Trends in Medical Care Prices

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ACCELERATION in the rate of increase in medical care prices during the past year has aroused considerable concern and discussion as to the reasons for the increase. Particular attention has been focused on the relationship between the accelerated increases and health insurance for the aged (Medicare), which began operation in July 1966.

The general public, medical care specialists, and the Government are all concerned in different ways. The consumer is adversely affected when higher prices put medical care out of the reach of many and often of those who need it most. Rising prices also increase the cost of Government medical programs and thus place a heavier burden on the taxpayer. The medical care specialist, involved in providing services in an institutional or noninstitutional setting, is concerned because the growing demand for medical services must be met and rising costs tend to impede the delivery of such services.

Early in 1967, the Department of Health, Education, and Welfare reported to the President on medical care prices.[1] The report identified the causes of the long-run upward trend and the recent acceleration in medical prices, estimated future price movements, and recommended Government actions to moderate the price rise and to encourage a more efficient use of medical resources.

This article describes in detail the trends in medical care prices since World War II, with special reference to their growth since the end of 1965. Data on prices are presented for the various medical services and supplies that comprise the medical care price component of the Consumer Price Index (CPI) prepared by the Bureau of Labor Statistics. Data from a special study of 1966 prices of five in-hospital medical and surgical services especially important to aged persons are also included. A brief historical review and a description of the pricing procedures used in the CPI, with particular reference to the medical care component, are presented as a basis for understanding and interpreting the trends.

THE CONSUMER PRICE INDEX AND THE MEDICAL CARE COMPONENT

This index, often called the cost of living index, has been used for nearly 50 years to measure the changes over a period of time in average prices of goods and services of the same quality, customarily purchased by urban wage earners and clerical workers. It measures changes in prices—the most important causes of changes in the cost of living—but does not indicate actual living expenses. The general procedure is to measure price changes by repricing a "market basket" of goods and services at regular intervals and comparing the aggregate costs with those of an equivalent market basket purchased in a selected base period.

The CPI has been revised and updated from time to time to keep pace with the changing nature of the supply of goods and services and changes in the demand by consumers for these products and services. The revision of the CPI that was completed in January 1964 was the third comprehensive revision since the index was initiated in 1918.[2] Just as the CPI is the most generally accepted measure of price changes, so are its medical care components the most widely used indicators of changes in health care costs.

Selection of items to be priced is based in part on data obtained from BLS surveys of family expenditures. The current index is based on the 1960–61 Consumer Expenditure Survey. Items are selected partly on the basis of statistical probability, their relative significance in the overall expenditures of urban wage earners and clerical workers, and for their ability to represent the movement of the unpriced items of the same type

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[1] Department of Health, Education, and Welfare, *Report to the President on Medical Care Prices*, February 1967.

[2] For a comprehensive review, see the Bureau of Labor Statistics, *The Consumer Price Index: History and Techniques*, 1966; and "Consumer Prices," *Handbook of Methods for Surveys and Studies*, 1966, Chapter 10, pages 69–90.

and characteristics. In the absence of adequate information from expenditure surveys for the latter purpose, the selection is made with the assistance of appropriate professional associations. For example, professional drug associations are asked to provide information on sales of important drugs and prescriptions as a basis for selecting the drug items to be priced.

Medical prices have been obtained since 1918 for three physicians' services (family doctor's office and house visit and obstetrical case), several dental services, rates for hospital pay ward (discontinued January 1964), eye examination and eyeglasses, and several drugs and prescriptions. In 1939, prices were added for services of surgeons and specialists (represented by fees for appendectomy and tonsillectomy), private and semiprivate hospital rooms, and services of private nurses. In mid-1947, pricing was discontinued for dentists' charges for cleaning teeth, replacement lens for eyeglasses, hospital room rates for women's pay ward, and fees for a private nurse in the hospital. As part of the interim adjustment of the CPI to improve the coverage of the medical care index, premiums for group hospitalization were added in 1950 in advance of the comprehensive revision completed in January 1953.[3] At this time the medical care component of the CPI was made a separate group index. Several changes were made in the 10-year period between the two major revisions. Surgical insurance was added in 1958. Until 1960, only three prescribed drugs—penicillin, a narcotic, and a nonnarcotic—were included. In that year the list of prescribed drugs was extended to 16 items.

The index of medical prices, effective January 1964, was considerably expanded and revised in the latest major revision.[4] Pediatrician, psychiatrist, and chiropractor office visits were added, as well as routine laboratory tests and a surgical fee for herniorrhaphy; full upper dentures were also included, and appendectomies no longer priced. The measurement of hospital service charges was changed by eliminating the daily service charge for men's pay ward and adding two in-hospital items (operating-room charges and X-ray diagnostic series) to supplement the daily service charges. Direct pricing of health insurance premiums was discontinued, and the cost of health insurance was imputed to price changes for certain services plus the net cost of overhead (retained earnings).[5]

In all, 38 items now make up the medical care index: 18 services and 20 drugs and prescriptions. These 38 items represent one segment of the nearly 400 items, priced for the CPI since January 1964. Not all items are priced in every city. To estimate the sampling error, two subsamples of items that are priced in different cities and in different outlet samples have been established; the list of items in the subsamples includes the most important goods and services and a selection of the less important ones.

PRICING PROCEDURES AND QUALITY CHANGES

Since 1936, collection of data for the CPI has been based on the principles of specification pricing. In order to ensure, to the extent possible, that price changes will not reflect quality changes, a list of the significant characteristics of each item is set forth to guide the pricing agents. Included are the quality determinants of price (established in discussion with manufacturers, merchandisers, and buyers) and the other physical characteristics needed to identify an item from reporter to reporter and from one pricing date to the next. In general, the same specification is used in all cities where the item is priced, and the prices are collected by trained field representatives in personal interview. To obtain some prices, mail questionnaires are employed. Prices are collected in 56 cities (classified according to population) to represent all urban areas in the 50 States.[6]

When no article or service conforming to the precise specifications is offered by a reporter from whom a price quotation is sought, the pricing agent may obtain a quotation on another item as similar as possible to the item specified, if the

[3] For detail on the medical care index as calculated through 1953, see Elizabeth A. Langford, "Medical Care in the Consumer Price Index, 1936–56," *Monthly Labor Review*, September 1957.

[4] Bureau of Labor Statistics, *Items Priced in the Revised CPI*, January 27, 1964.

[5] For a detailed description of this change see James C. Daugherty, "Health Insurance in the Revised CPI," *Monthly Labor Review*, November, August 1964.

[6] Sidney A. Jaffe, "The Statistical Structure of the Revised CPI," *Monthly Labor Review*, August 1964.

agent also obtains a technical description of the substitute article to ensure that future prices will be quoted on the same quality and quantity. When there are problems of quality change, linking is employed. Linking is the method of "splicing" a price based on a new or different quality to the preceding one at the same point in time as a means of factoring out the difference in price. The pricing procedure in effect since the 1964 revision has broadened the representation of retail outlets and more accurately reflects improvements in the quality of the items measured.

The handling of quality changes has always posed problems for those concerned with computing price indexes.[7] This is particularly true with respect to prices for medical care and services where quality changes are especially difficult to measure because of advances in medical technology.[8]

A 1961 report prepared by the National Bureau of Economic Research for the Bureau of the Budget focused on the issue of measurement of quality changes in the CPI, with specific references to the medical care component.[9] This issue was also discussed at length in 1961 congressional hearings before the Joint Economic Committee.[10] It was held, in general, that the index failed to take account of quality changes, such as the steady advance of medical knowledge, and that this failure introduces a systematic upward bias. This idea was based on the assumption that prices are compared directly and that, when the quality of goods deteriorates, the index tends to understate the true price rise and, when quality improves, the index tends to overstate the true rise in prices. The opposite situation may prevail, however, when prices are linked. Linking treats the entire difference in prices as a quality difference, though part of it may be a real price change. This price change is not reflected in the index. The net bias in the index depends to a great extent upon the degree to which linking is used.

The Subcommittee urged more prompt introduction of new products—a matter of particular importance in the case of drugs and prescriptions. Coverage of the latter was greatly improved by the 1964 revision. Moreover, the revised method of grouping all consumer goods and services into 52 expenditure classes as a basis for sampling items to be priced makes it feasible to add or substitute items as changes are deemed appropriate.

