

Differences by Age Groups in Health Care Spending

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This paper presents differences by age in health care spending by type of expenditure and by source of funds through 1978.

Use of health care services generally increases with age. The average health bill reached \$2,026 for the aged in 1978, \$764 for the intermediate age group, and \$286 for the young. Biological, demographic, and policy factors determine each age group's share of health spending.

Public funds financed over three-fifths of the health expenses of the aged, with Medicare and Medicaid together accounting for 58 percent. Most of the health expenses of the young age groups were paid by private sources.

Expenditures for medical care differ markedly with age. The differences apply to the type and amount of medical care required, as well as the source of payment. This article examines these differences for three broad age groups—the young (under age 19), the intermediate group (ages 19-64), and the aged (65 and older). Data are presented for calendar year 1978 and for several earlier periods. Summary highlights reveal that:

- Of the \$168 billion total spent for personal health care in 1978, 12 percent was spent for the young, 59 percent for persons 19 to 64, and 29 percent for the oldest group. For a breakdown of private and public spending by age group and type of expenditure, see Tables A through D in the Technical Note, Appendix C.
- The average medical care bill for the aged reached \$2,026 per person, compared with \$764 for the intermediate group and \$286 for the young.
- About half of all public spending for personal health care was for the aged.
- Medicare payments covered 44 percent of the personal health care expenses for the aged, and Medicaid reimbursed an additional 13 percent.
- Private financing, primarily private health insurance and direct payments, is the major channel of payment for younger age groups, providing about 70 percent of their health care costs.

This article also examines some of the reasons contributing to the diversity in health care spending by different age groups. Age-related utilization statistics are shown by type, volume, and intensity of service. These utilization statistics are examined for hospital care, physicians' services, drugs, and nursing home care. Also considered are demographic changes and variations in health status. Policy-relevant variables, such as payment source and reimbursement policy, are examined to the extent that they affect utilization.

Channels of payment for health care, mainly private health insurance, public financing, and direct payments are explored. The role of the major public programs, primarily Medicare and Medicaid, in funding health care are described. Trends in channels of payment in the hospital sector demonstrate how private and public funding interact. Finally, the amount and sources of out-of-pocket expenses for health care, particularly for the elderly, are described.

Level of Health Care Spending by Age Group

The level of personal health care spending varies by age group as shown in Table 1. As might be expected, aged persons spent a disproportionate share of these dollars. Persons aged 65 and over comprise only 11 percent of the population but account for 29 percent of all personal health care expenditures. Thirty-one percent of the population are under age 19, but this group accounts for only 12 percent of spending for health care.

Persons aged 65 and over spent \$2,026 per capita for health care—seven times the \$286 per capita spending for persons under age 19 and two-and-one-half times the \$764 per capita expenditure for persons aged 19 to 64.

VARIATIONS IN HEALTH CARE EXPENDITURES BY AGE GROUP

Health care expenditures are the product of three factors: volume, which is the number of contacts with health care providers; intensity, which is the number of services provided in an average contact; and average price per service. Variations in health care spending by age group are due mostly to the first two

TABLE 1

Distribution of Population and of Personal Health Care Spending by Age Group, 1978

Age	Health Care Spending (billions)	Population (millions)	Per Capita Spending	Percentage Distribution	
				Health Care Spending	Population
All Ages	\$167.9	223.0	\$ 753	100.0%	100.0%
Under 19	19.9	69.5	286	11.9	31.2
19-64	98.7	129.2	764	58.8	57.9
65 and Over	49.4	24.3	2,026	29.4	10.9

factors, as average price per service is assumed not to vary by age. For example, a flu shot should cost the same for a 19-year old or for an 80-year old person. Variations in health care expenditures by age group due to differences in volume and in intensity are examined for hospital care, physicians' services, drugs, and nursing home care.

Hospital Care

Hospital care expenditures comprised the major health care expense category for all age groups in 1978. Yet, the percentage of total health expenditures for hospital care varies significantly by age group. Hospital care comprises 36 percent of all expenditures for persons under age 19, 48 percent for persons aged 19 to 64, and 43 percent for persons aged 65 and over.

Hospital expenditures per capita increase with age. The \$869 per capita hospital expenditure of the aged is more than eight times the \$102 per capita expenditure for the young and more than twice the \$370 per capita spent for persons aged 19 to 64.

One method of evaluating this variation in hospital expenditures is to examine the volume of services used. According to the 1978 Health Interview Survey (HIS) conducted by the National Center for Health Statistics (NCHS), both the percentage of each age-group hospitalized in short-stay hospitals and the number of hospital days used by each group increases with age [NCHS, 1978]. About five percent of persons under age 17 were hospitalized in 1978, compared to over 18 percent of persons aged 65 and over. Ten percent of all persons were hospitalized at least once in 1978 (Table B). The annual number of hospital days used ranged from an average of about six days per user for the youngest age group to an average of about 16 days per user for the HIS sample of persons 65 and over. Because of limitations in the HIS survey, estimates of hospital use by the elderly are significantly understated¹.

¹The Health Interview Survey (HIS), which provided the data for Table 2, continuously samples members of households. It is not intended to provide complete information on the deceased or on the institutionalized population. Thus, Table 2 tends to underestimate the volume of services used by the aged. [See Appendix B for a complete discussion of this issue.]

Another method of evaluating the variations by age in hospital expenditures is to examine the intensity of care. One measure of the age-relative intensity of hospital care is the variation by age group in charges per day. A study by NCHS for the years 1968-1970 (the last years for which such information was collected for the general population) showed that the average charge per day of care for the youngest persons was about the same as that for all hospital users. The average charge per day for the middle age group was about six percent more than the overall average, and that for the elderly was eight percent less (Hospital Discharge Survey, 1974). Thus, although the aged use far more hospital days per capita than do younger persons, the average intensity of care per hospital day is less. Given the relatively small variation in the intensity of hospital care it should be concluded that volume—the number of hospitalizations per capita and the average length of hospital stay—is the dominant factor in the differences by age in spending for hospital care.

Physicians' Services

Care by physicians represents a significant proportion of the health care dollars for all age groups. As a share of total spending for health care, physicians' care ranks second to hospital care for the younger age groups and third (after hospital and nursing home care) for the aged.

The percentage of the population making at least one visit to a physician per year does not vary significantly with age. Over 85 percent of the population received physicians' services in 1978 (NCHS, 1979). However, age-related variations both in the number of visits per year and, consequently, in annual per capita expenditures is observed. In 1978, the average number of out-of-hospital visits to physicians by persons under age 17 was 4.1, compared to an average of 6.3 visits by persons 65 and over. The per capita expenditures for physicians' services in 1978 ranged from \$.75 for young persons to \$366 for persons aged 65 and over.

