospective payment system and fiscal year 1991 rates; Final rule. Vol. 55, No. 170, 36043-36050 and 36169-36173. Office of the Federal Register, National Archives and Records Administration. Washington. U.S. Government Printing Office, Sept. 4, 1990.

*Federal Register*: Medicare program; Schedules of limits of home health agency cost per visit for cost reporting periods beginning on or after July 1, 1988; Notice with comment period. Vol. 53, No. 201, 40771. Office of the Federal Register, National Archives and Records Administration. Washington. U.S. Government Printing Office, Oct. 18, 1988.

*Federal Register*: Medicare program; Schedules of limits of skilled nursing facility inpatient routine service costs; Final notice with comment period. Vol. 56, No. 62, 13330. Office of the Federal Register, National Archives and Records Administration. Washington. U.S. Government Printing Office, Apr. 1, 1991.

**Table 1**  
**Selected community hospital statistics: 1988-91**

Item	Calendar year			1988 Q1	1989 Q1	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1
	1988	1989	1990							
<b>Operating expenses</b>										
Total in millions	\$177,770	\$195,378	\$217,114	\$43,141	\$47,312	\$52,471	\$53,738	\$54,902	\$56,001	\$57,189
Labor in millions	96,415	106,019	117,828	23,277	25,563	28,319	29,050	29,941	30,517	30,971
Non-labor in millions	81,355	89,359	99,286	19,864	21,749	24,152	24,688	24,961	25,484	26,218
Inpatient expense in millions	140,482	152,147	165,792	34,572	37,286	40,706	40,969	41,645	42,457	43,406
Amount per patient day	631.91	690.44	764.59	593.04	651.82	712.48	759.65	785.58	804.71	795.30
Amount per admission	4,194	4,586	5,021	3,989	4,384	4,780	4,936	5,097	5,287	5,259
<b>Utilization</b>										
Admissions in thousands	33,496	33,176	33,017	8,667	8,506	8,516	8,300	8,171	8,031	8,253
Inpatient days in thousands	222,313	220,361	216,836	58,297	57,204	57,132	53,931	53,012	52,761	54,578
Adult length of stay in days	6.6	6.6	6.6	6.7	6.7	6.7	6.5	6.5	6.6	6.6
Surgical operations in thousands	21,252	21,383	21,904	5,310	5,380	5,449	5,581	5,496	5,378	5,379
Outpatient visits in thousands	296,111	308,086	326,498	72,353	74,837	79,336	82,609	83,417	81,136	82,471
Beds in thousands	942	930	921	946	935	926	924	920	915	915
Adult occupancy rate <sup>1</sup>	64.5	64.9	64.5	67.7	67.9	68.5	64.1	62.6	62.7	66.3
<b>Full-time equivalent (FTE) personnel</b>										
Total in thousands	3,112	3,162	3,229	3,094	3,136	3,212	3,226	3,241	3,235	3,242
Number per bed	3.3	3.4	3.5	3.3	3.4	3.5	3.5	3.5	3.5	3.5
Adjusted patient days <sup>2</sup> per FTE	90	89	88	24	23	23	22	22	22	22
Adjusted patient days in thousands	281,322	282,974	283,959	72,747	72,585	73,647	70,741	69,886	69,593	71,909

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

<sup>2</sup>Adjusted 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. 1988-Mar. 1991.

**Table 2**  
**Percent change in selected community hospital statistics: 1988-91**

Item	Calendar year			1988 Q1	1989 Q1	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1
	1988	1989	1990							
<b>Operating expenses</b>	Annual percent change			Percent change from the same period of previous year						
Total	10.2	9.9	11.1	11.7	9.7	10.9	11.5	11.7	10.4	9.0
Labor	10.1	10.0	11.1	11.2	9.8	10.8	11.5	11.8	10.5	9.4
Non-labor	10.3	9.8	11.1	12.4	9.5	11.0	11.5	11.6	10.3	8.6
Inpatient expenses	8.2	8.3	9.0	9.8	7.9	9.2	9.4	9.5	7.8	6.6
Amount per patient day	8.8	9.3	10.7	8.2	9.9	9.3	10.9	11.5	11.4	11.6
Amount per admission	8.7	9.3	9.5	8.4	9.9	9.0	8.8	10.0	10.2	10.0
<b>Utilization</b>										
Admissions	-0.4	-1.0	-0.5	1.4	-1.9	0.1	0.6	-0.4	-2.2	-3.1
Inpatient days	-0.5	-0.9	-1.6	1.5	-1.9	-0.1	-1.4	-1.8	-3.2	-4.5
Adult length of stay	-0.1	0.1	-1.1	0.1	0.0	-0.2	-1.9	-1.3	-1.0	-1.4
Surgical operations	1.0	0.6	2.4	2.7	1.3	1.3	2.1	3.9	2.5	-1.3
Outpatient visits	6.2	4.0	6.0	9.1	3.4	6.0	5.4	6.7	5.8	4.0
Beds										
Adult occupancy rate <sup>1</sup>	-1.3	-1.3	-0.9	-1.4	-1.1	-1.0	-0.8	-0.8	-1.1	-1.2
<b>Full-time equivalent (FTE) personnel</b>										
Total	1.1	1.6	2.1	0.8	1.4	2.4	2.4	2.1	1.4	0.9
Number per bed	2.4	3.0	3.1	2.2	2.5	3.4	3.3	2.9	2.7	2.1
Adjusted patient days per FTE	0.2	-1.0	-1.7	2.4	-1.6	-0.9	-1.9	-1.9	-2.3	-3.3
Adjusted patient days	1.3	0.6	0.3	3.3	-0.2	1.5	0.5	0.2	-0.9	-2.4

<sup>1</sup>Change 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. 1988-Mar. 1991.

**Figure 1**

**Percent change in inpatient days and outpatient visits from the same period of previous year: 1981-91**

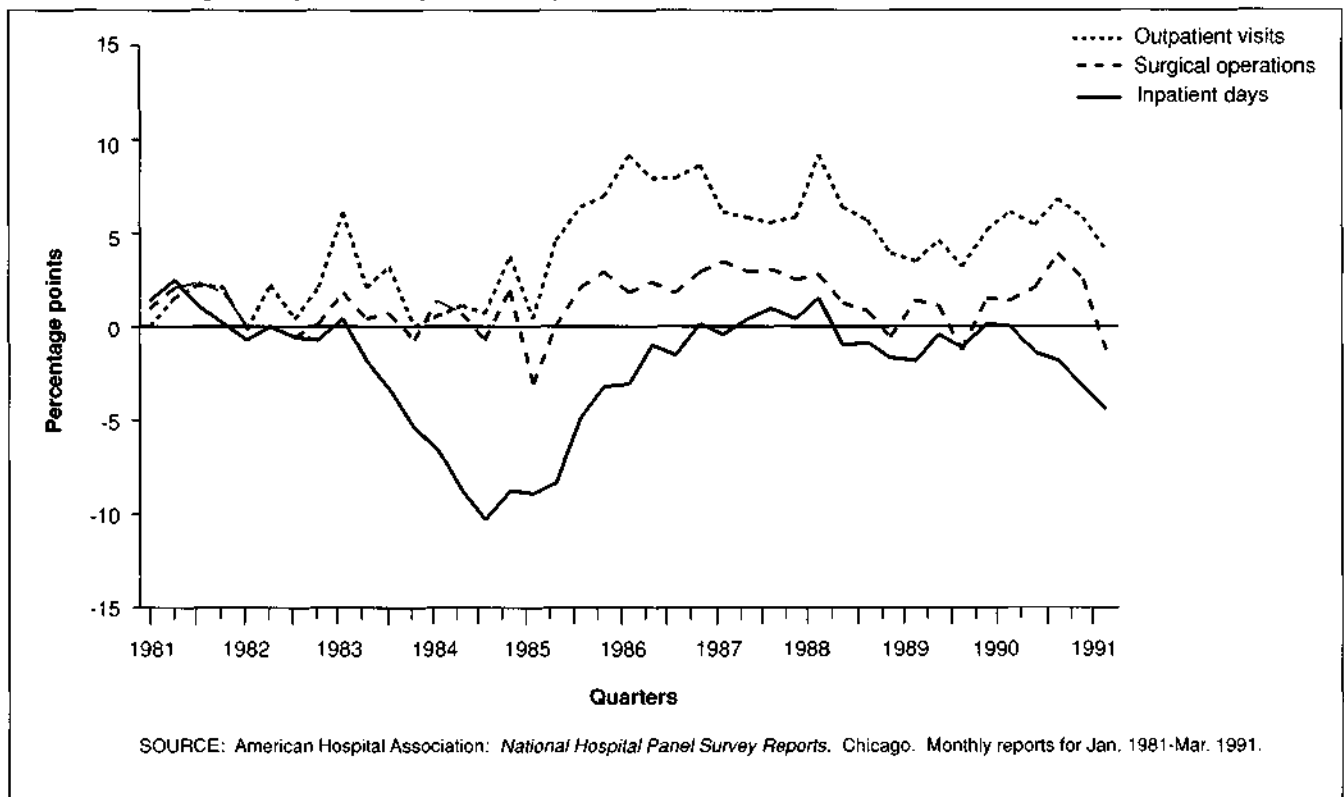
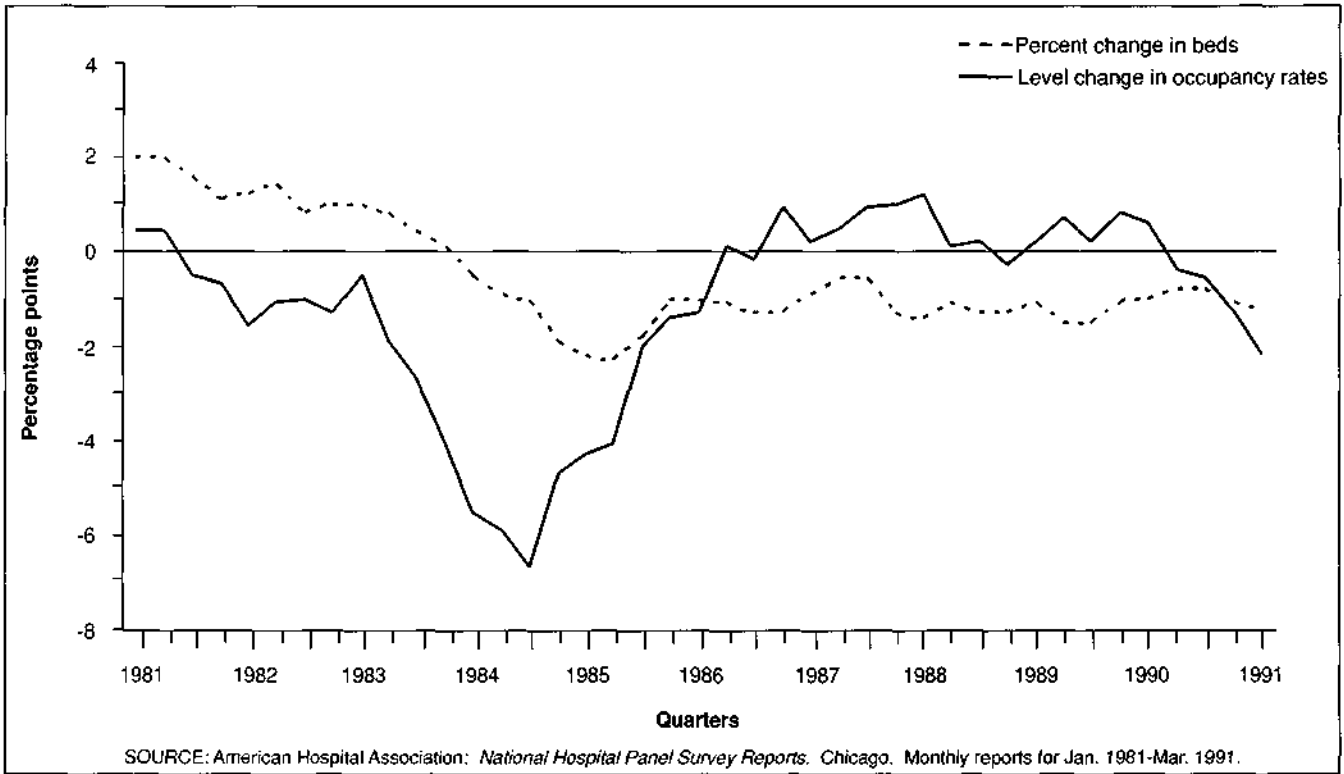