The Subcommittee also suggested an adjustment for quality improvement in hospital services by taking account of the length of hospital stay required for a particular surgical procedure or for recovery from a particular illness. It was hypothesized that the new drugs and diagnostic techniques might reduce length of hospital stay or that the number of physician visits normally associated with a particular illness and greater "value" per visit might thus result. Using this approach one researcher has developed in detail an alternative method of measuring medical costs by pricing the total illness rather than the individual items and services.[11]

Such an approach has been frequently recommended as a method of arriving at a more accurate index of medical care costs, since over the long run the conventional medical care index may have overstated the real price increase for the reasons already discussed. The results of this study show, however, that in the period from 1951–52 to 1964–65 the costs of treatment of the five conditions covered (acute appendicitis, maternity care, otitis media in children, fracture of the forearm in children, and cancer of the breast) increased at a higher rate than the BLS medical care price index. The difference is due to some extent to the fact that the "total illness approach" takes account of a number of factors affecting costs not taken into account by the BLS, including the introduction of more complicated and

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[7] See Milton Gilbert, "The Problem of Quality Changes and Index Numbers," *Monthly Labor Review*, September 1961; and Ethel D. Hoover, "The CPI and Problems of Quality Change," *Monthly Labor Review*, November 1961.

[8] See Herbert E. Klarman, *The Economics of Health*, Columbia University Press, 1965, pages 149–162; and American Medical Association, *Report of the Commission on the Cost of Medical Care*, 1964, pages 50–51.

[9] George J. Stigler, *The Price Statistics of the Federal Government*, National Bureau of Economic Research, New York, 1961.

[10] U.S. Congress, Joint Economic Committee, Subcommittee on Economic Statistics, *Hearings: Government Price Statistics* (87th Congress, First Session), May 1961.

[11] Anne A. Scitovsky, "An Index of the Cost of Medical Care—A Proposed New Approach," in *The Economics of Health and Medical Care* (Proceedings of the Conference on the Economics of Health and Medical Care), 1964, pages 128–43; and Anne A. Scitovsky, *Changes in the Costs of Treatment of Selected Illnesses, 1951–1965* (paper presented at the annual meeting of the American Public Health Association, San Francisco, in 1966).

costly types of treatment. The study concluded that additional research in this field is needed.

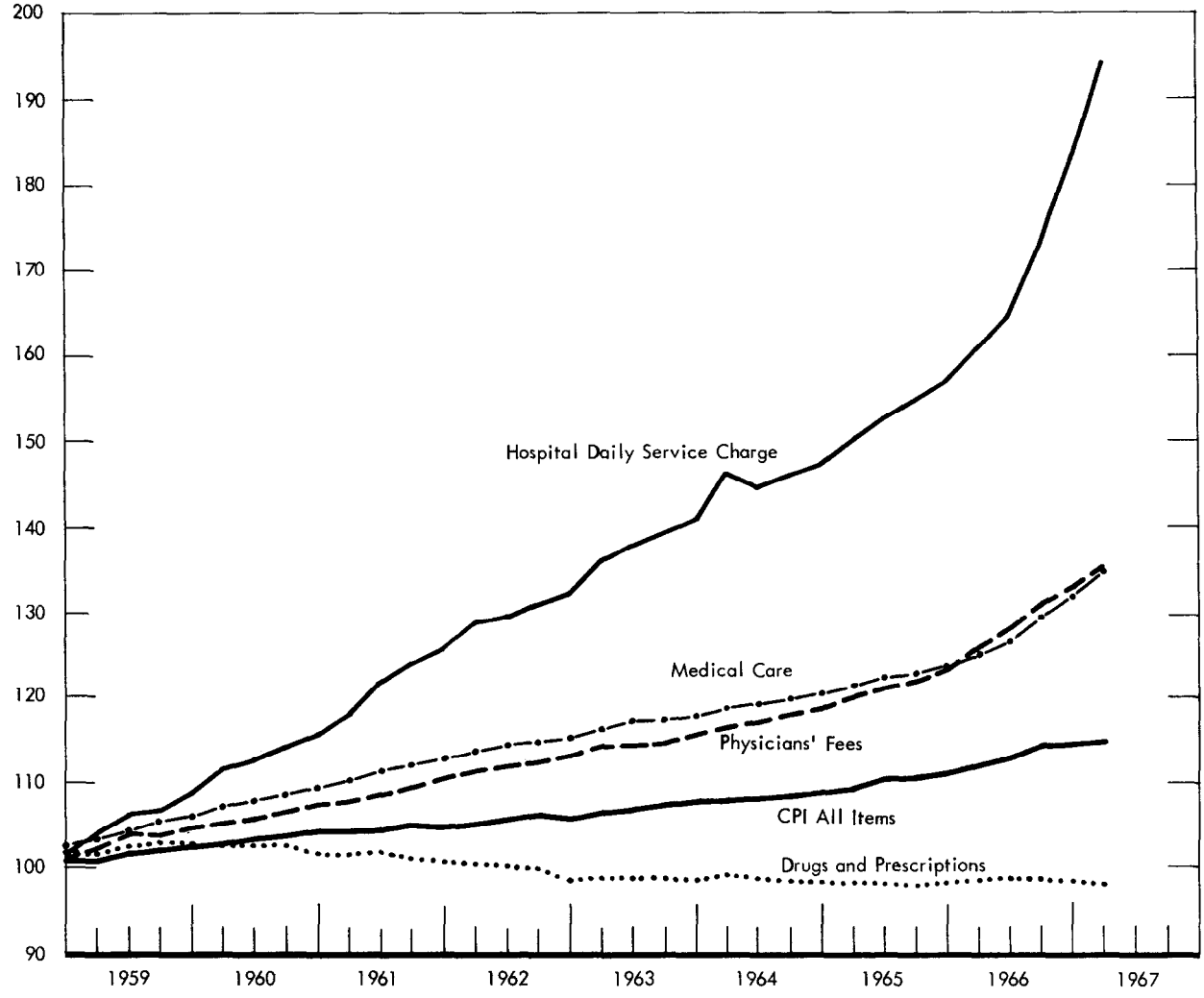
GENERAL TRENDS, 1946–66

Since World War II, the CPI and its medical care component have been continuously rising, with the latter rapidly outpacing the former (chart 1). The year 1946 was chosen as the base year because it was the first full year following the lifting of price controls after World War II. From 1946 to 1966, medical care prices increased at a rate more than half again as fast as that for consumer prices—110 percent compared with 66 percent. The medical care price index is made up of services, except for drugs and prescriptions. In general, the cost of services has risen faster than that of commodities, but the prices of medical care services have risen even more rapidly than the prices of other services. During the past two decades, the medical care service component of the CPI increased 129 percent while the index for all services rose 95 percent.

The *Report to the President on Medical Care Prices* indicated that the long-run upward trend in medical care prices is related to the economic forces of demand and supply of medical services.

CHART 1.—Quarterly index of consumer and medical care prices, 1959–67

[1957–59=100]



Source: *Consumer Price Index*, Bureau of Labor Statistics.

TABLE 1.—Consumer price index and average percentage changes for selected medical care components, by selected years, 1946–66

[1957–59=100 unless otherwise specified]

Item	Price index				Average annual percentage change		
	1946	1960	1965	1966	1946–60	1960–65	1965–66
CPI, all items	68.0	103.1	109.9	113.1	3.0	1.3	2.9
CPI, all services	62.7	106.6	117.8	122.3	3.9	2.0	3.8
Medical care, total	60.7	108.1	122.3	127.7	4.2	2.5	4.4
Medical care services, total	58.4	109.1	127.1	133.9	4.6	3.1	5.4
Daily hospital service charges	37.0	112.7	153.3	168.0	8.3	6.3	9.6
Physicians' fees	66.4	106.0	121.5	128.5	3.4	2.8	5.8
Drugs and prescriptions [1]	74.6	102.3	98.1	98.4	2.3	−.8	.3

[1] Index base for prescriptions, March 1960; for over-the-counter items, December 1963.