To further evaluate the relationship of age to expenditures for physicians' services, intensity of service has been compared by age group. One measure of the relative intensity of physicians' services is the average duration of a visit. The National Ambulatory Care Survey for 1975 showed that the mean time per visit was greater for older patients—12 minutes for persons under age 16 compared to 15 minutes for all

TABLE 2

**Percent of Persons Hospitalized, Days per Patient, Physician and Dental Visits per Capita,
Noninstitutionalized Persons by Age Group, 1978**

Age Group	Percent of Persons Hospitalized			Short-Stay Hospital Days per Patient			Physician Visits per Capita	Dental Visits per Capita
	Total	Men	Women	Total	Men	Women		
All Persons	10.4	8.5	12.2	9.7	11.0	8.8	4.8	1.6
Under 17	5.3	5.6	5.0	6.4	6.4	6.5	4.1	1.6
17-24	10.6	6.2	14.8	5.8	7.2	5.2	4.3	1.5
25-44	11.3	6.9	15.4	7.3	8.9	6.6	4.7	1.7
45-64	12.1	11.8	12.4	12.3	12.9	11.9	5.3	1.7
65 and Over	18.0	19.2	17.2	15.6	17.2	14.4	6.3	1.2

Source: Current Estimates from the Health Interview Survey

other age groups. This survey also showed that more older persons tend to have visits in which drugs are prescribed, injections given, and blood pressure checked. The relative number of surgical operations by age group is another measure of the variations in the complexity or intensity of physicians' services. In 1977, the Hospital Discharge Survey showed that the number of surgical operations in hospitals was greater for older persons. There were 41 per 1000 persons under age 15 and 166 operations per 1000 persons aged 65 and over [NCHS, 1979]. Thus, the intensity of a physician visit, as well as the number of visits, and the per capita expenditure for physician services are greater for older persons.

Prescription Drugs and Drug Sundries

Along with short-stay hospital and physician care, prescription drug usage varies with age. These drug expenditures represent nine percent of personal health care expenditures for the total population. They constitute 14 percent of the expenditures for persons under age 19, 9 percent for persons 19-64, and seven percent for persons 65 and over. In 1978, per capita spending for prescription drugs ranged from \$41 for those under age 19 to \$133 for the aged. Similarly, the number of prescriptions per capita and the intensity of a prescription (measured by average price) also increased with age. The following table shows spending for drugs by age group. It is based on a 1973 NCHS survey, adjusted to include institutionalized and deceased persons.

TABLE 3
Prescriptions per Capita and Average Price per Prescription, 1973

Age Group	Prescriptions per Capita	Average Price per Prescription
0-16	3.2	\$3.39
17-24	4.2	3.77
25-44	5.6	4.33
45-64	8.7	5.09
65 and over	14.4	5.09

Source: (Trapnell, 1979)

Dental Care

Unlike other categories of care, spending for dental care does not increase directly with age. The number of dental visits per person by age group remains relatively constant for persons under age 65 and decreases for older persons.

According to the Health Interview Survey only 40 percent of the aged population reported visiting a dentist in 1977 compared to over 60 percent of the other age groups. Dental care expenditures accounted for 9 percent of total health care costs for persons aged 19 to 64, but for only three percent of total spending for the aged group. However, it should be noted that the intensity of dental services, measured by the average charge per dental visit, is greater for older persons. Thus, although the aged make fewer dental visits than do others, their visits are more costly.

Nursing Home Care

Nursing home use is dominated by the aged or near-aged. The National Nursing Home Survey (NNHS) shows that persons 65 and over comprised 86 percent of the nursing home population in 1977. Persons in the 55 to 64 age group accounted for an additional eight percent of nursing home residents. As expected, in 1978 nursing home care was second to hospital care as the most expensive health item for persons aged 65 and over. The per capita expenditure was \$518—one-fourth of the total health care spending for that age group.

Causes of Increased Health Care Spending with Age

Except for dental care, the number of contacts with health care providers increases with age. Much of this increase is due to degeneration associated with aging, shown in chronic diseases and physical impairment requiring frequent health care services. One measure of degeneration is a person's subjective assessment of the degree to which a chronic condition is limiting his or her activity.

The percentage of persons reporting limitation of activity (in the Health Interview Survey for 1974) accelerates with age and accelerates faster for men than for women (Figure 1). As people age, an increasing proportion suffers from some chronic condition requiring medical attention.

The 14 percent of the population who suffered a chronic condition accounted for 37 percent of all short-stay hospital discharges, for 55 percent of all short-stay hospital days, and for 28 percent of all out-of-hospital physician visits. Chronically impaired persons account for an increasing share of hospital discharges as age increases (Figure 2).

For males, each percentage point increase in the proportion of an age group suffering a chronic condition (Figure 1) is associated with an increase of 45 hospital discharges per 10,000 persons. For females, a percentage point increase in the same proportion is associated with an increase of 38 hospital discharges per 10,000 persons. In the group aged 65 and over, people with chronic conditions account for most of the hospitalization.

The acceleration of the incidence of chronic conditions shown in Figure 2 and of the implied use of health services related to these conditions is understated because two groups who use many health services are excluded: institutionalized persons—who are limited in activity by definition—and people who died before the survey.

Increasing use of health care services associated with increases in chronic conditions are rooted in age-related degeneration of biological functions. According to one study, each year of life after age 30 is accompanied by slightly less than one percent degeneration in a composite of one's functional capacity (Strehler, 1977). This steady rate sets the stage for increasing death, disease, and impairment, which are directly associated with health care use rates.

TRENDS IN HEALTH CARE SPENDING

Demographic Shifts

Personal health care spending for older people is rising as a percentage of the total, and that for young people is falling, as shown in Table 4.

This trend results in part from the decrease in the proportion of the population under age 19—a decrease which began around 1965. Thirty-eight percent of the

population was under age 19 in 1965; the percentage dropped to 31 percent by 1978.

This "aging" of the population tends to increase the intensity and therefore the costs of health care. As shown previously, health care for the young is generally less intense than for older age groups. Therefore, as the percent of total contacts with health care providers by the young diminishes, due to their declining relative and absolute numbers, the average intensity of service for the total population increases.

Changes in fertility rates have affected hospitalization rates for the child-bearing age group. Hospital days of care for deliveries dropped 37 percent between 1967 and 1977, from 410 days per 1,000 females aged 15 to 44 in 1967 to 259 days in 1977. Decreasing birth rates also imply fewer physician visits and less prescription drug spending for this group (NCHS, 1967, 1977). This has a dual effect on health care use: it reduces the number of persons needing health care and the number of women needing obstetrical care.

Aging of the Aged

Within the group aged 65 and over, the proportion of the very old is increasing. Persons aged 85 and over comprised about 5.9 percent of the total population of the nation in 1965 and 8.7 percent in 1978—a trend which may continue for some years.

The impact of this trend on health care costs is significant. In 1976, under Medicare, persons aged 85 and over used 5,484 days of short-stay hospital care per 1,000 persons, compared to 3,684 days for all persons 65 and over—a 50 percent higher rate (unpublished HCFA data). The rate for persons under age 65 was 894 days per 1,000 persons. Further, persons aged 85 and above accounted for 35 percent of all nursing home days of care in 1977 [NNHS, 1977], while comprising only eight percent of the population aged 65 and over.

IMPACT OF PUBLIC POLICY

The implementation of the Medicare and Medicaid programs and the Economic Stabilization Program [ESP] appear to explain changes in health care use and costs by age groups which are not associated with age-related biological factors.