Figure 2

Percent change in beds and level change in occupancy rates from the same period of previous year:  
1981-91



**Table 3**  
**Employment, hours, and earnings in private<sup>1</sup> health service establishments,**  
**by selected type of establishment: 1988-91**

Type of establishment and measure	Calendar year			1988	1989	1990	1990	1990	1990	1991
	1988	1989	1990	Q1	Q1	Q1	Q2	Q3	Q4	Q1
<b>Health services (SIC 80)</b>										
Total employment in thousands	7,121.0	7,483.7	7,844.0	6,971.2	7,356.0	7,675.7	7,795.2	7,913.5	7,991.4	8,072.5
Non-supervisory workers:										
Employment in thousands	6,324.3	6,654.1	6,973.5	6,186.0	6,542.0	6,822.2	6,931.1	7,036.0	7,104.9	7,176.9
Average weekly hours	32.4	32.5	32.6	32.5	32.4	32.4	32.4	32.8	32.6	32.4
Average hourly earnings	\$9.21	\$9.82	\$10.41	\$9.00	\$9.62	\$10.24	\$10.31	\$10.47	\$10.61	\$10.74
<b>Offices and clinics of medical doctors (SIC 801)</b>										
Total employment in thousands	1,203.8	1,273.7	1,353.1	1,177.9	1,247.8	1,316.7	1,342.7	1,369.2	1,383.6	1,402.4
Non-supervisory workers:										
Employment in thousands	992.0	1,052.0	1,117.3	967.5	1,031.3	1,086.5	1,109.5	1,131.4	1,141.7	1,155.9
Average weekly hours	31.6	31.9	31.8	31.6	31.8	31.8	31.6	31.9	31.4	31.8
Average hourly earnings	\$9.07	\$9.78	\$10.59	\$8.88	\$9.54	\$10.32	\$10.47	\$10.68	\$10.91	\$11.05
<b>Offices and clinics of dentists (SIC 802)</b>										
Total employment in thousands	484.6	501.2	513.7	478.7	492.7	510.0	513.6	515.3	516.0	518.4
Non-supervisory workers:										
Employment in thousands	424.5	438.6	450.4	420.2	431.3	447.2	450.6	451.4	452.3	455.2
Average weekly hours	28.5	28.5	28.4	28.6	28.4	28.3	28.4	28.5	28.5	28.3
Average hourly earnings	\$8.82	\$9.41	\$10.14	\$8.64	\$9.25	\$9.89	\$10.09	\$10.23	\$10.33	\$10.46
<b>Nursing and personal care facilities (SIC 805)</b>										
Total employment in thousands	1,314.3	1,360.7	1,419.8	1,295.6	1,339.5	1,389.9	1,409.8	1,430.1	1,449.4	1,467.8
Non-supervisory workers:										
Employment in thousands	1,187.0	1,230.3	1,282.9	1,169.6	1,211.1	1,255.3	1,274.4	1,292.2	1,309.6	1,325.1
Average weekly hours	31.6	31.9	32.1	31.4	31.6	31.7	31.9	32.6	32.3	32.0
Average hourly earnings	\$6.33	\$6.80	\$7.24	\$6.17	\$6.65	\$7.09	\$7.20	\$7.29	\$7.39	\$7.46
<b>Private hospitals (SIC 806)</b>										
Total employment in thousands	3,295.0	3,440.2	3,547.0	3,226.4	3,397.8	3,499.4	3,530.3	3,569.9	3,588.5	3,607.1
Non-supervisory workers:										
Employment in thousands	3,010.8	3,146.9	3,247.0	2,946.1	3,108.1	3,201.5	3,230.2	3,269.2	3,287.1	3,306.1
Average weekly hours	34.0	34.0	34.2	34.1	33.9	34.2	34.2	34.4	34.1	34.0
Average hourly earnings	\$10.51	\$11.21	\$11.79	\$10.24	\$10.97	\$11.63	\$11.67	\$11.86	\$12.01	\$12.16
<b>All private non-agricultural establishments</b>										
Total employment in thousands	88,150	90,550	91,649	85,680	88,615	90,189	91,906	92,562	91,940	89,408
Non-supervisory workers:										
Employment in thousands	71,383	73,400	74,254	69,166	71,632	72,921	74,494	75,078	74,525	72,097
Average weekly hours	34.7	34.6	34.5	34.4	34.3	34.2	34.5	34.8	34.4	33.9
Average hourly earnings	\$9.28	\$9.65	\$10.01	\$9.16	\$9.54	\$9.89	\$9.96	\$10.04	\$10.16	\$10.23
<b>Employment in thousands</b>										
All hospitals	4,600.9	4,742.0	4,864.0	4,532.2	4,698.0	4,803.3	4,842.0	4,892.6	4,917.9	4,943.0
Private hospitals (SIC 806)	3,295.0	3,440.2	3,547.0	3,226.4	3,397.8	3,499.4	3,530.3	3,569.9	3,588.5	3,607.1
Federal hospitals	240.7	227.4	233.4	250.1	225.6	232.2	233.3	234.2	233.7	235.9
State hospitals	446.2	442.4	430.5	442.7	448.5	429.9	430.1	430.3	431.6	430.2
Local hospitals	619.0	632.0	653.1	613.0	626.1	641.8	648.3	658.2	664.1	669.8

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

NOTES: Data for 1989 quarter 2 and later reflect Bureau of Labor Statistics' annual benchmark revisions. Data presented here incorporates 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. 1988-Mar. 1991.



Table 4

**Percent change in employment, hours, and earnings in private<sup>1</sup> health service establishments,  
by selected type of establishment: 1988-91**