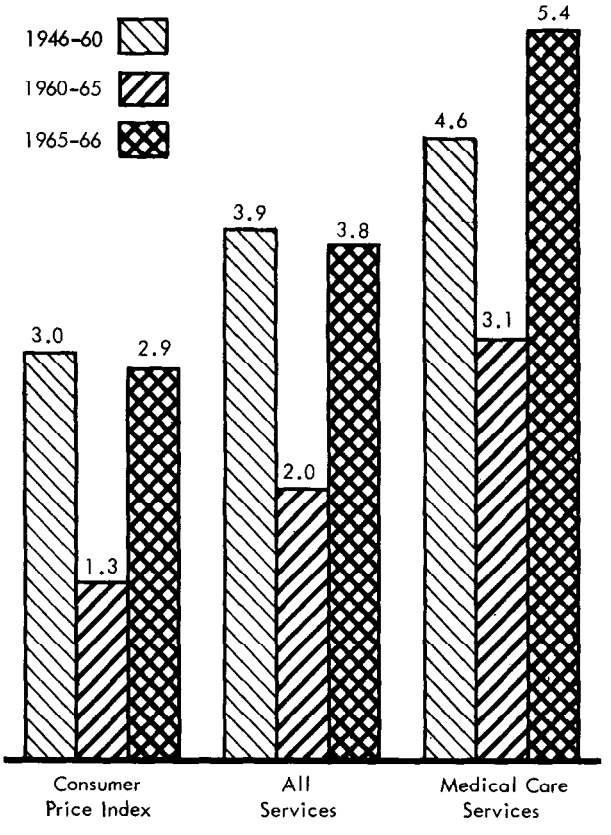
Source: *Consumer Price Index*, Bureau of Labor Statistics.

Since World War II, for example, the demand for physicians' services increased more rapidly than did the supply of physicians. As a result, physicians raised their fees and their productivity. Factors contributing to the rapid increases in demand for physicians' services include increasing population, rising personal income, expansion of insurance coverage and increasing public awareness of the curative powers of physicians. Long-run increases in the cost of hospital care, according to the *Report*, reflect the partial catching up with wages of hospital employees—which had been low in relation to those in other sectors of the economy—as well as the growing complexity of the hospital plant and rapid increases in specialized care facilities that are available in hospitals.

The average annual increase in the CPI as a whole amounted to 3.0 percent for the period 1946–60. There was a perceptible slowing down in the rate of increase for all consumer prices during 1960–65, when the CPI rose at a rate of about two-fifths that for 1946–60 (1.3 percent compared with 3.0 percent). The trend in prices of all services followed a similar pattern (table 1 and chart 2). But the slowdown in the rate of increase during 1960–65 for all medical care services was not as appreciable, representing about two-thirds of the annual rate of increase for the period 1946–60.

The general deceleration in price increases that took place between 1960 and 1965 came to an abrupt halt in 1966. The CPI for 1966 was 113.1

CHART 2.—Average annual percentage increase in the consumer price index, all services and medical care services for selected periods



Source: *Consumer Price Index*, Bureau of Labor Statistics.

or 2.9 percent higher than the index for the previous year and more than double the annual rate of increase from 1960 to 1965. Medical care prices also rose in 1966 at nearly twice the annual rate for the earlier period. The index for all services was also substantially higher during 1966, and reported increases in medical care services were even greater.

Clearly, a general acceleration of consumer price increases, particularly for medical care, occurred during 1966. To obtain a more precise picture of the short-run increases in prices, an examination is made here of quarterly, semiannual, and year-end figures. Year-end medical care price indexes and yearly percentage changes for the 3 years 1964–66 are shown in table 2; 6-month changes are reported in table 3; and table 4 shows the quarterly figures, including indexes for the first quarter of 1967.

TABLE 2.—Consumer price index and annual percentage change for medical care prices, by item, December 1964–December 1966

[1957–59=100, unless otherwise specified]

Item	Index			Percentage change, 12 months ending—	
	Dec. 1964	Dec. 1965	Dec. 1966	Dec. 1965	Dec. 1966
CPI, all items	108.8	111.0	114.7	2.0	3.3
CPI, all services	116.2	119.3	125.2	2.7	4.9
Medical care, total	120.3	123.7	131.9	2.8	6.6
Medical care services	124.5	128.9	139.4	3.5	8.1
Professional services:					
Physicians' fees:	118.8	123.3	132.9	3.8	7.8
Family doctor, office visits	118.2	123.1	133.3	4.1	8.3
Family doctor, house visits	121.8	127.4	138.3	4.6	8.6
Herniorrhaphy (adult) [1]	102.5	105.7	110.5	3.1	4.5
Tonsillectomy and adenoidectomy	120.3	123.4	130.8	2.6	6.0
Obstetrical cases	116.6	118.6	127.5	1.7	7.5
Pediatric care, office visits [1]	103.6	107.5	119.5	3.8	11.2
Psychiatrist, office visits [1]	102.3	106.3	112.6	3.9	5.9
Dentists' fees	115.7	118.8	124.3	2.7	4.6
Other professional services:					
Examination, prescription, and dispensing of eyeglasses	111.3	114.1	118.6	2.5	3.9
Routine laboratory tests [1]	102.4	104.0	107.6	1.6	3.5
Hospital service charges:					
Daily service charges	147.4	157.1	183.0	6.6	16.5
Operating-room charges [1]	102.8	108.9	119.0	5.9	9.3
X-ray, diagnostic series, upper G.I. [1]	101.1	102.6	110.0	1.5	7.2
Drugs and prescriptions	98.1	98.1	98.3	0	.2
Prescriptions [2]	91.3	90.7	90.3	−.7	−.4
Over-the-counter items [1]	100.5	101.4	102.5	.9	1.1

[1] Index base, December 1963.
[2] Index base, March 1960.
Source: *Consumer Price Index*, Bureau of Labor Statistics.

TABLE 3.—Consumer price index and semiannual percentage change for medical care prices, by item, 1966

[1957–59=100, unless otherwise specified]

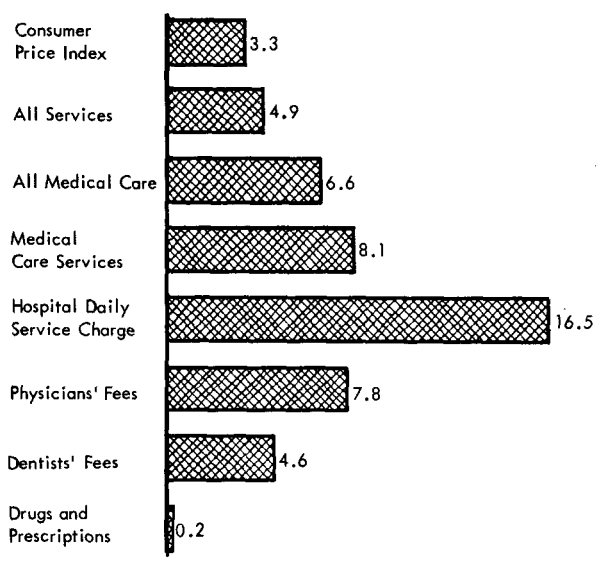
Item	Index			Percentage change from preceding 6 months	
	Dec. 1965	June 1966	Dec. 1966	6 months ending June 1966	6 months ending Dec. 1966
CPI, all items	111.0	112.9	114.7	1.7	1.6
CPI, all services	119.3	122.0	125.2	2.3	2.6
Medical care, total	123.7	127.0	131.9	2.7	3.9
Medical care services	128.9	133.0	139.4	3.2	4.8
Professional services:					
Physicians' fees	123.3	128.0	132.9	3.8	3.8
Family doctor, office visits	123.1	128.1	133.3	4.1	4.1
Family doctor, house visits	127.4	133.3	138.3	4.6	3.8
Herniorrhaphy (adult) [1]	105.7	107.5	110.5	1.7	2.8
Tonsillectomy and adenoidectomy	123.4	127.3	130.8	3.2	2.7
Obstetrical cases	118.6	121.9	127.5	2.8	4.6
Pediatric care, office visits [1]	107.5	115.0	119.5	7.0	3.9
Psychiatrist, office visits [1]	106.3	108.9	112.6	2.4	3.4
Dentists' fees	118.8	120.9	124.3	1.8	2.8
Other professional services:					
Examination, prescription, and dispensing of eyeglasses	114.1	115.7	118.6	1.4	2.5
Routine laboratory tests [1]	104.0	105.7	107.6	1.6	1.8
Hospital services charges:					
Daily service charges	157.1	164.2	183.0	4.5	11.4
Operating-room charges [1]	108.9	112.6	119.0	3.4	5.7
X-ray, diagnostic series, upper G.I. [1]	102.6	104.5	110.0	1.9	5.3
Drugs and prescriptions	98.1	98.6	98.3	.5	−.3
Prescriptions [2]	90.7	90.5	90.3	−.2	−.2
Over-the-counter items [1]	101.4	102.9	102.5	1.5	−.4

[1] Index base, December 1963.
[2] Index base, March 1960.
Source: *Consumer Price Index*, Bureau of Labor Statistics.