TABLE 4

Percentage Distribution of Personal Health Care Expenditures by Age Group, Selected Calendar Years 1965-78

Age Group	1965	1970	1976	1977	1978
All Ages	100.0%	100.0%	100.0%	100.0%	100.0%
0-18	17.1	15.8	12.6	12.2	11.8
19-64	59.1	58.0	58.9	58.7	58.8
65 and Over	23.8	26.3	28.5	29.0	29.4

FIGURE 1
Percentage of Persons with Chronic Conditions, by Age and Sex, 1974

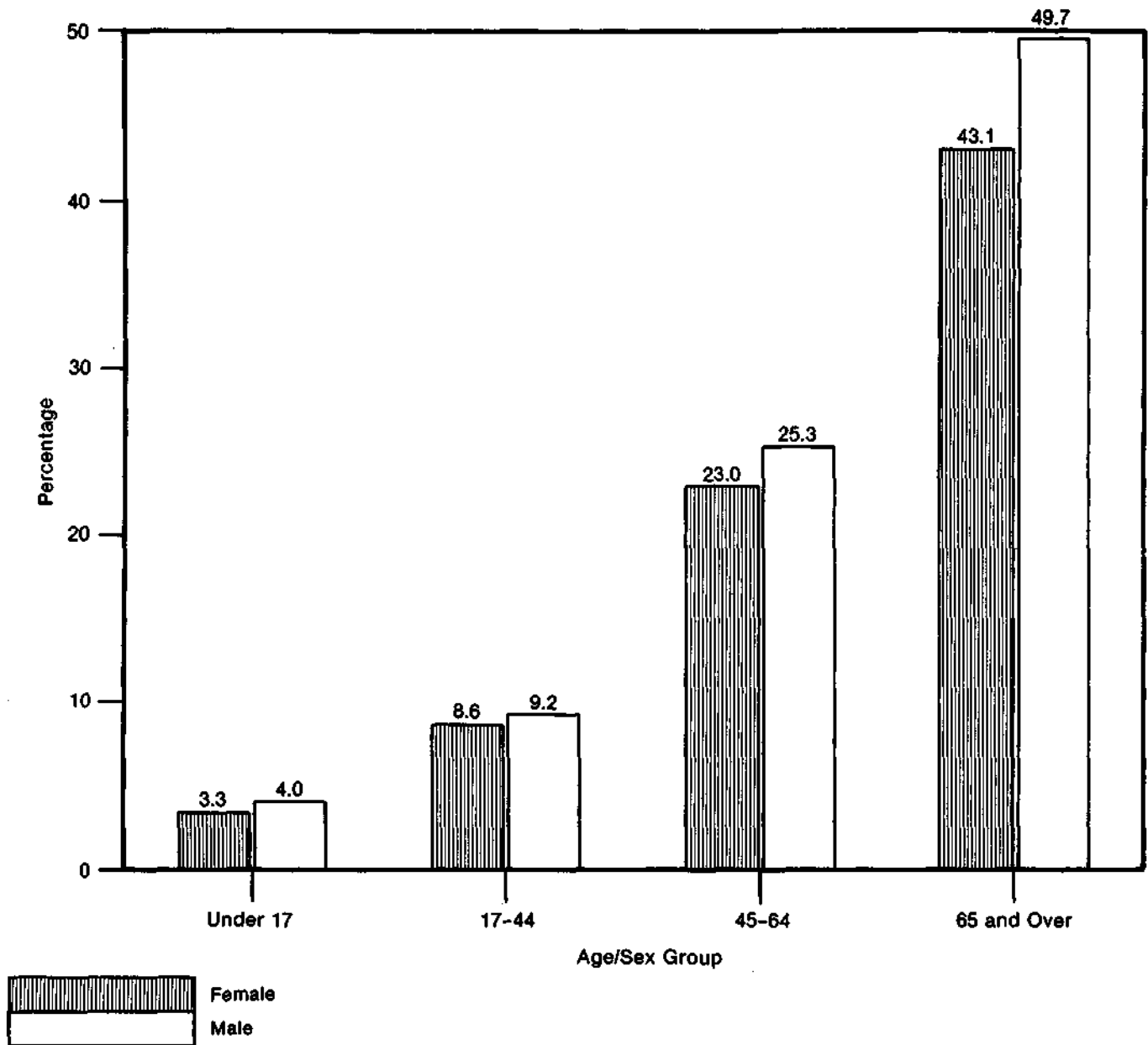
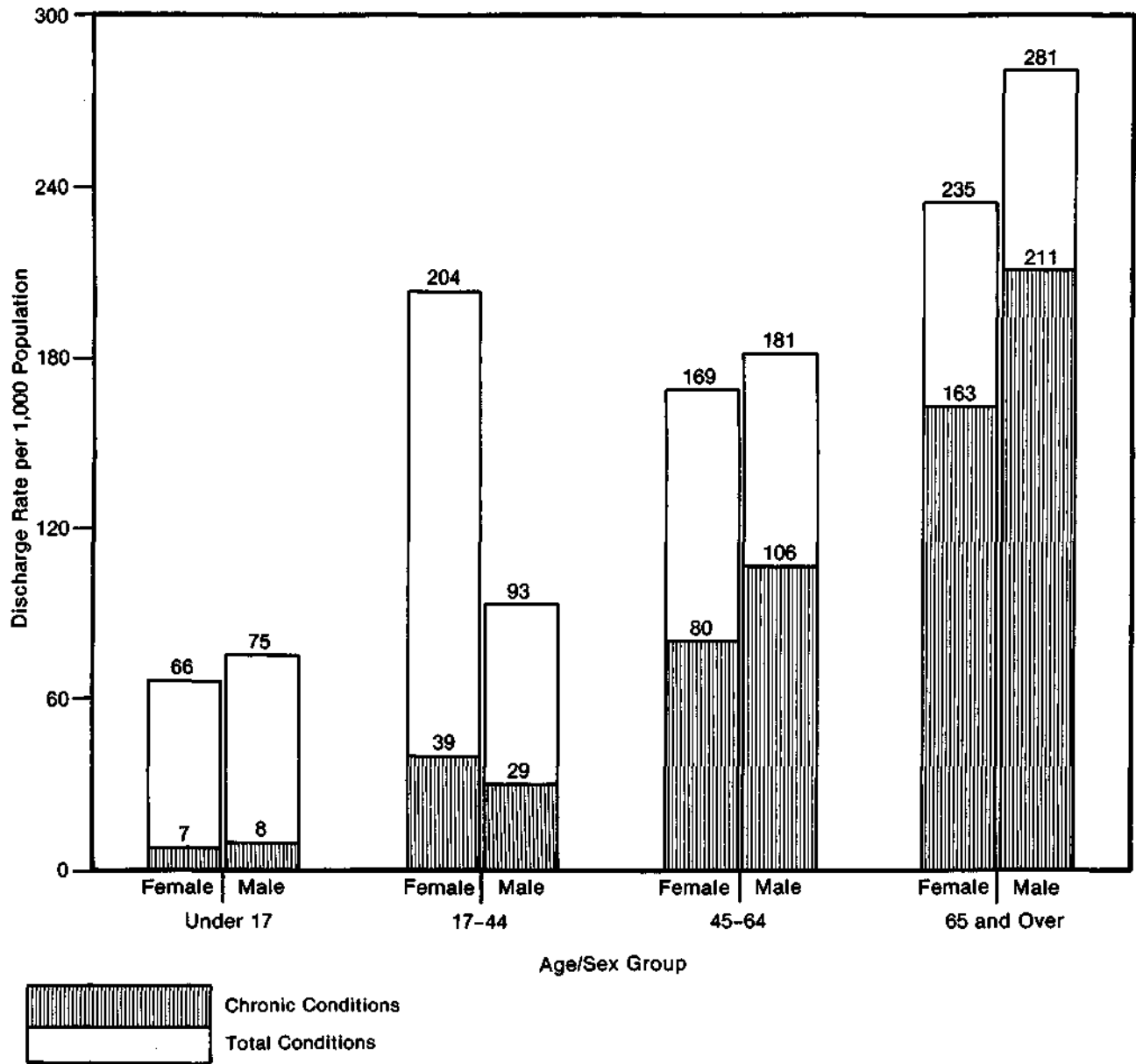