Type of establishment and measure	Calendar year			1988 Q1	1989 Q1	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1
	1988	1989	1990							
<b>Health services (SIC 80)</b>	Annual percent change			Percent change from the same period of previous year						
Total employment	4.6	5.1	4.8	4.2	5.5	4.3	4.6	5.0	5.3	5.2
Non-supervisory workers:										
Employment	4.5	5.2	4.8	4.0	5.8	4.3	4.6	5.0	5.3	5.2
Average weekly hours	0.2	0.3	0.3	0.6	-0.3	0.0	0.0	0.6	0.3	0.0
Average hourly earnings	5.9	6.7	5.9	5.1	6.9	6.4	6.4	5.7	5.3	4.9
<b>Offices and clinics of medical doctors (SIC 801)</b>										
Total employment	5.4	5.8	6.2	5.4	5.9	5.5	6.0	6.7	6.7	6.5
Non-supervisory workers:										
Employment	4.9	6.0	6.2	4.5	6.6	5.3	6.0	6.7	6.7	6.4
Average weekly hours	1.4	0.9	-0.3	1.6	0.6	0.0	-0.6	-0.3	-1.9	0.0
Average hourly earnings	5.3	7.9	8.3	4.2	7.4	8.2	8.7	8.4	8.0	7.1
<b>Offices and clinics of dentists (SIC 802)</b>										
Total employment	3.0	3.4	2.5	3.1	2.9	3.5	2.5	2.2	1.8	1.6
Non-supervisory workers:										
Employment	2.4	3.3	2.7	2.4	2.6	3.7	2.8	2.3	2.0	1.8
Average weekly hours	0.8	-0.1	-0.2	1.8	-0.7	-0.4	-1.0	0.7	0.0	0.0
Average hourly earnings	3.9	6.6	7.7	2.4	7.0	7.0	8.2	8.5	7.3	5.8
<b>Nursing and personal care facilities (SIC 805)</b>										
Total employment	2.3	3.5	4.3	1.9	3.4	3.8	4.1	4.4	5.2	5.6
Non-supervisory workers:										
Employment	2.2	3.6	4.3	1.8	3.5	3.7	4.0	4.2	5.2	5.6
Average weekly hours	0.0	1.0	0.6	0.3	0.6	0.3	0.6	1.2	1.3	0.9
Average hourly earnings	5.4	7.4	6.6	4.3	7.8	6.7	7.1	6.4	6.0	5.3
<b>Private hospitals (SIC 806)</b>										
Total employment	4.8	4.4	3.1	4.4	5.3	3.0	2.9	3.1	3.4	3.1
Non-supervisory workers:										
Employment	5.0	4.5	3.2	4.5	5.5	3.0	3.0	3.2	3.5	3.3
Average weekly hours	-0.5	0.1	0.7	0.0	-0.6	0.9	0.9	0.6	0.3	-0.6
Average hourly earnings	6.8	6.7	5.2	6.1	7.1	6.0	5.5	4.8	4.5	4.6
<b>All private non-agricultural establishments</b>										
Total employment	3.5	2.7	1.2	3.5	3.4	1.8	1.5	1.3	0.4	-0.9
Non-supervisory workers:										
Employment	3.5	2.8	1.2	3.5	3.6	1.8	1.5	1.2	0.2	-1.1
Average weekly hours	-0.2	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.6	-0.9
Average hourly earnings	3.4	4.0	3.7	2.8	4.1	3.7	3.9	3.8	3.5	3.4
<b>Employment</b>										
All hospitals	3.7	3.1	2.6	3.7	3.7	2.2	2.4	2.7	3.0	2.9
Private hospitals (SIC 806)	4.8	4.4	3.1	4.4	5.3	3.0	2.9	3.1	3.4	3.1
Federal hospitals	-3.5	-5.5	2.6	2.4	-9.8	2.9	3.7	2.5	1.4	1.6
State hospitals	1.7	-0.9	-2.7	1.7	1.3	-4.1	-3.3	-2.4	-0.9	0.1
Local hospitals	2.1	2.1	3.3	1.8	2.1	2.5	3.1	3.7	4.0	4.4

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

NOTES: Data for 1989 quarter 2 and later reflect Bureau of Labor Statistics' annual benchmark revisions. Data presented here incorporates 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. 1988-Mar. 1991.

**Figure 3**  
**Percent change in indicators of national economic activity from the same period of previous year:**  
**1983-91**

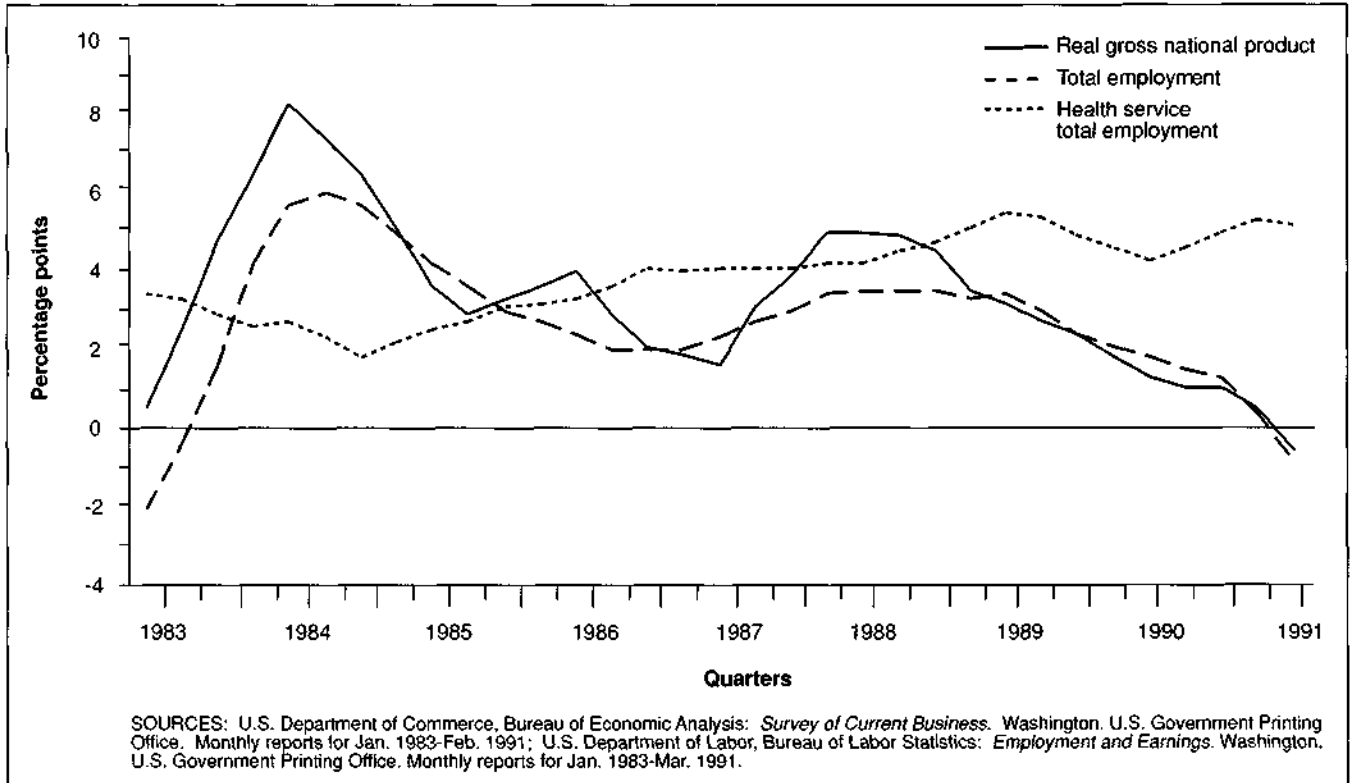


Table 5

**Percent change in implied non-supervisory payrolls and work-hours in private<sup>1</sup> health service establishments, by selected type of establishment: 1988-91**

Type of establishment	Calendar year			1988 Q1	1989 Q1	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1
	1988	1989	1990							
<b>Private health service establishments (SIC 80)</b>	Annual percent change			Percent change from the same period of previous year						
Payrolls	10.9	12.4	11.3	9.9	12.7	11.2	11.5	11.6	11.1	10.3
Work-hours	4.7	5.3	5.0	4.7	5.4	4.3	4.6	5.6	5.6	5.2
<b>Offices and clinics of medical doctors (SIC 801)</b>										
Payrolls	12.1	15.5	14.6	10.8	14.9	14.2	14.3	15.5	14.4	13.7
Work-hours	6.4	7.1	5.4	6.2	7.3	5.3	5.3	6.4	4.7	6.4
<b>Offices and clinics of dentists (SIC 802)</b>										
Payrolls	7.1	10.1	10.4	6.8	9.0	10.5	10.1	11.6	9.5	7.7
Work-hours	3.2	3.2	2.5	4.3	1.9	3.3	1.7	3.0	2.0	1.8
<b>Nursing and personal care facilities (SIC 805)</b>										
Payrolls	7.8	12.3	12.1	6.5	12.1	11.0	12.2	12.4	12.7	12.0
Work-hours	2.2	4.6	5.2	2.1	4.2	4.0	4.7	5.5	6.5	6.6
<b>Private hospitals (SIC 806)</b>										
Payrolls	11.7	11.6	9.3	11.0	12.5	10.1	9.6	8.8	8.5	7.4
Work-hours	4.5	4.6	3.9	4.5	4.9	3.9	3.9	3.8	3.8	2.7
<b>All private non-agricultural establishments</b>										
Payrolls	6.8	6.6	4.7	6.1	7.7	5.2	5.1	5.1	3.4	1.2
Work-hours	3.3	2.5	0.9	3.2	3.3	1.5	1.2	1.2	-0.4	-2.0

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

NOTES: Data for 1989 quarter 2 and later reflect Bureau of Labor Statistics' annual benchmark revisions. Data presented here incorporates 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. 1988-Mar. 1991.