A general acceleration of all consumer price rises started in the last quarter of 1965 and continued during each of the first 3 quarters of 1966. In the final quarter of 1966 and the first quarter of 1967, however, the rate of increase subsided somewhat, from a 1.1 percent increase during the third quarter of 1966 to an increase of 0.3 percent for the first quarter of 1967.

Quarterly figures for medical care service prices show a different pattern. A more rapid pace in these price rises began in the first quarter of 1966, continued in the second quarter, and intensified in the succeeding 3 quarters. From December 1965 to December 1966, they increased 8.1 percent (chart 3). About three-fifths of this increase took place during the second half of the year. The advance in the third quarter of 1966 alone was 4 times greater than that for the corresponding period in 1965. During the first quarter of 1967, these prices rose 2.5 percent, the highest quarterly increase that had been reported for these services for many years.

CHART 3.—Percentage increase of the consumer price index and medical care components, December 1965–December 1966



Source: *Consumer Price Index*, Bureau of Labor Statistics.

TABLE 4.—Consumer price index and quarterly percentage change for medical care prices, by item, June 1965–March 1967

[1957–59=100, unless otherwise specified]

Item	June 1965	Sept.[1] 1965	Dec. 1965	March 1966	June 1966	Sept. 1966	Dec. 1966	March 1967
	Price index, end of quarter							
CPI, all items	110.1	110.2	111.0	112.0	112.9	114.1	114.7	115.0
CPI, all services	117.6	118.5	119.3	120.1	122.0	123.5	125.2	126.3
Medical care, total	122.2	122.8	123.7	125.3	127.0	129.4	131.9	134.6
Medical care services	127.0	127.8	128.9	130.8	133.0	136.2	139.4	142.9
Professional services:								
Physicians' fees	121.1	122.0	123.3	125.5	128.0	130.8	132.9	135.5
Family doctor, office visits	120.9	121.8	123.1	125.7	128.1	131.1	133.3	136.4
Family doctor, house visits	124.1	124.9	127.4	129.9	133.3	135.9	138.3	140.7
Herniorrhaphy (adult) [2]	103.2	104.5	105.7	107.1	107.5	108.5	110.5	112.1
Tonsillectomy and adenoidectomy	121.9	122.6	123.4	124.7	127.3	129.8	130.8	132.2
Obstetrical cases	117.7	118.3	118.6	120.2	121.9	125.5	127.5	130.4
Pediatric care, office visits [2]	106.0	106.4	107.5	109.2	115.0	117.5	119.5	121.8
Psychiatrist, office visits [2]	104.4	105.2	106.3	107.4	108.9	110.2	112.6	113.0
Dentists' fees	117.4	118.2	118.8	119.5	120.9	122.8	124.3	125.8
Other professional services:								
Examination, prescription, and dispensing of eyeglasses	112.8	113.4	114.1	114.6	115.7	117.1	118.6	120.6
Routine laboratory tests [2]	103.5	103.9	104.0	103.8	105.7	106.9	107.6	108.6
Hospital service charges:								
Daily service charges	152.5	154.9	157.1	160.8	164.2	172.6	183.0	194.2
Operating-room charges [2]	105.7	106.7	108.9	111.2	112.6	115.4	119.0	124.3
X-ray, diagnostic series, upper G.I.[2]	102.0	100.1	102.6	103.2	104.5	107.6	110.0	111.0
Drugs and prescriptions	98.1	97.9	98.1	98.4	98.6	98.5	98.3	98.0
Prescriptions [3]	90.8	90.7	90.7	90.9	90.5	90.5	90.3	89.6
Over-the-counter items [2]	101.4	101.1	101.4	101.8	102.9	102.6	102.5	102.6
	Percentage change from preceding quarter							
CPI, all items		0.1	0.7	0.9	0.8	1.1	0.5	0.3
CPI, all services		.8	.7	.7	1.6	1.2	1.4	.9
Medical care, total		.5	.7	1.3	1.4	1.9	1.9	2.0
Medical care services		.6	.9	1.5	1.7	2.4	2.3	2.5
Professional services:								
Physicians' fees		.7	1.1	1.8	2.0	2.2	1.6	2.0
Family doctor, office visits		.7	1.1	2.1	1.9	2.3	1.7	2.3
Family doctor, house visits		.6	2.0	2.0	2.6	2.0	1.8	1.7
Herniorrhaphy (adult) [2]		1.3	1.1	1.3	.4	.9	1.8	1.4
Tonsillectomy and adenoidectomy		.6	.7	1.1	2.1	2.0	.8	1.1
Obstetrical cases		.5	.3	1.3	1.4	3.0	1.6	2.3
Pediatric care, office visits [2]		.4	1.0	1.6	5.3	2.2	1.7	1.9
Psychiatrist, office visits [3]		.8	1.0	1.0	1.4	1.2	2.2	.4
Dentists' fees		.7	.5	.6	1.2	1.6	1.2	1.2
Other professional services:								
Examination, prescription, and dispensing of eyeglasses		.5	.6	.4	1.0	1.2	1.3	1.7
Routine laboratory tests [2]		.4	.1	−.2	1.8	1.1	.7	.9
Hospital service charges:								
Daily service charges		1.6	1.4	2.4	2.1	5.1	6.0	6.1
Operating-room charges [2]		.9	2.1	2.1	1.3	2.5	3.1	4.5
X-ray, diagnostic series, upper G.I.[2]		−1.9	2.5	.6	1.3	3.0	2.2	.9
Drugs and prescriptions		−.2	.2	.3	.2	−.1	−.2	−.3
Prescriptions [3]		−.1	0	.2	−.4	0	−.2	−.8
Over-the-counter items [2]		−.3	.3	.4	1.1	−.3	−.1	.1

[1] Unpublished data.
[2] Index base, December 1963.
[3] Index base, March 1960.
Source: *Consumer Price Index*, Bureau of Labor Statistics.

HOSPITAL CHARGES AND COSTS

Hospital Service Charges

The BLS does not compute a summary index for hospital service charges. Three separate hospital service items are measured for the CPI: (1) hospital daily service charge (room rate); (2) operating room charges; and (3) X-ray diagnostic services for upper gastrointestinal (G. I.) series.

As defined for the CPI, the hospital daily service charge is the amount charged to adult inpatients for routine nursing care, room, board, and minor medical and surgical supplies. It usually excludes such additional charges incorporated in the hospital bill as those for laboratory work, X-rays, operating room, and special nursing. Indexes for operating room charges and for the X-ray diagnostic series have been developed only within the past 3 years.

These three sets of indexes do not represent all the charges for services provided in the hospital. Drugs, intensive-care units, and laboratory serv-

ices are among the ancillary services currently not priced for the CPI.

Hospital daily service charges have been increasing faster than any other component of the medical care price index. Since World War II, the index for hospital daily service charges has increased 354 percent, compared with 66 percent for all consumer prices, 110 percent for all medical care prices, and 94 percent for physicians' fees. Thus, the rate of increase of hospital daily service charges has been more than five times that of the CPI, more than three times that of medical care, and nearly four times the rate of physicians' fees.

From 1946 to 1960, the annual rate of increase of daily service charges was 8.3 percent. In the period 1960–65, the CPI showed a general deceleration in its upward price trend in which hospital daily service charges shared. The annual rate of increase for these charges was 6.3 percent during 1960–65, or three-fourths the annual rate in the years following World War II to 1960.