FIGURE 2
Hospital Discharge Rate, by Age and Sex: Total and Those Attributable to Persons with Chronic Conditions, 1974



Medicare

With the implementation of Medicare in 1966, short-stay hospital admission rates for persons aged 65 and over increased rapidly. To isolate age-related biological factors from other factors in the use of medical services, Figure 3 was developed. The figure displays the proportion of the aged population which had at least some hospital expense paid by Medicare for the years 1967, 1968, 1969, and 1976. The effect of biological age-related factors underlying hospitalization rates is approximated by the slopes of the lines which show an increase of about 3.1 percent for each year after age 66. Although the rate of use by all persons (Figure 3) did not change over the early period, hospitalization rates for all aged persons under Medicare did increase. The vertical distances between the lines in Figure 3 represent changes in overall hospitalization rates and reflect factors other than age-related, biological ones.

Figure 4 indicates that the Medicare program made hospital care affordable to the elderly, and that the resulting influx of the aged into hospitals temporarily displaced younger patients. Following that initial surge, Medicare admission rates stabilized at about 300 per 1,000 beneficiaries from fiscal year 1969 through fiscal year 1971, after which admission rates increased at a rate of two percentage points per year. Admission rates for persons under age 65 increased sharply in 1970, and again between 1972 and 1974 before stabilizing.

Hospital stays involving some surgery for persons aged 65 and over also increased but at a different rate. In the early period, from 1965 to 1972, hospital discharges with surgery per 1,000 Medicare beneficiaries increased at an annual rate of 1.8 percent. From 1972 to 1976, this surgical rate increased 2.9 percent annually.

Upward trends in hospitalization and surgical rates for the aged are also associated with a shift in physicians' Medicare charges for services performed outside the hospital to services performed in the hospital, as shown in Table 5.

Evidently, this shift in physicians' charges from out-of-hospital to in-hospital care is related to increasing hospitalization rates and surgical rates. Physicians' charges are generally higher for hospital visits than for out-of-hospital visits, and average physicians' surgical charges generally far exceed average charges for other types of service. Both out-of-hospital visits to physicians and the number of hospital days used per capita by aged persons remained relatively stable during the period 1971 through 1977. Total physician

visits did not change significantly, but inpatient visits and surgical services as a proportion of total visits increased leading to a shift in physicians' charges toward more expensive types of care.

Medicaid

Changes in the Medicaid program may also help explain the variation in admission rates shown in Figure 4. The Medicaid program, formally begun in January, 1966, is a joint State-Federal program in which States participate at their option. All but two States joined the program between 1965 and 1970. Alaska joined in fiscal year 1973. Arizona is the only State without a Medicaid program. The last major influx of Medicaid participants occurred in January, 1970 when seven States joined the program.

The number of persons under age 65 eligible for Medicaid due to disability increased significantly between 1969 and 1970. These persons are extensive users of hospital care, and their enrollment in Medicaid partially explains the increase in admission rates for persons under age 65 in 1970—a year in which admission rates for aged persons did not change.

The Economic Stabilization Program

The resumption of increases in hospital admission rates for aged persons, increasing surgical hospitalizations, a shift of physicians' charges toward care in the hospital, and an increase in admission rates for persons under age 65 coincided with the start of the Economic Stabilization Program (ESP) in fiscal year 1972. For most of its effective life, the ESP restricted increases in hospital costs per admission and physicians' charges per procedure but did not restrict increases in hospital admissions or in total physicians' services. Since the ESP had no effective limitation on the volume of services, one interpretation of the data is that hospitals and physicians responded to the ESP requirements by allowing hospital admission rates to increase.

After the ESP ended in early 1974, overall admission rates seemed to stabilize, although admission rates for aged persons continued to increase.

Changes in the rate of surgical operations per capita paralleled changes in admission rates over the period 1967-1978. Surgical rates per capita increased at an annual rate of 1.8 percent from the year ending in June 1967 to 1971; they increased at an annual rate of 3.2 percent from 1971 through 1974, and have decelerated to an annual rate of increase of 2.1 percent since 1974. [AHA Panel Survey].

TABLE 5

Physicians' Services: Charges Under Medicare for Persons Aged 65 and Over for Selected Calendar Years 1971-1977 (amounts in billions)¹

	1971		1972		1976		1977	
	Amount	Percent	Amount	Percent	Amount	Percent	Amount	Percent
Allowed Charges	\$2.8	100.0%	\$3.0	100.0%	\$5.0	100.0%	\$5.9	100.0%
Inpatient Hospital	1.6	56.8	1.7	57.6	3.0	60.0	3.6	60.7
Out-of-Hospital ¹	1.2	43.2	1.3	42.4	2.0	40.0	2.3	39.3

¹ Excludes outpatient hospital billing for physicians' services. Source: Current Medicare Surveys

FIGURE 3
Persons Hospitalized per 1,000 Medicare Beneficiaries by Age,
Calendar Years 1967, 1968, 1969, and 1976