Figure 4

Percent change in measures of price inflation from the same period of previous year: 1981-91

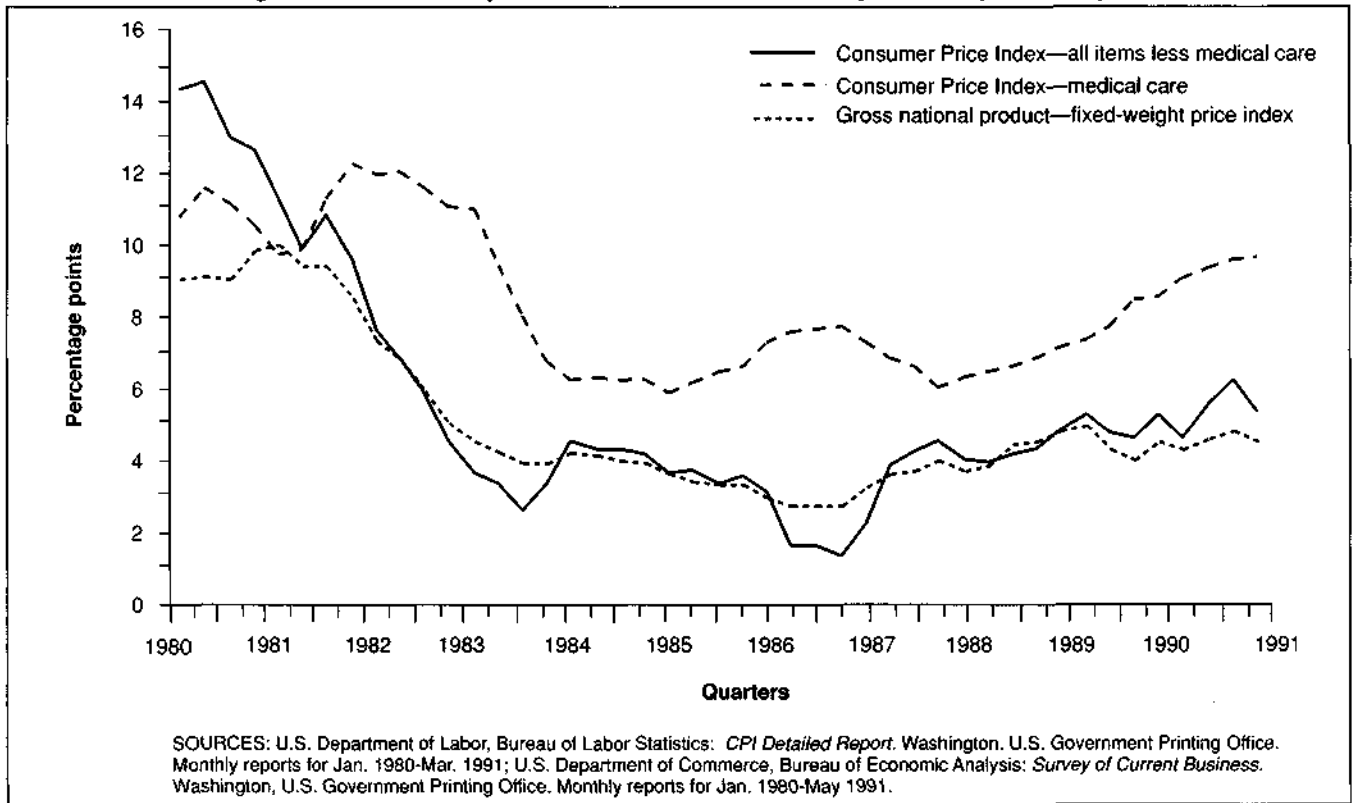


Table 6  
Selected items of the Consumer Price Index for all urban consumers: 1988-91

Item	Calendar year			1988 Q1	1989 Q1	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1
	1988	1989	1990							
All items	118.3	124.0	130.7	116.1	121.7	128.0	129.3	131.6	133.7	134.8
All items less medical care	117.0	122.4	128.8	114.9	120.2	126.3	127.5	129.6	131.7	132.6
Apparel and upkeep	115.4	118.6	124.1	111.6	116.6	120.8	125.2	123.3	127.1	126.3
Energy	89.2	94.3	102.1	87.0	89.4	96.5	97.3	103.8	110.8	103.2
Food and beverages	118.2	124.9	132.1	115.8	122.7	130.7	131.3	132.7	133.7	136.2
Housing: shelter	127.1	132.8	140.0	125.1	130.4	136.9	138.6	141.9	142.5	144.6
Medical care	138.6	149.2	162.8	135.4	145.0	157.4	160.8	164.8	168.2	172.4
Medical care services <sup>1</sup>	138.3	148.9	162.7	135.2	144.8	157.1	160.5	164.7	168.4	172.6
Professional services	137.5	146.4	156.1	134.4	143.4	152.2	155.0	157.7	159.5	162.3
Physicians' services	139.8	150.0	160.8	136.3	146.8	156.5	159.8	162.6	164.5	167.4
Dental services	137.5	146.0	155.8	134.5	143.0	152.3	154.4	157.1	159.3	162.7
Hospital and related services	143.9	160.5	178.0	138.9	154.6	171.5	174.5	180.3	185.8	190.9
Hospital room	143.3	158.1	175.4	138.1	152.8	169.7	172.2	177.6	182.1	187.3
Other inpatient services <sup>2</sup>	114.0	128.9	142.7	109.6	123.9	136.7	139.4	144.7	150.0	153.7
Outpatient services <sup>2</sup>	112.5	124.7	138.7	109.3	119.9	134.0	136.3	140.1	144.4	148.9
Medical care commodities	139.9	150.8	163.4	136.2	146.0	158.5	162.3	165.0	167.9	171.7
Prescription drugs	152.0	165.2	181.7	147.7	159.4	175.5	180.2	183.8	187.2	192.9
Non-prescription drugs and medical supplies <sup>2</sup>	108.1	114.6	120.6	105.6	111.7	118.0	120.1	121.2	123.2	124.1
Internal and respiratory over-the-counter drugs	130.8	138.7	145.9	127.6	135.4	142.6	144.9	146.4	149.8	150.4
Non-prescription medical equipment and supplies	123.9	131.1	138.0	121.0	127.6	135.2	138.1	138.9	139.9	141.4

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

<sup>2</sup>December 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. 1988-Mar. 1991.

**Table 7**

**Percent change in selected items of the Consumer Price Index for all urban consumers: 1988-91**

Item	Calendar year			1988 Q1	1989 Q1	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1
	1988	1989	1990							
	Annual percent change			Percent change from the same period of previous year						
All items	4.1	4.8	5.4	4.0	4.8	5.2	4.6	5.5	6.2	5.3
All items less medical care	3.9	4.6	5.2	3.8	4.6	5.0	4.3	5.3	6.0	5.0
Apparel and upkeep	4.3	2.8	4.6	4.2	4.5	3.6	4.6	5.7	4.7	4.5
Energy	0.8	5.7	8.2	2.2	2.8	8.0	0.2	6.8	18.3	6.9
Food and beverages	4.1	5.7	5.8	3.1	5.9	6.5	5.4	5.6	5.5	4.2
Housing: shelter	4.8	4.5	5.4	5.1	4.3	5.0	5.2	6.0	5.4	5.6
Medical care	6.5	7.7	9.1	6.3	7.1	8.5	9.0	9.3	9.5	9.6
Medical care services <sup>1</sup>	6.5	7.6	9.3	6.2	7.2	8.5	9.1	9.6	9.8	9.8
Professional services	6.7	6.4	6.6	6.9	6.7	6.2	6.6	6.9	6.9	6.6
Physicians' services	7.2	7.3	7.2	7.0	7.7	6.6	7.3	7.4	7.4	7.0
Dental services	6.8	6.2	6.7	7.5	6.3	6.5	6.3	6.9	6.8	6.8
Hospital and related services	9.4	11.5	10.9	8.0	11.3	10.9	10.8	10.9	11.1	11.3
Hospital room	9.2	10.3	10.9	7.7	10.6	11.1	11.2	11.1	10.4	10.4
Other inpatient services	9.7	13.1	10.7	8.3	13.0	10.3	10.1	10.7	11.7	12.5
Outpatient services	8.9	10.9	11.2	8.1	9.7	11.8	11.2	10.6	11.2	11.1
Medical care commodities	6.9	7.8	8.4	6.8	7.2	8.5	8.3	8.3	8.2	8.4
Prescription drugs	7.9	8.7	10.0	8.0	7.9	10.1	10.0	9.9	9.7	9.9
Non-prescription drugs and medical supplies	4.9	6.0	5.2	4.5	5.8	5.6	5.0	5.1	5.2	5.2
Internal and respiratory over-the-counter drugs	5.5	6.1	5.2	5.3	6.1	5.3	4.6	5.0	5.7	5.5
Non-prescription medical equipment and supplies	3.6	5.8	5.3	3.0	5.5	5.9	5.7	5.2	4.3	4.6

<sup>1</sup> includes 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. 1988-Mar. 1991.