The year 1966 witnessed an unprecedented spurt in the hospital daily service charges and in the other hospital services priced for the CPI. Hospital daily service charges increased 16.5 percent from December 1965 to December 1966; the increase during the previous year was 6.6 percent. Operating room charges jumped 9.3 percent in 1966; the previous year's increase was 5.9 percent. The rise in prices for X-ray diagnostic series was nearly five times the 1.5 percent rate of increase in 1965.

Recently, the Bureau of Labor Statistics undertook a special examination of the four hospital service charges collected for the CPI in 22 cities to determine the extent and magnitude of the price increases in 1966 compared with those of 1965. The special study clearly showed that the growth in hospital daily service charges during 1966 was a universal phenomenon. Hospitals in every city raised their room rates, and many raised them more than once during the year. In 17 of 22 cities covered, all the hospitals in the sample reported rate increases for semiprivate rooms; in the other five cities, 63 percent to 88 percent of the hospitals reported higher charges for this service. During the preceding year these increases were not so widespread. From December 1964 to December 1965, the hospitals in three cities had reported no change in their semiprivate room rates and there were only three cities in which all hospitals had reported increases in these rates.

The BLS also studied the magnitude of the increases in room rates in the 2-year period 1965–66. From December 1964 to December 1965, the average percentage increase ranged from 3 percent to 14 percent. By contrast, increases in 1966 ranged from 9 percent to 32 percent. These widespread increases in room rates clearly account for the 16.5-percent rise in the index for hospital daily service charges from December 1965 to December 1966.

Examination of the semiannual and quarterly increases during 1966 reveals accelerated upward trends during the latter part of the year for hospital daily service charges, operating room, and X-ray diagnostic series. The increases for these items in the second half of the year represented 73 percent, 63 percent, and 74 percent, respectively, of the annual increases. The first quarter of 1967 saw a continued acceleration in hospital daily service charges, an unprecedented quarterly rise in operating room charges, and a declining rate of increase for X-ray diagnostic series.

Factors Affecting Increased Hospital Costs

The *Report to the President on Medical Care Prices* found that the acceleration in hospital charges in 1966 was primarily related to rising wages in a tight labor market and to increases in the prices of food and supplies purchased and used by hospitals.[12] Reports by the Bureau of Labor Statistics of wage developments in the second half of 1966 clearly indicated widespread wage increases for registered nurses, licensed practical nurses, and other hospital employees. Although the amounts of these increases and the categories affected varied considerably among hospitals and among cities, an examination of the reports for the 21 cities studied showed that a large proportion of the hospitals in the BLS wage sample provided wage increases to their employees in the second half of 1966. Further, many more hospitals reported that they planned to provide

[12] For another analysis of hospital costs, see "Hospital Cost Trends," *Blue Cross Reports*, May–June 1967.

some additional wage increases early in 1967.[13]

The major component of hospital expenses is payroll, which accounts for more than three-fifths of hospital expenses.[14] Wages and salaries of hospital employees, particularly nonprofessional workers, have been notoriously low and the recent increases in salaries have clearly played a significant part in the increase in the hospital costs.

It has been suggested that the health insurance program for the aged, which began operations on July 1, 1966, contributed to the substantial increase in hospital daily service charges during the second half of 1966. Participation in the program has required hospitals to reexamine their charges and reprice their services. Previously, many hospitals traditionally kept their room and board charges low, subsidized by higher charges for revenue-producing services. With the advent of Medicare and reimbursement on the basis of reasonable costs, hospitals throughout the country have reexamined their charges and costs. In many hospitals, charges are being redistributed to more nearly reflect costs for each category of service. In the course of this repricing many hospitals decided to increase their daily room and board rates to relate to actual costs; these charges thus have risen faster than those for ancillary services. The relative rise in daily service charges therefore is probably larger than that of total hospital costs, but there is no comparable basis for measuring total hospital costs on a current basis.

One measure of overall hospital costs is the average hospital expense per patient day, which is based on data obtained from annual surveys of all hospitals accepted for registration by the American Hospital Association.[15] The hospital expense per patient day is an aggregate figure derived by dividing total expenses (including outpatient expenses and other hospital operating expenses not attributable to inpatients) by the number of inpatient days (not counting any such days for newborn infants). Excluded are those expenses incurred by inpatients but not billed by the hospitals, such as the cost of medical and surgical services rendered by the patient's physician.

TABLE 5.—Percentage increases in hospital daily service charges in CPI and expenses per patient day as reported by American Hospital Association, selected periods, 1946–66

Period	CPI hospital daily service charges [1]	Expense per patient day (AHA) [2]
20-year period:		
1946–66	354.1	420.1
5-year period:		
1946–51	73.2	78.6
1951–56	36.5	44.0
1956–61	38.6	44.8
1961–66	38.5	39.6
1-year period:		
1961–62	7.0	5.3
1962–63	6.3	5.6
1963–64	5.0	6.9
1964–65	5.8	7.0
1965–66	9.6	[3] 9.8

[1] Based on the hospital daily service charges in the consumer price index.
[2] Based on the dollar amounts of expense per patient day in short-term general hospitals reported in the American Hospital Association, *Hospitals* (Guide Issue) for the 12-month period October–September.
[3] Based on data from the American Hospital Association's sample survey, reported in "Hospital Indicators" in each midmonth issue of *Hospitals*.

The American Hospital Association (AHA) series actually overstates hospital costs to some extent because the calculation of hospital expense per patient day includes in the numerator a number of expenses not related to the inpatients who make up the denominator—such expenses as the costs for the care of newborn babies, costs for outpatient clinics, and expenses of such subsidiary operations as public restaurants, gift shops, etc. Although the AHA series overstates the actual levels of cost, it is of significance in showing trends in hospitalization costs. Comparison of the changes in hospital daily service charges in the CPI with those of the AHA series for expense per patient day in selected periods shows the same general trend, with the latter increasing at a somewhat higher rate (table 5).

PHYSICIANS' FEES

Price Trends

The CPI for physicians' fees is now comprised of seven services. Since 1918, prices have been obtained for three items—the family doctor's office visit and house visit and obstetrical case. In 1939, services of surgeons and specialists, whose fees are represented by tonsillectomy and adenoidectomy, were added. As a part of the major revision of the CPI effective January 1964, the

[13] For reports of wage developments during the second half of 1966, see the area releases, *Earnings and Supplementary Benefits in Hospitals*, prepared by the Bureau of Labor Statistics for 21 cities and George L. Stelluto, "Earnings in Hospitals," *Monthly Labor Review*, June 1967.

[14] Journal of the American Hospital Association, *Hospitals* (Guide Issue), August 1, 1966, page 432.

[15] See annual Guide Issues of *Hospitals*, Journal of the American Hospital Association, August 1 of each year.

pricing of professional medical services was expanded to include pediatric and psychiatric office visits and a surgical fee for herniorrhaphy.

Physicians' fees have more than doubled in the past two decades—a faster rate than that for all items in the CPI, but somewhat slower than that for hospital daily service charges. Following World War II and through 1960, physicians' fees have increased at an annual rate of 3.4 percent. The period from 1960 to 1965 witnessed a reduction in the rate of increase to 2.8 percent. As previously noted, the *Report to the President on Medical Care Prices* attributed the long-run increase in doctors' fees to the exceptionally rapid increase in demand for physicians' services relative to supply.[16]

Physicians' fees, like hospital charges, increased substantially during 1966. The index for December 1966 was 7.8 percent higher than the December 1965 figure—more than twice the rate of increase during the previous year and, as in the period 1960–65, also more than twice the rate of increase for all items in the CPI. Thus, on the basis of past trends, the accelerated increase in physicians' fees during 1966 appears to be the result, in part, of the general inflation in the economy.

Unlike the pattern of increases in hospital charges, which showed the greatest acceleration during the second half of the year, the 1966 increase in the cost of doctors' services was evenly divided between the first half and the second half of the year. Examination of the quarterly figures shows that the peak increase occurred in the third quarter of the year. The last quarter saw a deceleration in the upward trend of physicians' fees. During the first quarter of 1967, however, the steep upward trend was again resumed with a rise of 2.0 percent from December 1966; the rise was 1.6 percent in the previous quarter.