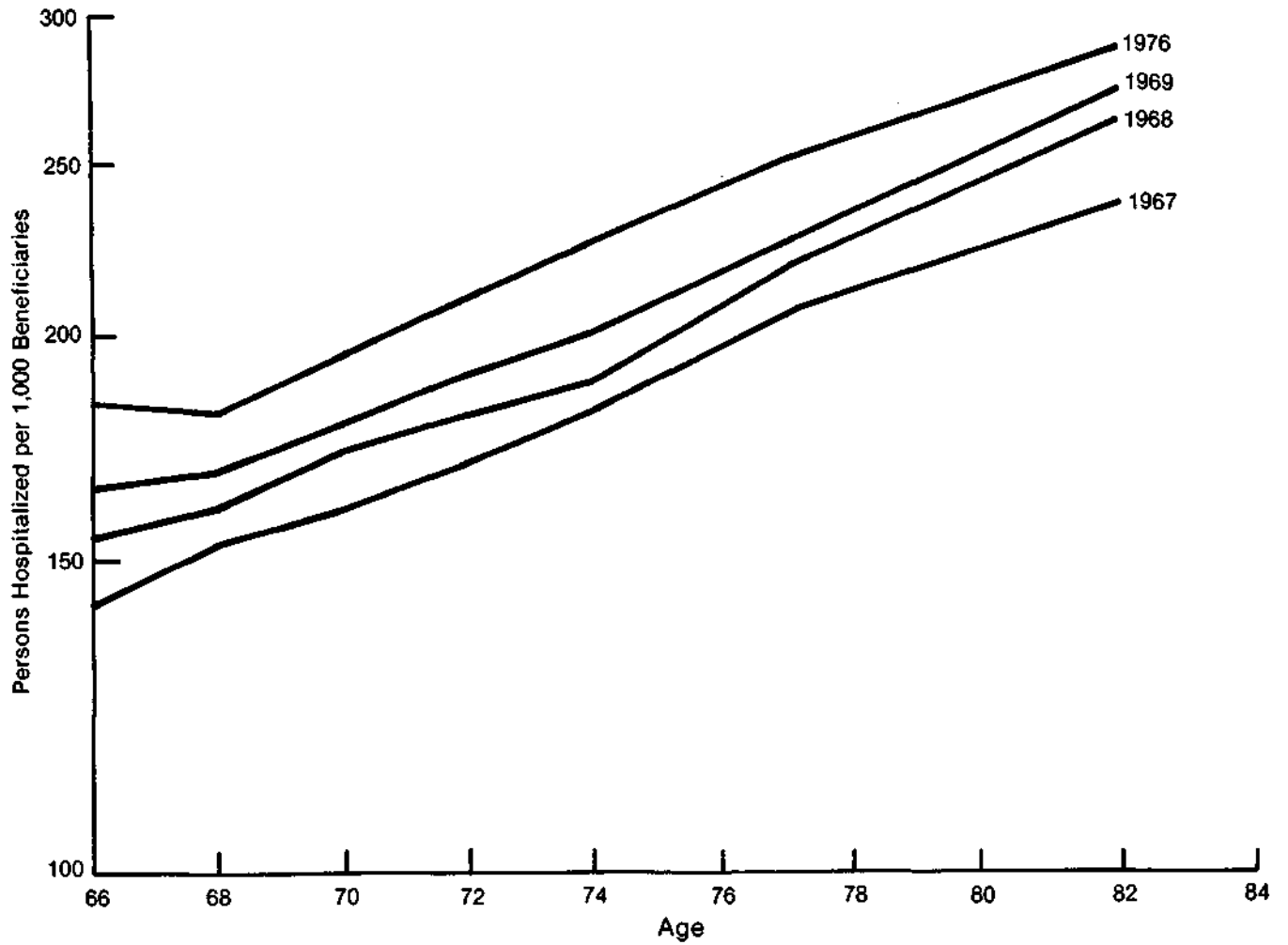
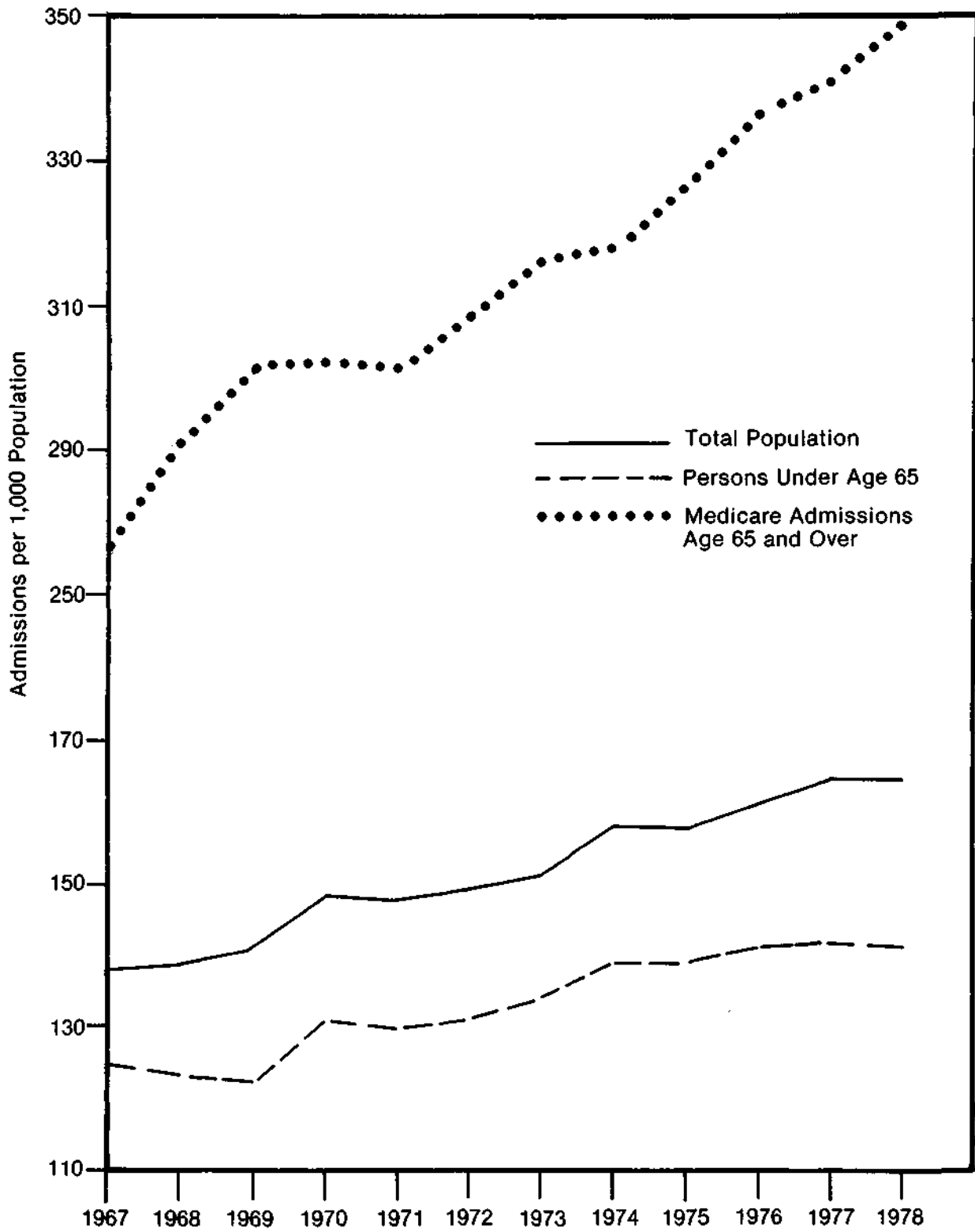


FIGURE 4
Short-Stay Hospital Admission Rates for Selected Populations,
Years Ending June, 1967-78



The Cost of Living Council, in its evaluation of the early part of the ESP program, reported that controls on hospital charges shifted the burden of increasing hospital expenses toward cost reimbursement programs such as Medicare and Medicaid and away from charge reimbursement payment mechanisms such as private insurance. Because Medicare and Medicaid serve mainly the aged and children, while charge reimbursement serves many of the 19 to 64 age group, the early ESP regulations tended to shift increasing hospital costs to the aged and those 18 and under. This affected the age distribution of hospital care expenses.