**Table 8**

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

Expense category <sup>1</sup>	Base year weights 1987 <sup>2</sup>	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	5.6	5.4	5.1	4.8	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	6.4	6.6	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	-0.5	2.3	4.8	7.5	8.5	5.7	6.2	9.7
Fuel oil, coal, and other fuel	0.625	-4.2	0.9	6.2	13.6	17.3	11.3	13.9	22.2
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	3.7	3.7
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	5.1	5.0	4.7	4.4	4.4
Business services	3.845	4.2	4.5	5.1	5.5	5.8	5.8	5.4	5.0
Computer and data processing	1.992	7.0	6.7	7.1	7.3	7.4	7.2	6.6	6.2
Transportation and shipping	1.233	3.3	4.3	4.7	5.0	5.1	3.8	4.1	5.6
Telephone	0.987	-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 <sup>1</sup>	Base year weights 1987 <sup>2</sup>	Four quarters ending							
		1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
Total	100.000	4.8	4.7	4.4	3.9	3.8	3.9	4.2	4.5
Wages and salaries	52.212	4.9	4.8	4.7	4.5	4.6	4.7	4.8	4.9
Employee benefits	9.497	7.5	7.2	7.0	6.6	6.5	6.5	6.3	6.4
Other professional fees	1.649	4.7	4.6	4.6	4.7	4.9	5.0	5.0	4.9
Energy and utilities	2.376	9.1	9.1	4.2	-5.5	-8.3	-7.6	-3.6	2.6
Fuel oil, coal, and other fuel	0.625	18.9	18.2	5.8	-16.5	-21.3	-19.6	-12.0	2.5
Electricity	1.143	4.2	4.7	5.0	5.1	3.6	3.0	2.7	2.1
Natural gas	0.343	-2.4	-2.0	-1.8	-3.5	-5.0	-3.5	-0.3	3.8
Motor gasoline	0.229	17.9	17.5	3.1	-18.3	-22.8	-21.2	-11.9	2.9
Water and sewerage maintenance	0.036	6.5	6.5	6.5	6.5	6.8	7.1	7.2	7.3
Professional liability insurance	1.433	-0.7	-1.7	-1.8	1.3	2.9	3.1	3.8	4.1
All other	32.839	3.7	3.7	3.5	2.9	2.6	2.6	2.9	3.4
Other products	21.788	3.5	3.5	3.3	2.6	2.1	2.1	2.5	3.0
Pharmaceuticals	3.873	8.4	8.3	8.5	8.8	9.2	8.9	8.5	7.9
Food	3.299	3.7	3.0	2.5	2.4	2.7	3.3	3.7	3.9
Direct purchase	2.111	3.2	2.4	1.8	1.8	2.3	2.9	3.3	3.5
Contract service	1.188	4.5	4.1	3.7	3.5	3.5	3.9	4.4	4.8
Chemicals and cleaning products	3.126	1.1	3.0	3.3	0.2	-1.9	-2.6	-2.4	-0.2
Surgical and medical instruments	2.672	2.4	2.3	2.1	2.2	2.2	2.4	2.6	2.7
Photographic supplies	2.623	2.8	1.7	-0.1	-1.4	-2.7	-2.2	-0.6	0.7
Rubber and plastics	2.323	1.3	1.8	2.3	2.1	1.6	1.3	1.3	1.8
Paper products	1.399	1.1	0.6	0.0	-0.6	-1.2	-0.8	0.1	1.2
Apparel	1.142	2.3	2.1	2.0	1.8	1.5	0.9	0.1	-0.2
Minor machinery and equipment	0.497	2.6	2.6	2.8	2.9	3.0	2.8	2.7	2.7
Miscellaneous products	0.833	4.5	4.2	3.1	1.4	1.0	1.3	2.1	3.3
Other services	11.051	4.3	4.2	3.9	3.6	3.5	3.6	3.8	4.1
Business services	3.845	4.6	3.9	3.4	3.2	3.3	3.6	4.0	4.2
Computer and data processing	1.992	5.7	4.7	3.9	3.2	3.1	3.6	4.5	5.4
Transportation and shipping	1.233	5.8	6.7	5.9	3.1	2.3	2.1	2.8	4.2
Telephone	0.987	0.4	0.9	1.9	2.5	2.9	2.7	2.4	2.1
Blood services	0.588	0.2	0.5	0.4	1.3	2.8	3.4	4.0	3.2
Postage	0.372	2.7	7.0	11.4	15.7	14.3	9.7	5.4	1.4
Other—labor intensive	1.233	4.0	3.8	3.6	3.4	3.6	3.8	4.0	4.2
Other—non-labor intensive	0.800	5.4	5.4	5.0	4.2	3.6	3.4	3.3	3.5

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

<sup>2</sup> Category weights may not sum to total because of rounding.

NOTES: Data for 1989 and 1990 are historical. Data for 1991 are partly historical and partly forecasted. Data for 1992 are 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.

SOURCE: 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 are 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 <sup>1</sup>	Base year	1989	1989	1989	1989	1990	1990	1990	1990
	weights 1987 <sup>2</sup>	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Total	100.000	109.9	111.3	112.6	113.5	115.3	116.4	118.0	119.5
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	111.6	113.4	115.8	117.4	120.9	122.4	124.4	126.5
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	101.4	111.1	110.2	106.7	110.3	110.8	119.8	130.1
Fuel oil, coal, and other fuel	0.625	103.4	123.1	113.9	115.9	124.0	120.7	138.9	174.2
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	32.839	110.9	112.3	112.7	113.5	114.8	115.9	116.8	118.4
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	126.9
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	110.7	111.6	113.1	114.4	115.4	116.8
Business services	3.845	107.9	109.2	110.6	111.7	113.8	115.3	116.0	116.5
Computer and data processing	1.992	114.3	116.6	118.6	120.1	121.8	124.3	125.8	126.9
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 <sup>1</sup>	Base year weights 1987 <sup>2</sup>	1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
Total	100.000	120.4	121.1	122.4	123.6	125.3	126.6	128.2	129.4
Wages and salaries	52.212	119.6	120.6	122.5	123.8	125.5	126.7	128.5	129.5
Employee benefits	9.497	129.0	130.5	132.9	134.4	137.3	138.9	141.1	143.1
Other professional fees	1.649	119.0	120.1	122.3	123.7	125.3	126.2	128.1	129.0
Energy and utilities	2.376	117.2	110.7	108.4	108.9	110.0	114.3	116.3	116.1
Fuel oil, coal, and other fuel	0.625	133.2	114.9	106.0	111.8	113.4	119.8	120.0	124.3
Electricity	1.143	109.9	110.6	114.5	111.5	111.6	113.4	117.0	113.7
Natural gas	0.343	103.5	95.9	92.1	93.3	97.3	99.5	100.4	102.3
Motor gasoline	0.229	128.4	119.6	105.9	108.8	108.3	122.3	122.8	122.9
Water and sewerage maintenance	0.036	125.4	127.5	130.7	131.4	134.4	137.3	140.2	141.0
Professional liability insurance	1.433	127.8	132.5	132.5	129.9	132.9	134.1	137.3	139.7
All other	32.839	119.2	119.6	119.8	120.9	122.2	123.4	124.4	125.6
Other products	21.788	119.9	120.0	120.2	121.0	122.2	123.4	124.5	125.6
Pharmaceuticals	3.873	137.4	142.1	143.6	146.7	150.3	153.2	154.5	157.0
Food	3.299	115.2	116.4	117.4	118.1	119.6	120.9	122.1	122.8
Direct purchase	2.111	113.9	115.3	116.2	116.6	118.0	119.3	120.3	120.4
Contract service	1.188	117.4	118.3	119.5	120.9	122.3	123.9	125.5	127.1
Chemicals and cleaning products	3.126	124.4	120.8	120.1	119.5	119.7	119.9	121.4	122.8
Surgical and medical instruments	2.672	110.8	111.3	111.5	112.3	113.5	114.3	114.7	115.5
Photographic supplies	2.623	117.5	113.9	112.4	113.2	113.9	114.7	115.6	116.1
Rubber and plastics	2.323	113.6	113.7	113.8	113.7	114.1	115.2	116.6	117.3
Paper products	1.399	119.4	117.6	117.3	117.9	118.0	118.6	119.7	121.3
Apparel	1.142	109.4	110.1	110.7	110.1	109.9	109.7	109.8	110.0
Minor machinery and equipment	0.497	111.5	112.8	113.4	113.8	114.7	115.4	116.3	117.2
Miscellaneous products	0.833	115.8	114.8	114.8	116.2	117.5	118.6	119.5	120.9
Other services	11.051	117.7	118.7	119.2	120.5	122.3	123.4	124.3	125.6
Business services	3.845	118.0	118.6	119.3	120.6	122.6	123.5	124.5	126.0
Computer and data processing	1.992	127.1	128.1	128.9	130.4	132.4	134.5	136.5	138.8
Transportation and shipping	1.233	119.3	119.6	118.9	121.0	122.3	124.8	125.2	126.7
Telephone	0.987	102.1	103.5	103.5	104.0	104.9	105.3	105.6	106.1
Blood services	0.588	105.7	107.2	106.3	109.4	111.9	111.2	109.0	110.0
Postage	0.372	125.7	133.3	133.3	133.3	133.3	133.3	133.3	133.3
Other—labor intensive	1.233	114.5	115.5	116.2	117.4	119.7	120.4	121.1	121.8
Other—non-labor intensive	0.800	119.9	120.5	121.6	122.5	123.5	124.9	126.1	127.1

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

<sup>2</sup>Category weights may not sum to total because of rounding.

NOTES: Data for 1989 and 1990 are historical. Data for 1991 are partly historical and partly forecasted. Data for 1992 are 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 forecasts are 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 <sup>1</sup>	Base year weights 1977 <sup>2</sup>	Four quarters ending							
		1989 Q1	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4
Total	100.00	5.7	6.2	6.4	6.5	6.4	6.3	6.3	6.3
Wages and salaries	63.02	6.3	7.0	7.3	7.4	7.1	7.0	6.8	6.6
Employee benefits	7.60	5.3	5.1	4.5	3.9	3.9	4.0	4.3	4.7
Food	9.74	5.1	5.8	5.5	5.2	4.8	4.5	4.7	4.5
Direct purchase	4.93	5.4	6.0	5.2	4.5	3.5	3.3	3.7	3.5
Contract service	4.81	4.9	5.7	5.8	5.8	6.0	5.6	5.5	5.3
Fuel and other energy	4.27	1.2	1.5	2.3	3.9	5.8	6.0	6.9	9.2
Electricity	1.21	1.6	2.1	2.8	2.8	3.1	2.9	2.5	2.3
Natural gas	0.91	1.2	2.4	3.0	2.8	2.1	1.2	0.5	0.2
Fuel oil and coal	1.66	-0.8	-1.0	0.3	4.7	10.2	11.5	14.8	21.2
Water and sewerage maintenance	0.49	5.7	6.0	6.0	6.1	6.2	6.4	6.6	6.7
All other	15.37	5.1	5.4	5.5	5.6	5.6	5.6	5.7	6.0
Drugs	1.50	8.1	8.5	9.0	9.1	9.3	9.5	9.2	8.9
Supplies	3.28	4.3	4.6	4.7	4.8	4.9	4.7	5.0	5.4
Health services	1.21	7.4	7.4	7.4	7.3	7.1	7.1	7.1	7.2
Other business services	4.59	4.7	4.8	4.9	4.9	5.0	5.1	5.1	5.3
Miscellaneous	4.79	4.3	4.6	4.7	4.8	4.9	4.7	5.0	5.4