The level of price increases among different types of physicians' services shows considerable variation, especially in the past year. For the 12 months ending December 1966, the increases ranged from 4.5 percent for adult herniorrhaphy to 11.2 percent for office visits for pediatric care.

The pattern of change during the year also varied considerably for different types of physicians. More than three-fifths of the increase reported for office visits for pediatric care during 1966 occurred in the first half of the year. Relatively larger increases during the first half of 1966 were reported for two other physicians' services—for house visits of family doctors and for tonsillectomy and adenoidectomy. In both cases, however, the increases during the first 6 months did not account for as large a portion of the year's total as that reported for pediatric office visits.

The 1966 quarterly increases in prices for the various types of physicians' fees also showed considerable variation. Peak increases were reported during the second quarter of 1966 for three sets of fees: (1) family doctor house visits (2) tonsillectomy and adenoidectomy, and (3) pediatric care, office visits. Again, by far the largest relative increases were reported for the last group. Two physicians' services showed peak increases in the third quarter of the year (office visits of family doctors and obstetrical cases), and the remaining two (adult herniorrhaphy and office visits of psychiatrists) reported peak increase in the final quarter of 1966.

Study of Fees for Office and House Visits

Detailed data on the extent and magnitude of the price increases during 1966 for two of the physicians' services regularly priced in the CPI—office and house visits of family doctors—are available from a special study conducted by the Bureau of Labor Statistics for the Social Security Administration. The regular sample of general practitioners, who report their "usual" fees for routine office and home visits, was expanded in the fourth quarter of 1965 as part of a larger study of prices for in-hospital medical and surgical services especially important to the aged (described in a later section of the article).

The expanded sample includes more than 700 general practitioners and internists who are currently providing fee quotations on routine office and home visits and provides a larger base for the study of short-term changes in these important services.

The reported increases in the index from De-

[16] For an analysis of the demand and supply of physicians, see Rashi Fein, *The Doctor Shortage: An Economic Diagnosis*, The Brookings Institution, May 1967.

TABLE 6.—Percent of physicians reporting fee increases and average percentage increase in fees, by type of procedure, selected periods, 1966 and 1967

Procedure	3 months ending—					6 months ending—		12 months ending Dec. 1966
	March 1966	June 1966	Sept. 1966	Dec. 1966	March 1967	June 1966	Dec. 1966	
	Percent of physicians reporting fee increases [1]							
Family doctor, office visits	9.1	8.2	10.6	8.3	9.0	17.7	18.8	36.8
Family doctor, house visits	7.2	10.9	10.0	7.5	7.5	19.0	18.2	35.4
In-hospital medical care procedures, combined	3.9	4.9	7.5	8.1	8.0	8.2	15.4	23.5
Myocardial infarction	4.0	5.0	7.7	8.6	8.2	8.5	16.1	24.3
Cerebral hemorrhage	3.8	4.8	7.3	7.6	7.7	7.9	14.9	22.6
In-hospital surgical procedures, combined	4.1	8.9	8.8	9.7	11.5	13.5	18.5	33.2
Cholecystectomy	3.1	7.4	6.0	7.6	11.1	10.8	14.1	25.2
Prostatectomy	6.5	13.1	12.3	11.3	12.8	20.8	23.3	46.4
Fractured neck of femur	2.8	6.3	8.0	10.3	10.5	9.0	18.2	27.9
	Average percentage increase in fees							
Family doctor, office visits	16.5	14.0	20.1	14.4	22.7	18.5	21.7	24.0
Family doctor, house visits	13.6	16.8	18.0	19.7	16.8	20.6	23.1	25.9
In-hospital medical care procedures, combined	7.6	11.1	8.6	18.2	16.6	11.1	21.6	19.8
Myocardial infarction	7.7	11.2	8.8	18.6	16.2	11.1	22.0	20.1
Cerebral hemorrhage	7.5	10.9	8.3	17.4	17.1	11.1	21.2	19.6
In-hospital surgical procedures, combined	3.4	7.1	8.1	7.9	9.5	8.1	10.8	12.7
Cholecystectomy	2.2	8.4	6.9	7.1	9.5	9.4	10.6	14.5
Prostatectomy	5.6	7.4	10.3	9.0	6.7	8.8	10.9	11.8
Fractured neck of femur	2.6	5.8	6.8	7.7	12.3	6.3	11.0	11.9

[1] Physicians raising fees more than once during the period are counted more than once.

Source: Compiled by the Social Security Administration from unpublished data reported by the Bureau of Labor Statistics.

cember 1965 to December 1966 amounted to 8.3 percent for office visits and 8.6 percent for house calls. The price for office visits represents the usual fee to regular patients for office visits following the first call (which may involve large and one-time charges for complete examination) and excludes special fees to participants in group hospitalization and surgical plans.

Two measures were employed by the Social Security Administration to analyze the changes in physicians' fees during 1966: the percent of physicians reporting fee increases and the average percentage increases in fees for those reporting the increases. The communities are classified by size, as well as by the four major geographical regions in the United States. The changes are examined on an annual, semiannual, and quarterly basis according to type of service and physician specialty.

In all, 37 percent of the physicians increased their fees for office visits some time during the year ending December 1966 (table 6). Included in this count are physicians who were in the sample and provided quotations for the entire period. The percentage may be slightly overstated because a physician raising his fees more than once during the period is counted more than once. An inspection of the quotations for each physician, however, revealed that very few actually increased their fees more than once during this period.

The average increase for the 12-month period amounted to 24 percent for those who raised their fees. For example, an office visit priced at $5 increased on the average to more than $6. In other words, the rise of 8.3 percent in the index for physician's fees for office visits reflects the fact that about 1 in 3 doctors raised fees more than $1, on the average.

Increases in fee quotations for house visits showed about the same general pattern—the proportion of physicians increasing fees was just slightly lower (35 percent) and the average percentage increase was slightly larger (26 percent). The physician is requested to provide a quotation of his usual fee for a house visit to regular patients during the day. Excluded here are special fees to participants in group hospitalization and surgical plans.

General practitioners and internists provide quotations for office and house visits. For both services, general practitioners showed larger increases, both on the basis of the proportion increasing fees and the average percentage increase (table 7). The differences between the two types of physicians are clearly evident in their fees for house visits. About two-fifths of the general practitioners increased their fees during 1966 by approximately 24 percent. By contrast, slightly

TABLE 7.—Percent of physicians reporting fee increases and average percentage increase in fees, by region, population of community, and physician specialty and by type of procedure, 12-month period ending December 1966

Item	Percent of physicians reporting fee increases [1]				Average percentage increase in fees			
	Family doctor visits		In-hospital combined procedures		Family doctor visits		In-hospital combined procedures	
	Office	House	Medical care [2]	Surgical procedure [3]	Office	House	Medical care [2]	Surgical procedure [3]
Region:								
Northeast	34.8	45.1	23.4	35.1	23.0	23.8	29.7	13.4
North Central	33.5	31.5	25.1	24.6	25.2	26.1	15.9	11.9
South	36.7	29.7	16.1	36.4	24.4	29.2	14.9	13.4
West	46.5	32.4	32.0	39.8	23.4	24.7	15.6	11.7
Population of community:								
1,400,000 or over	38.3	37.9	20.6	35.6	24.2	27.6	25.9	14.7
250,000–1,399,999	34.9	29.0	22.1	36.6	24.4	26.3	16.3	14.4
50,000–249,999	31.5	38.1	24.3	32.9	22.0	25.5	20.9	13.4
Under 50,000	39.7	36.7	30.3	24.1	24.8	22.5	11.8	6.1
Physician specialty:								
General practitioner	39.1	40.2	23.9	----	21.6	23.9	20.2	----
Internist	33.3	26.7	21.2	----	19.9	19.0	12.0	----
General surgeon	----	----	----	25.2	----	----	----	14.5
Urologist	----	----	----	46.4	----	----	----	11.8
Orthopedic surgeon	----	----	----	27.9	----	----	----	11.9

[1] Physicians raising fees more than once during the period are counted more than once.
[2] Myocardial infarction and cerebral hemorrhage.
[3] Cholecystectomy, prostatectomy, and fractured neck of femur.