Channels of Payment

PUBLIC CHANNELS

Public funding of health care for all age groups has been shifting from State and local governments to the Federal government. In 1965, the main sources of public financing of health care were State and local governments, which provided over half of the \$7.9 billion in public money spent for health care. Most of these non-Federal public funds were spent for the mid-age group which comprised the largest proportion of persons in non-Federal government psychiatric hospitals. By 1970 the State and local share of public health care spending had declined to 35 percent, and

by 1978 the share was down to 29 percent. The decline in the percentage of health care spending by State and local governments may be traced to two factors: the growth of Federal programs which partially replaced State and local public assistance spending for medical care and the decrease in populations of State and local governmental psychiatric hospitals. The Federal share of total public health care spending grew from 48 percent in 1965 to 71 percent in 1978. Between 1965 and 1978 inclusively, the Federal share grew from 51 percent to 86 percent for the aged, from 43 percent to 57 percent for the mid-age group, and from 61 percent to 66 percent for persons under age 19. The distribution of total personal health spending in 1978 by age group and source of public payment is displayed in Figure 5.

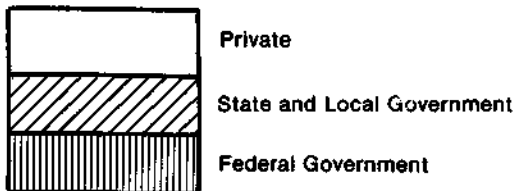
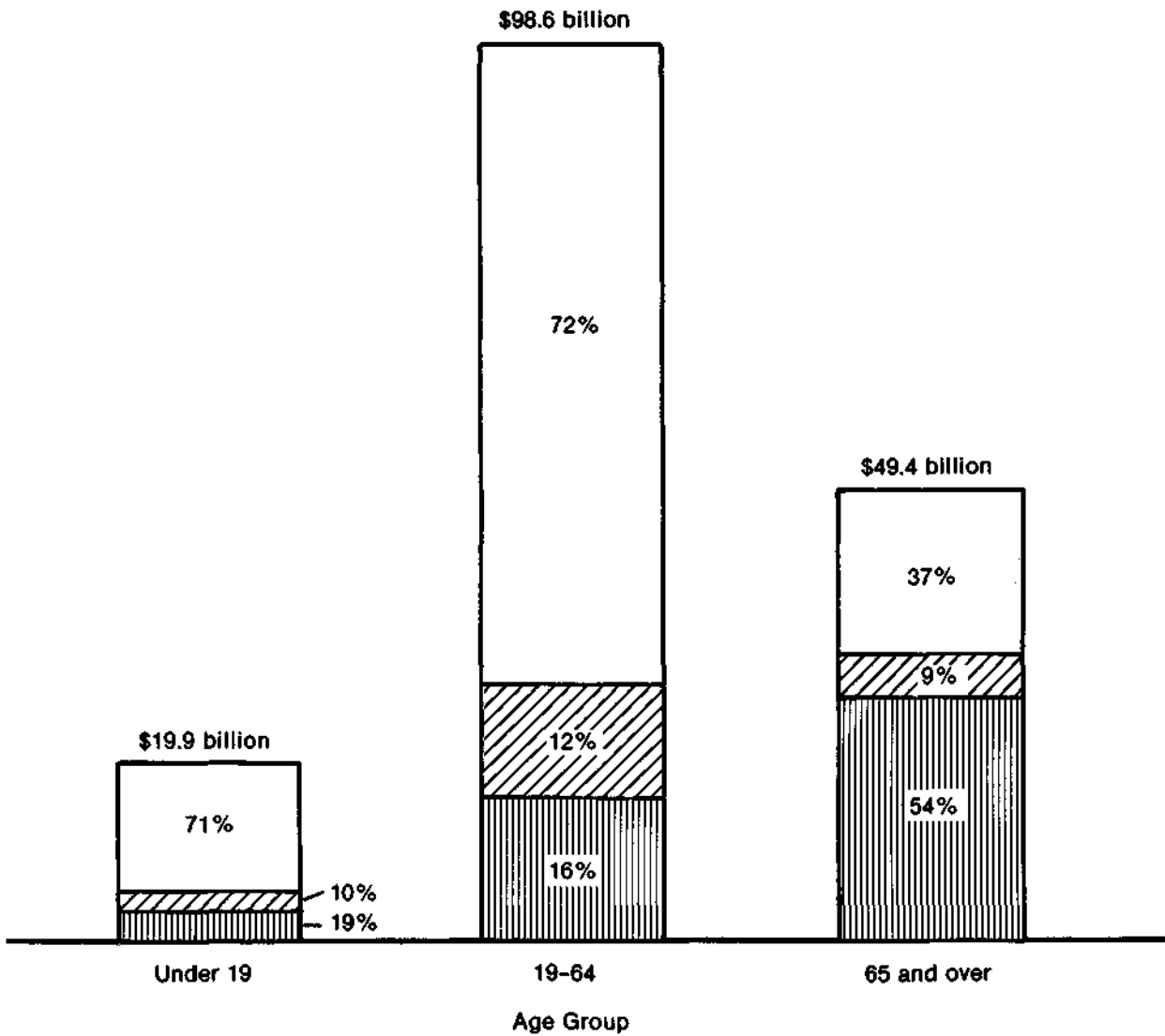
In 1965, the Veterans Administration, the Department of Defense, and workers' compensation also provided health care—mainly for the mid-age group. These programs spent \$2.75 billion and accounted for 35 percent of all public spending in 1965. In 1978 they spent \$11.6 billion, but their share of public spending diminished to 17 percent, reflecting the rapid growth in Medicare and Medicaid spending. Public financing as a percent of all health care funding grew rapidly after the introduction of Medicare and Medicaid in 1966 but more recently appears to have stabilized for all age groups (Table 6). Although public funding of personal health care expenditures continues to grow, State and local funding as a percent of total expenditures had declined.