Expense category <sup>1</sup>	Base year weights 1977 <sup>2</sup>	Four quarters ending							
		1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
Total	100.00	5.9	5.7	5.6	5.3	5.4	5.4	5.5	5.7
Wages and salaries	63.02	6.2	6.0	6.0	6.0	6.4	6.5	6.4	6.4
Employee benefits	7.60	5.0	5.4	5.8	6.0	6.0	5.9	5.8	5.6
Food	9.74	3.8	3.2	2.7	2.5	2.8	3.1	3.4	3.5
Direct purchase	4.93	3.2	2.4	1.8	1.9	2.4	2.9	3.3	3.5
Contract service	4.81	4.3	3.8	3.4	3.1	3.2	3.3	3.4	3.5
Fuel and other energy	4.27	7.7	7.0	4.8	-1.7	-3.7	-2.8	-0.9	3.3
Electricity	1.21	2.5	2.7	3.8	4.5	4.1	3.9	3.0	2.3
Natural gas	0.91	0.1	1.7	3.6	3.9	3.6	2.4	1.5	2.3
Fuel oil and coal	1.66	16.6	13.5	5.5	-11.4	-16.1	-13.5	-7.9	3.2
Water and sewerage maintenance	0.49	6.5	6.5	6.5	6.5	6.8	7.1	7.2	7.3
All other	15.37	5.9	5.9	5.6	5.1	4.8	4.6	4.5	4.5
Drugs	1.50	8.4	8.3	8.5	8.8	9.2	8.9	8.5	7.9
Supplies	3.28	5.4	5.4	5.0	4.1	3.5	3.3	3.3	3.5
Health services	1.21	7.3	7.1	7.0	6.8	6.9	6.9	6.8	6.7
Other business services	4.59	5.3	5.2	5.0	4.7	4.3	4.1	3.9	3.9
Miscellaneous	4.79	5.4	5.4	5.0	4.1	3.5	3.3	3.3	3.5

<sup>1</sup>For data sources used to estimate the input price index relative weights and choice of price proxies, see the *Federal Register* (1987).

<sup>2</sup>Category weights may not sum to total because of rounding.

NOTES: Data for 1989 and 1990 are historical. Data for 1991 are partly historical and partly forecasted. Data for 1992 are 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 1991 forecasts are 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 <sup>1</sup>	Base year	1989	1989	1989	1989	1990	1990	1990	1990
	weights	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	1977 <sup>2</sup>								
Total	100.00	203.4	205.7	208.8	212.2	216.3	218.8	221.5	225.4
Wages and salaries	63.02	203.4	205.7	209.5	213.3	217.0	220.4	223.0	226.2
Employee benefits	7.60	208.2	209.9	211.5	213.4	217.4	219.1	221.6	224.7
Food	9.74	172.1	173.9	174.8	177.0	180.6	182.1	182.7	183.6
Direct purchase	4.93	158.2	158.7	158.9	161.1	162.8	165.4	165.5	165.4
Contract service	4.81	186.3	189.5	191.1	193.3	198.8	199.2	200.4	202.3
Fuel and other energy	4.27	202.4	204.3	204.7	211.4	222.8	212.6	219.2	243.5
Electricity	1.21	198.5	201.3	200.7	203.7	205.0	206.9	203.5	207.6
Natural gas	0.91	227.3	222.8	221.7	227.5	231.5	220.9	219.5	229.2
Fuel oil and coal	1.66	183.0	187.5	188.2	199.3	224.0	201.2	219.8	273.5
Water and sewerage maintenance	0.49	231.1	234.0	239.0	241.9	246.5	249.9	255.1	257.5
All other	15.37	221.1	224.3	226.9	229.6	233.9	237.0	240.4	244.2
Drugs	1.50	271.5	277.7	283.8	289.1	297.6	304.3	307.2	312.5
Supplies	3.28	201.0	204.1	205.7	207.7	211.4	213.5	217.0	220.7
Health services	1.21	250.9	254.5	258.7	261.8	267.5	273.2	277.9	281.3
Other business services	4.59	231.9	234.4	237.1	240.0	243.8	246.7	249.6	253.3
Miscellaneous	4.79	201.0	204.1	205.7	207.7	211.4	213.5	217.0	220.7

Expense category <sup>1</sup>	Base year	1991	1991	1991	1991	1992	1992	1991	1991
	weights	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
	1977 <sup>2</sup>								
Total	100.00	227.3	230.9	233.9	236.2	239.7	244.5	247.2	249.4
Wages and salaries	63.02	228.4	234.1	237.7	239.8	243.5	249.6	252.4	254.5
Employee benefits	7.60	229.5	232.3	235.4	238.1	242.7	245.8	248.4	250.7
Food	9.74	184.5	186.2	187.5	189.2	190.8	192.6	194.2	195.8
Direct purchase	4.93	165.5	167.3	168.5	170.0	171.5	173.0	174.4	175.7
Contract service	4.81	203.9	205.5	207.0	208.7	210.6	212.7	214.6	216.4
Fuel and other energy	4.27	232.7	215.6	215.4	219.4	223.7	226.6	229.4	232.8
Electricity	1.21	213.3	214.1	215.6	217.3	218.5	219.8	220.5	221.1
Natural gas	0.91	234.6	234.2	234.0	233.0	235.1	237.7	240.6	243.6
Fuel oil and coal	1.66	237.2	191.6	188.2	197.2	204.4	207.7	211.2	217.2
Water and sewerage maintenance	0.49	261.7	266.1	272.8	274.4	280.6	286.6	292.6	294.3
All other	15.37	247.3	249.8	252.3	255.0	258.2	261.2	263.7	266.5
Drugs	1.50	320.5	331.6	334.9	342.2	350.6	357.3	360.4	366.2
Supplies	3.28	222.7	223.3	225.2	227.1	229.3	231.4	233.5	235.7
Health services	1.21	286.2	291.7	296.5	300.5	306.6	311.4	316.0	320.0
Other business services	4.59	256.4	258.6	261.2	263.6	266.2	268.8	271.5	274.1
Miscellaneous	4.79	222.7	223.3	225.2	227.1	229.3	231.4	233.5	235.7

<sup>1</sup>For data sources used to estimate the input price index relative weights and choice of price proxies, see the *Federal Register* (1987).

<sup>2</sup>Category weights may not sum to total because of rounding.

NOTES: Data for 1989 and 1990 are historical. Data for 1991 are partly historical and partly forecasted. Data for 1992 are 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 are 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 <sup>1</sup>	Base year weights 1976 <sup>2</sup>	Four quarters ending							
		1989 Q1	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4
Total	100.00	6.3	6.3	6.3	6.1	5.9	5.7	5.4	5.2
Wages and salaries	65.14	7.1	6.9	6.9	6.7	6.4	6.2	5.6	5.2
Employee benefits	7.90	5.3	5.1	4.5	3.9	3.9	4.0	4.3	4.7
Transportation	4.87	3.3	4.3	4.7	5.0	5.1	3.8	4.1	5.6
Office costs	2.79	4.7	4.8	4.9	4.9	5.0	5.1	5.1	5.3
Rent	1.35	3.8	3.8	3.8	3.9	4.0	4.1	4.2	4.2
Non-rental space occupancy	1.17	1.2	1.6	2.4	4.0	5.8	6.1	7.0	9.3
Medical and nursing supplies and equipment	2.81	4.3	4.9	5.4	5.8	5.9	5.9	5.7	5.3
Contract services	6.87	6.3	6.3	6.3	6.1	5.9	5.7	5.4	5.2
Miscellaneous	7.10	4.3	4.6	4.7	4.8	4.9	4.7	5.0	5.4

Expense category <sup>1</sup>	Base year weights 1976 <sup>2</sup>	Four quarters ending							
		1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
Total	100.00	5.0	4.9	4.9	4.8	4.8	4.8	4.9	5.1
Wages and salaries	65.14	4.8	4.7	4.8	5.0	5.1	5.2	5.3	5.4
Employee benefits	7.90	5.0	5.4	5.8	6.0	6.0	5.9	5.8	5.6
Transportation	4.87	5.8	6.7	5.9	3.1	2.3	2.1	2.8	4.2
Office costs	2.79	5.3	5.2	5.0	4.7	4.3	4.1	3.9	3.9
Rent	1.35	4.2	4.1	3.6	3.0	2.4	1.9	1.8	2.2
Non-rental space occupancy	1.17	7.8	7.1	4.8	-1.7	-3.8	-2.9	-0.9	3.4
Medical and nursing supplies and equipment	2.81	4.9	4.6	4.4	4.4	4.2	4.3	4.3	4.4
Contract services	6.87	5.0	4.9	4.9	4.8	4.8	4.8	4.9	5.1
Miscellaneous	7.10	5.4	5.4	5.0	4.1	3.5	3.3	3.3	3.5

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

<sup>2</sup>Category weights may not sum to total because of rounding.