Source: Compiled by the Social Security Administration from unpublished data reported by the Bureau of Labor Statistics.

more than one-fourth of the internists increased their fees and the average increase amounted to 19 percent.

There is no consistent pattern in price increases during 1966 for these two types of physicians' services among the four regions in the country or by size of city. For office visits, a relatively larger proportion of the physicians in the West reported increased fees, but the average increase was about the same in all regions. For house visits, on the other hand, the Northeast region showed the largest proportion of physicians increasing their fees. The breakdown by size of city does not reveal any significant variations in the two measures.

The first quarter of 1967 revealed a significant increase in the index for office visits—2.3 percent compared with a 1.7 percent in the previous quarter. The detailed data show that the magnitude of the increase was much more important than the frequency of increases in this quarterly rise. During the quarter ending March 1967, the average increase in fees amounted to 23 percent, an increase half again as great as that for the last quarter in 1966.

Unlike the index for office visits, the March 1967 index for house visits shows a lower increase than that for the previous quarter. The detailed data for the percentage of physicians raising their fees and the average increase support this trend.

Study of Prices of In-Hospital Medical and Surgical Services

As in the case of hospital daily service charges, there has been considerable speculation concerning the influence of Medicare on the present acceleration in the rate of increase in physicians' fees. In the summer of 1965, the Social Security Administration arranged with the Bureau of Labor Statistics to collect prices for three surgical procedures (cholecystectomy, prostatectomy, and fractured neck of femur) and two in-hospital medical services (myocardial infarction and cerebral hemorrhage) that are important to older persons, though not necessarily limited to them. It was believed that fees for such services might be sensitive to the new Medicare program and hence would provide baseline data to assess the impact of the program on physicians' fees. Prices are collected for these five procedures but are not incorporated in the regular sample of the CPI.

The collection of prices for the in-hospital medical and surgical procedures, together with the expansion of the sample of general practitioners noted earlier, was begun in September 1965. Data on price changes for these services are thus available for 6 full quarters (December 1965 to March 1967) that permit a detailed analysis of the nature of the changes during 1966 and early 1967.

The expanded survey includes more than 700

general practitioners and internists who are currently providing fee quotations on the in-hospital medical services along with quotations on office and house calls. Nearly 1,300 physicians account for the fees reported for the surgical procedures. Price quotations are obtained in 56 areas located in 34 States and the District of Columbia. Of the 27 largest metropolitan areas, 24 are in the sample used to study physicians' fees. The distribution of sampling units provides rather comprehensive coverage for urban areas, but there is no coverage for services rendered in rural communities. The more serious the illness, however, the more likely it is that the patient will travel to a large community for medical care.

Both internists and general practitioners provide fee quotations for the two in-hospital procedures, which include the cost of admission, hospital write-up, examinations, and other services. The fee for myocardial infarction represents the usual hospital fee for a regular patient suffering from a heart attack who stays in the hospital a total of 21 days. Excluded are the costs of cardiograms, other laboratory fees, and medications. The most frequent fee for this medical service at the end of 1966 was $110.

The most usual fee for cerebral hemorrhage at the end of 1966 was $75. The fee represents the usual charge for a regular patient suffering from stroke who stays in the hospital 14 days. The price covers the same services as for patients suffering from heart attack. Fees for these two in-hospital procedures are obtained on a daily basis and data aggregated to yield a package price.

With respect to the three surgical procedures, both urologists and general surgeons provide the fee quotations for prostatectomy. Only general surgeons report prices for cholecystectomy (removal of gall bladder). General and orthopedic surgeons provide fee quotations for fracture of neck of femur (hip surgery).

The fee for each of these surgical procedures was $375 at the end of 1966. It includes the usual single preoperative visit and postoperative care, excluding the fee for diagnosis and tests and the anesthetist's fee. In the case of prostatectomies, the fee for cystoscopy is excluded, and the fee for appendectomy is excluded in cholecystectomies.

Indexes for these five procedures showed increases from December 1965 to December 1966

TABLE 8.—Quarterly indexes and percentage changes for physicians' fees and for in-hospital procedures for the aged, by item, December 1965–December 1966

[December 1965=100, unless otherwise specified]

Item	Quarter ending—					
	Dec. 1965	March 1966	June 1966	Sept. 1966	Dec. 1966	March 1967
	Index					
Physicians' fees: [1]						
1957–59=100	123.3	125.5	128.0	130.8	132.9	135.5
December 1965=100	100.0	101.8	103.8	106.1	107.8	109.9
In-hospital procedures for the aged: [2]						
Myocardial infarction	100.0	100.5	101.3	102.7	104.7	106.4
Cerebral hemorrhage	100.0	100.4	101.2	102.5	104.1	106.0
Cholecystectomy	100.0	100.3	101.4	101.9	102.5	104.8
Prostatectomy	100.0	100.9	102.5	104.8	106.9	108.3
Fractured neck of femur	100.0	100.4	101.2	102.0	103.5	105.2
	Quarterly percentage changes					
Physicians' fees [1]	1.1	1.8	2.0	2.2	1.6	1.9
In-hospital procedures for the aged: [2]						
Myocardial infarction	-------	.5	.8	1.4	2.0	1.6
Cerebral hemorrhage	-------	.4	.8	1.3	1.6	1.8
Cholecystectomy	-------	.3	1.1	.5	.6	2.2
Prostatectomy	-------	.9	1.6	2.3	2.1	1.3
Fractured neck of femur	-------	.4	.8	.8	1.5	1.6

[1] Combined index of all physicians' fees regularly reported in the CPI.
[2] Special study of prices for 5 procedures important to though not necessarily limited to older people, not incorporated in the regular sample of the CPI.
Source: Compiled by the Social Security Administration from unpublished data reported by the Bureau of Labor Statistics.

that ranged from 2.5 percent for cholecystectomy to 6.9 percent for prostatectomy (table 8). During the same period, the combined index for physicians' fees regularly priced for the CPI increased at the somewhat higher rate of 7.8 percent.

The actual increases and the number of physicians raising fees during the year shown in table 6, underlie, of course, the variations in the indexes for these items. Comparison with the data for office and house visits described previously shows, for example, that a relatively smaller proportion of the physicians reported increases for the in-hospital medical and surgical procedures and that the average percentage increases were indeed smaller. Nevertheless, the dollar amounts for these five in-hospital procedures are considerably greater than for the office and house visits or for most of the other services regularly priced for the index of physicians' fees.

At the end of December 1965 the most common fees for office and house calls were $5 and $10, respectively. A 25-percent increase in each amounts to $1.25 and $2.50. In contrast, the increases reported during 1966 for each of the three in-hos-

pital surgical procedures for the aged averaged more than $40 during the year, even though the average percentage increase was roughly half that for house and office visits.

The average increase during 1966 for the in-hospital medical procedures amounted to about 20 percent. Since the costs of treating heart attack and stroke are less than for surgical procedures, the average dollar increases during the year ranged from about $10 to $20, still considerably higher than those for office and house visits. Of course, since relatively more persons visit doctors for routine office calls, the larger percentage increases for the latter services affect considerably more persons.

The extent and magnitude of the changes in prices during 1966 were almost identical for the two in-hospital medical procedures. Nearly one-fourth of the physicians increased their fees for treatment of patients hospitalized because of heart attack or stroke, and the increases average about 20 percent. There was some variation in increases reported, according to type of specialist. Slightly more general practitioners than internists increased their fees for these services, and the increases of the general practitioners were significantly higher. The fee increases of general practitioners for the combined medical procedures averaged 20 percent, compared with 12 percent for internists.

There was considerable variation in the movement of prices among the in-hospital surgical procedures. The largest increases were reported for prostatectomy, usually performed by urologists. Almost half (46 percent) increased their fees by about 12 percent. About one-fourth of the general surgeons, on the other hand, increased their fees for cholecystectomy by about 15 percent and about 3 out of 10 orthopedic surgeons increased their fees for hip surgery by about 12 percent.

The five special surgical and medical procedures, particularly important for aged persons, revealed no discernible differences among the four regions in the country of cities of differing size in the pattern of price increases during 1966.