TABLE 6

Percentage Distribution of Funding for Personal Health Care for Selected Calendar Years 1965 to 1978

Age Group	1978	1977	1976	1970	1965
All Ages					
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Private	61.3	61.0	60.9	65.9	78.9
Public	38.7	39.0	39.1	34.1	21.1
Federal	27.7	27.6	27.5	22.2	10.1
State and Local	11.0	11.4	11.6	12.0	11.0
Under age 19					
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Private	71.3	71.5	71.1	76.1	84.5
Public	28.7	28.5	28.9	23.9	15.5
Federal	18.9	18.7	19.3	14.2	9.4
State and Local	9.8	9.8	9.7	9.7	6.1
Ages 19-64					
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Private	71.4	71.2	71.1	75.4	80.8
Public	28.6	28.8	28.9	24.6	19.2
Federal	16.2	16.0	16.0	11.1	8.3
State and Local	12.4	12.8	12.8	13.5	11.0
Ages 65 and Over					
Total	100.0%	100.0%	100.0%	100.0%	100.0%
Private	36.8	36.1	35.5	38.8	70.1
Public	63.2	63.9	64.5	61.2	29.9
Federal	54.2	54.7	54.7	51.3	15.4
State and Local	8.9	9.2	9.8	9.9	14.4

FIGURE 5
Percentage Distribution of Personal Health Care Expenditures by Source of Funds and Age Group,
Calendar Year 1978



Medicare and Medicaid

Two-thirds of all public financing of health care is provided by Medicare and Medicaid. Although Medicare finances health care primarily for aged persons, Medicaid finances health care for all ages, as shown by Table 7.

TABLE 7
Percent of Total Personal Health Care Expenditures Financed by Public Programs, 1978

Age Group	Medicare	Medicaid	Other
All ages	14.8%	10.9%	13.0%
Under 19	.2	15.8	12.7
19-64	3.2	8.7	16.7
65 and Over	44.1	13.4	5.7

Medicare

In 1978, Medicare provided 44 percent of all health care costs for the aged, compared to 39 percent in 1970. Part of this increase can be attributed to the rising proportion of hospital care funded by Medicare. Medicare paid 71 percent of hospital care costs in 1970 and 75 percent in 1978. This increase was not due to explicit policy decisions. It resulted from changes in the mix of psychiatric and non-psychiatric hospital care. Between 1955 and 1978, the average daily census in psychiatric hospitals fell from 677,000 patients to 190,000 patients; the age distribution of the average daily census remained fairly constant. Consequently, community hospital days grew as a share of total hospital days for the aged. This increasing proportion of more highly reimbursed care has caused the increase in the Medicare share of total hospital care for the aged.

The proportion of physician expenses paid by Medicare also has increased. This occurred because the Medicare annual deductible increased from \$50 to \$60 in 1973 but has not changed since, despite rapid increases in allowed charges for physicians' care. Table 8 shows that from 1971 to 1977, the deductible expense for physicians' services under Medicare decreased from about 19 percent to 12 percent of all allowed charges.

TABLE 8
Physicians' Services: Percentage Distribution of Reimbursements, Coinsurance, and Deductibles. Selected Calendar Years 1971-1977

	1977	1976	1972	1971
	Percent	Percent	Percent	Percent
Allowed Charges	100.0%	100.0%	100.0%	100.0%
Reimbursement	70.7	68.8	65.5	65.0
Coinsurance	17.7	17.5	16.4	16.2
Deductible	11.6	12.7	18.1	18.8

Source: Unpublished HCFA data.

Medicaid

Medicaid pays a significant part of hospital and physician care costs for persons under age 19. In 1977, about a fourth of all hospital spending and about one dollar of every eight spent for physician care for this group was financed by Medicaid (Table 9). Medicaid paid 39 percent of nursing home costs for persons aged 65 and over in 1978. It appears that the proportion of nursing home care costs paid by Medicaid and Medicare has been decreasing in recent years.

In 1978, the program spent \$8.6 billion for persons aged 19 to 64, which represented 47 percent of total Medicaid expenditures. Two groups of Medicaid recipients in this mid-age range accounted for most of these expenditures: disabled persons under age 65 who comprised about one-ninth of all Medicaid recipients, but for whom about one-fifth of all Medicaid expenditures were made, and adults in families with dependent children who comprised about one-fifth of all Medicaid recipients and for whom about one-sixth of all Medicaid expenditures were made.

THE INTERACTION OF PRIVATE AND PUBLIC CHANNELS

Direct or out-of-pocket payments and private insurance financed most health care costs for younger age groups while public monies dominated funding for aged persons. Major channels of payment for all age groups in 1977 are shown in Table 9 by selected types of medical care.

Hospitals were the major recipients of public and private funding for health care, receiving 34 percent of private funds and 63 percent of public funds. The changing structure of source of payment for hospital care is an important determinant of public and private health care funding policy. Although no comprehensive survey of sources of payment for hospital care by age group is available, data from various public and private sources may be merged to estimate the flow of funds by age group in the hospital industry. Table 10 represents this flow of funds for the years 1970 and 1977. Medicare provided an increasing share of

FIGURE 6
Per Capita Personal Health Care Expenditures for the Aged,
by Source of Funds and by Type of Care, Calendar Year 1978