NOTES: Data for 1989 and 1990 are historical. Data for 1991 are partly historical and partly forecasted. Data for 1992 are 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 1991 forecasts are 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 <sup>1</sup>	Base year weights 1976 <sup>2</sup>	1989 Q1	1989 Q2	1989 Q3	1989 Q4	1990 Q1	1990 Q2	1990 Q3	1990 Q4
	Total	100.00	242.8	245.3	249.9	253.4	256.8	257.9	262.1
Wages and salaries	65.14	252.4	254.4	260.3	264.3	267.4	268.3	272.7	276.3
Employee benefits	7.90	231.2	233.0	234.8	237.0	241.3	243.3	246.0	249.4
Transportation	4.87	202.5	209.7	207.8	208.6	212.5	213.7	219.1	229.9
Office costs	2.79	249.7	252.4	255.3	258.5	262.5	265.7	268.8	272.8
Rent	1.35	214.0	215.6	218.3	221.0	222.6	224.7	227.9	230.2
Non-rental space occupancy	1.17	227.8	229.9	230.5	238.2	251.2	239.4	247.1	275.0
Medical and nursing supplies and equipment	2.81	210.9	215.9	218.2	221.7	223.4	228.2	229.6	231.2
Contract services	6.87	242.9	245.3	249.9	253.4	256.8	258.0	262.1	266.3
Miscellaneous	7.10	214.1	217.3	219.0	221.1	225.1	227.3	231.1	235.0

Expense category <sup>1</sup>	Base year weights 1976 <sup>2</sup>	1991 Q1	1991 Q2	1991 Q3	1991 Q4	1992 Q1	1992 Q2	1992 Q3	1992 Q4
	Total	100.00	269.1	270.7	274.6	278.4	281.9	284.6	289.0
Wages and salaries	65.14	279.7	281.6	286.5	290.6	294.3	296.7	302.0	306.6
Employee benefits	7.90	254.8	257.9	261.4	264.3	269.4	272.9	275.8	278.4
Transportation	4.87	224.8	225.5	224.1	228.0	230.4	235.2	235.9	238.8
Office costs	2.79	276.1	278.5	281.3	283.9	286.6	289.4	292.3	295.1
Rent	1.35	231.5	232.9	233.7	234.4	235.3	236.8	239.0	241.9
Non-rental space occupancy	1.17	262.4	242.8	242.7	247.2	252.1	255.4	258.8	262.6
Medical and nursing supplies and equipment	2.81	233.6	237.9	239.5	241.4	242.9	248.3	250.4	252.4
Contract services	6.87	269.1	270.8	274.7	278.4	281.9	284.6	289.0	293.0
Miscellaneous	7.10	237.1	237.7	239.7	241.8	244.1	246.4	248.6	250.9

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

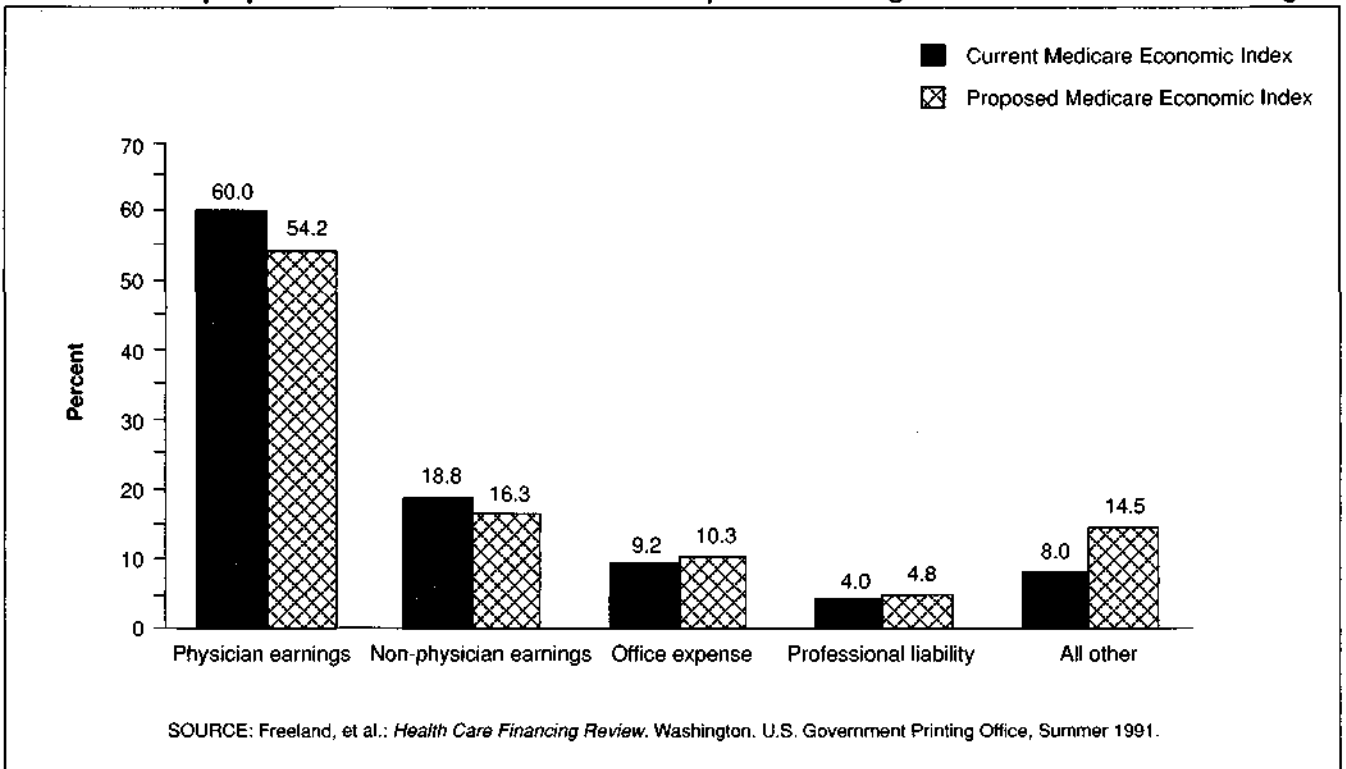
<sup>2</sup>Category weights may not sum to total because of rounding.

NOTES: Data for 1989 and 1990 are historical. Data for 1991 are partly historical and partly forecasted. Data for 1992 are 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 are made by Data Resources, Inc./McGraw-Hill.