The price index for all physicians' services moved up more rapidly during the first 6 months of 1966 than the five special indexes. This relationship continued during the latter half of 1966 and the first quarter of 1967, but the differential was smaller. The index for physicians' fees increased 9.9 percent in the 15 months from December 1965 to March 1967. During the same period the increases for the five special indexes ranged from 4.8 percent for cholecystectomy to 8.3 percent for prostatectomy.

Although these special indexes have not increased as rapidly as those for all physicians' fees reported in the CPI, a different pattern of increase is clearly discernible. As previously noted, the percentage increase in the index for the cost of physicians' services was the same in the first and second halves of 1966. For four of the five special procedures, on the other hand, the increases during the second half of the year were about twice those of the first 6 months. The index for cholecystectomy was the only one in which the increase was higher in the first part of the year.

During the first quarter of 1967, the upward trend continued in the price rise of three of the five indexes specific to the aged. The most significant change occurred in the price of cholecystectomy, which increased almost four times the rate during the previous quarter (2.2 percent compared with 0.6 percent). Increases during the first quarter of 1967 in each of the other four indexes ranged from 1.3 percent for prostatectomy to 1.8 percent for cerebral hemorrhage. The quarterly increase for all physicians' fees reported in the CPI was 2.0 percent.

If the indexes of surgical and medical procedures specially significant for aged persons can be used as a direct measure of the changes in fees for services for this special population group since the implementation of Medicare, it may be concluded that more physicians were adjusting their fees and increasing them more than was the case in the first half of the year. Comparison with the price index for all physicians' fees, however, suggests that the increases may be part of a process in which physicians increased their customary fees for services for the aged in line with the general upward trend in all physicians' fees.[17]

The Medicare program has established the pay-

[17] *The Report to the President on Medical Care Prices* noted that "there was no marked acceleration in physicians' fees after Medicare came into effect on July 1" based on the index of physicians' fees at the time it was written. Data on the five special indexes of surgical and medical procedures particularly important for aged persons were available only for the first 6 months of 1966.

ment of customary and prevailing charges as the basis for reimbursement of physicians' services. The term "customary charges" refers to the amount which the individual physician usually and most frequently charges his patients for a specific service in similar medical circumstances; "prevailing charges" refers to those that fall within the range of charges most frequently and most widely used in a locality for particular medical procedures.

Before Medicare, many physicians used a sliding scale of fees, charging less for services provided to aged persons with lower incomes than the general population. With the advent of Medicare, physicians' charges for aged persons are presumably higher than formerly, since they can now charge the same amount that they customararily charge other patients. Such increases, however, would not be reflected in the price index, since no increase in the physicians' usual or customary fee would have occurred. Even with no change in "customary charges," the net result would be an increase in income. Coupled with increased fees, the increase in income is even greater.

OTHER MEDICAL CARE PRICES

In general, other medical care prices followed the same upward trend in 1966 as hospital service charges and physicians' fees but the magnitude of increases was not as large. For example, the rate of increase of dentists' fees has not been as rapid as physicians' fees. From December 1965 to December 1966, dentists' fees rose 4.6 percent; the comparable increase for the previous year was 2.7 percent. More than 60 percent of the rise in 1966 took place in the second half of the year, with the peak increase occurring in the third quarter. Fees for dentists' services continued to increase in the first quarter of 1967 at about three-fifths the rate of physicians' fees.

Prices for examination, prescriptions, and the dispensing of eyeglasses increased almost 4 percent in 1966, or more than one and one-half times the increase during the previous year. The second half of the year accounted for almost two-thirds of the increase in 1966. The first quarter of 1967 witnessed a slight increase from the last quarter of 1966.

The cost of routine laboratory tests increased about 3.5 percent in 1966—an increase nearly evenly divided between the first and second halves of the year.

Prices of drugs and prescriptions have moved rather differently from prices of the other components of the medical care index of the CPI. In fact, decreases were reported each year from 1960 to 1965 and at an annual rate of about 1 percent. From December 1965 to December 1966, the prices of drugs and prescriptions increased slightly—0.3 percent.

There has been considerable questioning of the drugs and prescription component of the CPI for some years. It had been generally acknowledged that, in the past, the index did not accurately reflect the true changes in prices because of lags in incorporating the newer drugs into the CPI. Several additions were made to this component in 1952, but it was in 1960 that an extensive revision took place.

A more up-to-date and representative "market basket" of drugs and prescriptions was linked into the July 1960 index, which at that time included only penicillin tablets and narcotic and nonnarcotic prescriptions. Because there were no earlier counterparts for many of the new items the linking was not done by the usual item-by-item method.[18] A new sample was selected and items representing broad therapeutic end-use categories were weighted together with data representing their sales importance in 1960. The new drugs were substituted for the old sample by linking. The importance of all drugs combined in the CPI index for all items, however, was not changed when the substitution was made.

The drugs and prescription index now includes six over-the-counter items and 14 prescriptions. Another review of the sample and weighting diagram was made in 1967 and three items were replaced with new specifications.

SUMMARY

The upward trends in medical care prices since World War II have been described in relation to

[18] Ethel Hoover, *op. cit*, *Monthly Labor Review*, November 1961, page 1182.

prices of all items and services in the CPI. Also presented are annual percentage changes in medical care prices and its components for three periods: 1946–60, 1960–65, and 1965–66.

In general, the postwar acceleration in consumer prices, including medical care prices, was moderated during the period from 1960 to 1965; there was a sharp rise in 1966 that continued into 1967. The accelerated increase in medical care costs during 1966 appears to be part of the general inflation in the economy. Nevertheless, the year 1966 witnessed unprecedented increases in the hospital daily service charges. Semiannual and quarterly figures reveal accelerated upward trends during the latter part of the year that continued through the first quarter of 1967. The increases following the inception of the Medicare program largely reflect higher salaries and possibly the repricing of this component of hospital charges to more nearly mirror actual costs.

Physicians' fees also increased substantially during 1966 and into 1967 but at a lesser rate than hospital daily service charges. In addition, the pattern of change was different so that the annual increase was more evenly divided during the year. Largest increases during 1966 were reported for pediatric office visits.

The index of the five in-hospital surgical and medical procedures particularly significant for the aged did not increase as rapidly during 1966 as the combined index for physicians' fees regularly priced for the CPI. By the end of the year, however, the differential had narrowed because more physicians were adjusting their fees for these special procedures, and the increases have been somewhat higher than during the first half of the year.

This upward adjustment during the last half of the year may partly represent a process in which physicians increased their customary fees for these specialized services for the aged to conform with the general upward trend in all physicians' fees.

Other medical care prices, except drugs and prescriptions, followed the same general upward trend in 1966 and into 1967, but the acceleration was not as fast as for hospital daily service charges and physicians' fees.

Notes and Brief Reports

Federal Grants To State And Local Governments, 1965-66*

In fiscal year 1965–66 Federal grants to the States and localities totaled $12.5 billion, about 18 percent more than the $10.6 billion granted in 1964–65. Approximately 60 percent of the total—$7.7 billion—went to programs with basically a social welfare purpose. A decade ago Federal grants amounted to $3.4 billion—roughly one-fourth the current annual rate—and social welfare grants, at $2.6 billion, then represented more than 75 percent of the total.

Grants-in-aid are but one of the Federal fiscal aids to State and local governments, although quantitatively they are the most significant. Federal grants are also made to other types of recipients, but those made to the lower governmental levels—again quantitatively—are the most significant.

The scope of the data in the accompanying tables is confined to grants for cooperative Federal-State or Federal-local programs administered at the State and/or local level and to those programs in which the bulk of the funds is channeled through agencies of State and local governments. Emergency grants and the value of grants-in-kind, such as Braille materials for the blind, are included when they conform to these criteria. In the fiscal year 1965–66 this definition applied to 77 separate Federal grant programs, which are presented in nine grant groups in table 1.

At $3.5 billion, grants for the federally aided public assistance programs and their administration exceeded by 15 percent the assistance grants of 1964–65. The 1965–66 figure includes a half year's operation of the new medical assistance program under title XIX of the Social Security Act.

The $469 million granted in 1965–66 for the

* Prepared by Sophie R. Dales, Office of Research and Statistics, with the statistical assistance of Alice Skinner.