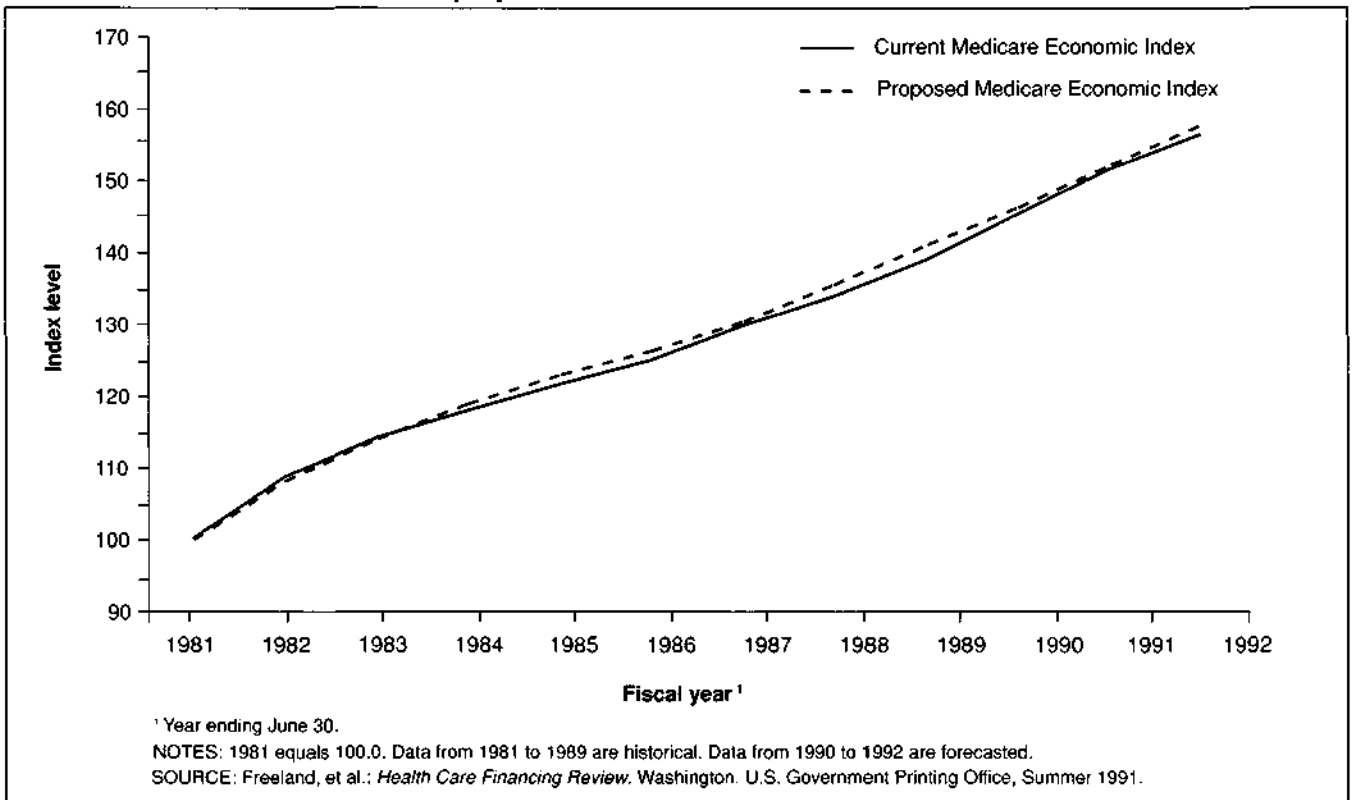
**Figure 5**

**Current versus proposed Medicare Economic Index: Expenditure categories and their associated weights**

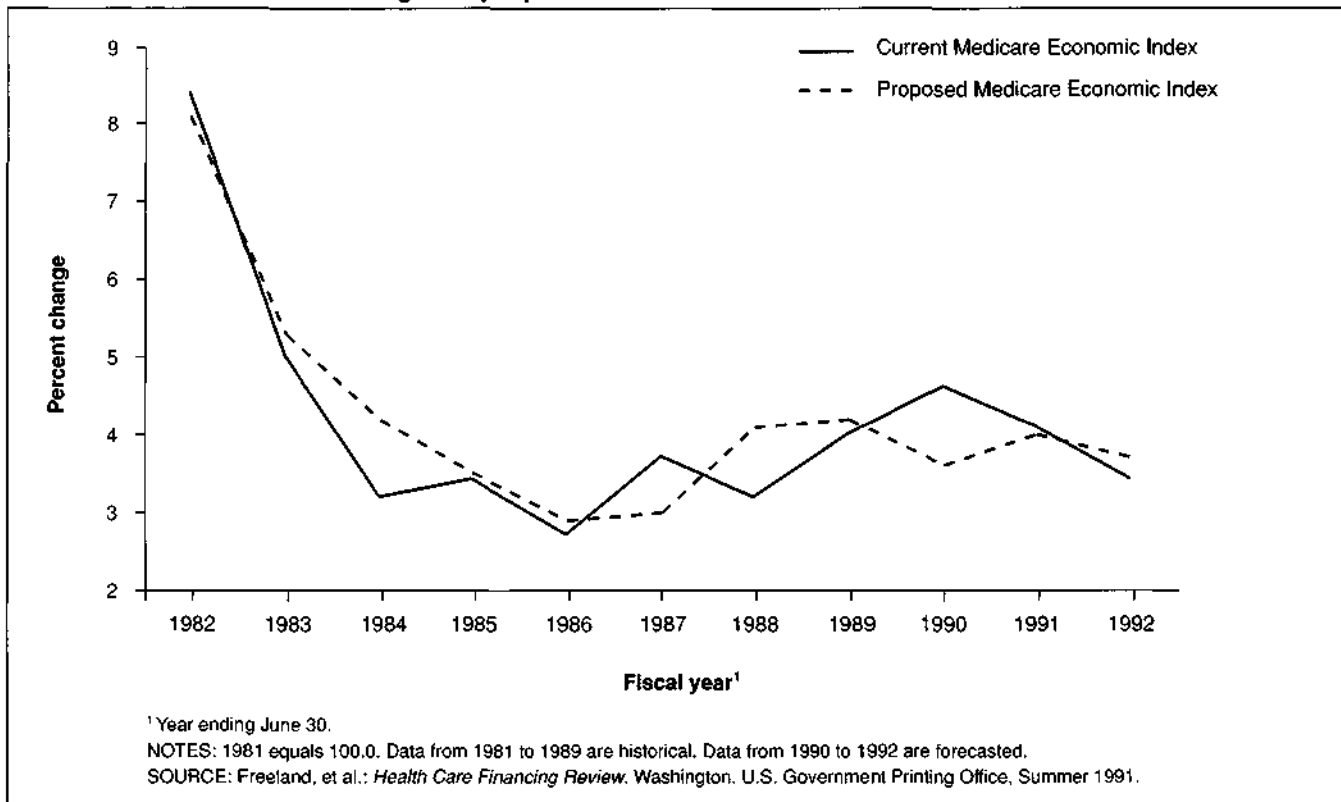


**Figure 6**

**Index levels for proposed versus current Medicare Economic Index**



**Figure 7**  
**Percent changes in proposed versus current Medicare Economic Index**



**Table 14**  
**Selected national economic indicators: 1988-91**

Indicator	Calendar year			1988 Q1	1989 Q1	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1
	1988	1989	1990							
<b>Gross national product</b>										
Billions of dollars	\$4,874	\$5,201	\$5,465	\$4,736	\$5,101	\$5,375	\$5,443	\$5,515	\$5,527	\$5,562
Billions of 1982 dollars	\$4,017	\$4,118	\$4,157	\$3,970	\$4,096	\$4,151	\$4,155	\$4,170	\$4,153	\$4,127
Implicit price deflator (1982 = 100.0)	121.3	126.3	131.5	119.3	124.6	129.5	131.0	132.3	133.1	134.8
<b>Employment, hours, and earnings</b>										
Unemployment rate, all workers	5.5	5.3	5.5	5.7	5.2	5.3	5.3	5.6	5.9	6.5
Private nonagricultural workers:										
Total employment in thousands	88,150	90,550	91,649	85,680	88,615	90,189	91,906	92,562	91,940	89,408
Average weekly hours	34.7	34.6	34.5	34.4	34.3	34.2	34.5	34.8	34.4	33.9
Average hourly earnings	\$9.28	\$9.65	\$10.01	\$9.16	\$9.54	\$9.89	\$9.96	\$10.04	\$10.16	\$10.23
Health services workers:										
Total employment in thousands	7,121	7,484	7,844	6,971	7,356	7,676	7,795	7,914	7,991	8,073
Average weekly hours	32.4	32.5	32.6	32.5	32.4	32.4	32.4	32.8	32.6	32.4
Average hourly earnings	\$9.21	\$9.82	\$10.41	\$9.00	\$9.62	\$10.24	\$10.31	\$10.47	\$10.61	\$10.74
<b>Personal income and savings</b>										
Income in billions	\$4,071	\$4,384	\$4,646	\$3,951	\$4,302	\$4,563	\$4,622	\$4,679	\$4,719	\$4,737
Disposable income in billions	\$3,479	\$3,726	\$3,946	\$3,379	\$3,662	\$3,888	\$3,926	\$3,969	\$4,002	\$4,018
Savings in billions	\$146	\$172	\$180	\$136	\$190	\$191	\$195	\$167	\$168	\$164
Personal saving rate	4.2	4.6	4.6	4.0	5.2	4.9	5.0	4.2	4.2	4.1
<b>Prices<sup>1</sup></b>										
Gross national product fixed-weight price index (1982 = 100.0)										
	123.9	129.5	135.4	121.6	127.6	133.3	134.6	136.0	137.5	139.3
Consumer Price Index, all items										
	118.3	124.0	130.7	116.1	121.7	128.0	129.3	131.6	133.7	134.8
All items less medical care										
	117.0	122.4	128.8	114.9	120.2	126.3	127.5	129.6	131.7	132.6
Apparel and upkeep										
	115.4	118.6	124.1	111.6	116.6	120.8	125.2	123.3	127.1	126.3
Energy										
	89.2	94.3	102.1	87.0	89.4	96.5	97.3	103.8	110.8	103.2
Food and beverages										
	118.2	124.9	132.1	115.8	122.7	130.7	131.3	132.7	133.7	136.2
Housing: shelter										
	127.1	132.8	140.0	125.1	130.4	136.9	138.6	141.9	142.5	144.6
Medical care										
	138.6	149.3	162.8	135.4	145.0	157.4	160.8	164.8	168.2	172.4
Producer Price Index, <sup>2</sup> finished consumer goods										
	106.2	112.1	118.2	104.3	110.0	116.3	116.3	118.4	122.0	120.2

<sup>1</sup>Base period = 1982-84, unless noted.

<sup>2</sup>Formerly 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. 1988-May 1991; U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1988-Mar 1991.



**Table 15**  
**Percent change in selected national economic indicators: 1988-91**

Indicator	Calendar year			1988 Q1	1989 Q1	1990 Q1	1990 Q2	1990 Q3	1990 Q4	1991 Q1
	1988	1989	1990							
<b>Gross national product</b>	Annual percent change			Percent change from the same period of previous year						
Billions of dollars	7.9	6.7	5.1	7.8	7.7	5.4	5.2	5.3	4.5	3.5
Billions of 1982 dollars	4.5	2.5	0.9	5.0	3.2	1.3	1.0	1.0	0.5	-0.6
Implicit price deflator (1982 = 100.0)	3.3	4.1	4.1	2.8	4.4	3.9	4.1	4.3	4.0	4.1
<b>Employment, hours, and earnings</b>										
Unemployment rate, all workers <sup>1</sup>	-0.7	-0.2	0.2	-0.9	-0.5	0.1	0.0	0.3	0.6	1.2
Private non-agricultural workers:										
Total employment	3.5	2.7	1.2	3.5	3.4	1.8	1.5	1.3	0.4	-0.9
Average weekly hours	-0.2	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	0.0	-0.6	-0.9
Average hourly earnings	3.4	4.0	3.7	2.8	4.1	3.7	3.9	3.8	3.5	3.4
Health services workers:										
Total employment	4.6	5.1	4.8	4.2	5.5	4.3	4.6	5.0	5.3	5.2
Average weekly hours	0.2	0.1	0.2	0.6	-0.3	0.0	0.0	0.6	0.3	0.0
Average hourly earnings	5.9	6.7	5.9	5.1	6.9	6.4	6.4	5.7	5.3	4.9
<b>Personal income and savings</b>										
Income	8.1	7.7	6.0	7.6	8.9	6.1	5.9	6.3	5.6	3.8
Disposable income	8.9	7.1	5.9	7.6	8.4	6.2	6.2	6.0	5.3	3.4
Savings	57.5	18.0	4.8	6.3	39.1	0.8	15.5	7.8	-3.8	-14.2
Personal saving rate <sup>1</sup>	1.3	0.4	0.0	-0.1	1.2	-0.3	0.4	0.1	-0.4	-0.8
<b>Prices<sup>2</sup></b>										
Gross national product fixed-weight price index (1982 = 100.0)	4.1	4.5	4.6	3.6	4.9	4.5	4.3	4.6	4.8	4.5
Consumer Price Index, all items	4.1	4.8	5.4	4.0	4.8	5.2	4.6	5.5	6.2	5.3
All items less medical care	3.9	4.6	5.2	3.8	4.6	5.0	4.3	5.3	6.0	5.0
Apparel and upkeep	4.3	2.8	4.6	4.2	4.5	3.6	4.6	5.7	4.7	4.5
Energy	0.8	5.7	8.2	2.2	2.8	8.0	0.2	6.8	18.3	6.9
Food and beverages	4.1	5.7	5.8	3.1	5.9	6.5	5.4	5.6	5.5	4.2
Housing: shelter	4.8	4.5	5.4	5.1	4.3	5.0	5.2	6.0	5.4	5.6
Medical care	6.5	7.7	9.1	6.3	7.1	8.5	9.0	9.3	9.5	9.6
Producer price index, <sup>3</sup> finished consumer goods	2.5	5.6	5.4	2.2	5.5	5.7	3.2	5.4	7.5	3.3

<sup>1</sup>Change in rate, rather than percent change.

<sup>2</sup>Base period = 1982-84, unless noted.

<sup>3</sup>Formerly 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 1991; U.S. Department of Labor, Bureau of Labor Statistics: *Employment and Earnings*. Washington. U.S. Government Printing Office. Monthly reports for Jan. 1988-Mar. 1991.