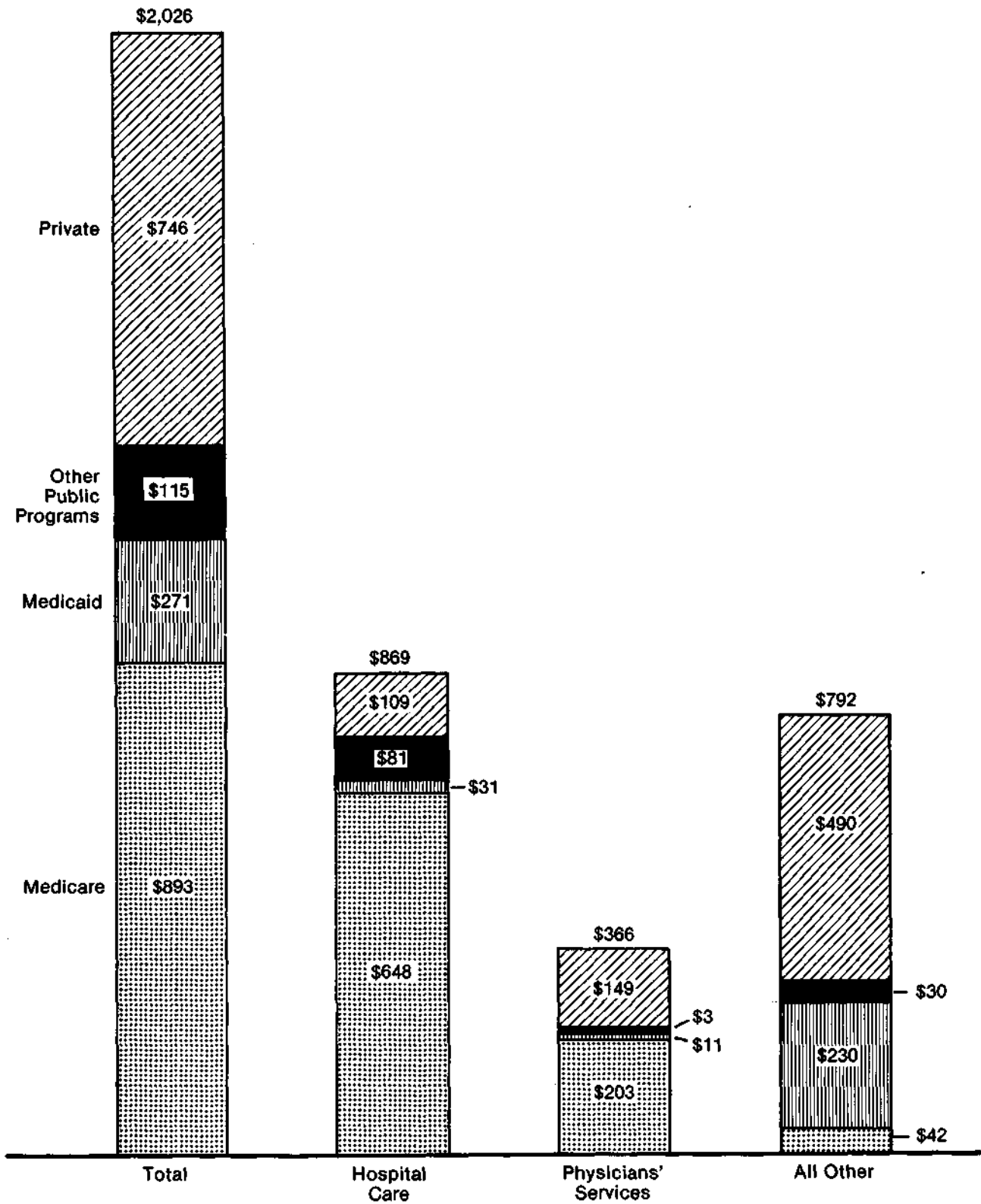


TABLE 9

Percentage Distribution of Health Care Expenditures by Channels of Payment for Hospital Care, Physicians' Services and All Other Health Care Services, Calendar Year 1977

Age Group	Total	Private				Public			
		Total	Direct Payments	Private Health Insurance	Other	Total	Medicare	Medicaid	Other
All Personal Health Care									
All Ages	100.0	61.0	31.8	27.9	1.3	39.0	14.6	11.2	13.2
Under 19	100.0	71.5	38.1	32.7	.7	28.5	.1	15.6	12.8
19-64	100.0	71.2	31.9	37.4	1.9	28.8	3.0	8.9	16.9
65 and Over	100.0	36.1	29.1	6.6	.4	63.9	44.2	13.8	5.9
Hospital Care									
All Ages	100.0	45.6	8.3	36.2	1.1	54.4	23.9	9.5	21.0
Under 19	100.0	54.6	3.7	50.7	.2	45.4	—	25.0	20.4
19-64	100.0	59.2	10.7	46.9	1.6	40.8	4.9	9.6	26.3
65 and Over	100.0	12.0	4.6	7.1	.3	88.0	74.7	3.9	9.4
Physician Care									
All Ages	100.0	74.1	33.9	40.1	.1	25.9	14.7	6.0	5.2
Under 19	100.0	84.4	38.7	45.7	—	15.6	.4	12.1	3.1
19-64	100.0	84.5	35.7	48.6	.1	15.5	2.4	5.6	7.5
65 and Over	100.0	41.8	26.2	15.5	—	58.2	54.2	3.1	.9
All Other Care									
All Ages	100.0	73.9	62.5	9.0	2.4	26.1	1.9	16.7	7.5
Under 19	100.0	78.5	70.2	6.9	1.5	21.5	—	9.2	12.3
19-64	100.0	81.2	63.4	14.0	3.8	18.8	.2	10.2	8.4
65 and Over	100.0	60.6	58.0	1.9	.7	39.4	5.3	29.9	4.2

community and related hospital spending, and private insurance declined, due to the extension of Medicare coverage to certain disabled persons under age 65.

The proportion of hospital spending for the aged paid by Medicare decreased slightly over the period. According to Medicare actuaries, more than a million persons aged 65 and over are ineligible for hospital insurance under Medicare. These persons are predominantly retired government employees whose private insurance continues at retirement and covers most of their physician and hospital care.

DIRECT PAYMENTS BY PERSONS AGED 65 AND OVER

Out-of-pocket payments for health care continue to be a major expense for aged persons. In 1977, persons aged 65 and over paid 29 percent of their health care costs out-of-pocket. The amounts paid out-of-pocket vary considerably by the type of care provided.

The out-of-pocket liability of the elderly for hospital care has changed dramatically since 1965—the year before Medicare and Medicaid began. About 13 percent of spending for hospital care was paid out-of-pocket in 1965, compared to less than five percent by 1977.

The elderly make out-of-pocket payments for physicians' care for that part of the deductible and coinsurance not paid by Medicaid or private insurance, for physicians' charges not allowed by Medicare but collectable from beneficiaries, and for medical services not covered by Medicare. Physicians' billings to patients for charges denied by Medicare because the charges exceed the allowed amounts add a significant amount to patients' liabilities generally not covered by private insurance. Through 1976, the percentage of total physicians' charges paid by Medicare declined because of the growing obligations of Medicare beneficiaries for physicians' charges on "unassigned" claims that were submitted by physicians but disallowed. These disallowed charges to beneficiaries increased from two percent of the total physician bill for the aged in fiscal year 1968 to about 10 percent in calendar year 1976, where they remained through 1978. In dollar terms, these out-of-pocket expenses for physicians' services were about \$84 per capita in 1977, and preliminary estimates indicate that the costs will rise to about \$96 per capita in 1978.

Payment for nursing home care represents the largest health care liability for persons aged 65 and over—estimated at \$271 per capita in 1978, up from \$228 in 1977, and \$109 in 1970. About 52 percent of nursing home care was financed out-of-pocket by beneficiaries in 1978.

TABLE 10

Hospital Expenditures and Percentage Distribution of Channels of Payment by Type of Hospital and Age Group, Calendar Years 1970 and 1977. (Dollar amounts in millions)

	1977				1970			
	Total	Under 19	19-64	65 and Over	Total	Under 19	19-64	65 and Over
Psychiatric Hospitals (non-Federal)	\$4,015	\$199	\$2,632	\$1,184	\$2,534	\$81	\$1,710	\$744
State and Local Hospitals								
Sources of Payment-Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Medicare	1.7	—	.4	4.9	.5	—	—	1.6
Medicaid	18.7	34.7	15.3	23.6	11.0	3.7	.5	35.9
Other Federal	1.5	7.0	1.5	.5	1.5	9.9	1.5	.5
Other State and Local	44.6	8.5	46.5	46.5	70.1	74.1	79.1	48.9
Private Health Insurance	14.0	41.2	18.0	.6	1.0	3.7	1.2	.1
Direct Payment	19.5	8.5	18.3	23.9	15.9	8.6	17.6	12.9
Private Hospitals	\$661	\$33	\$433	\$195	\$258	\$8	\$174	\$76
Sources of Payment-Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Medicare	1.7	—	.5	4.6	3.5	—	—	11.8
Other State and Local	1.1	3.0	1.2	.5	1.9	—	2.9	—
Private Health Insurance	70.0	84.8	77.4	50.8	48.1	37.5	48.3	48.7
Philanthropy	3.9	3.0	3.9	4.1	3.9	12.5	3.4	3.9
Direct Payments	23.4	9.1	17.1	40.0	42.6	50.0	45.4	35.5
Federal Hospitals	\$6,099	\$747	\$4,595	\$757	\$2,822	\$499	\$2,025	\$349
Sources of Payment-Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Veterans Administration	58.6	—	63.6	85.6	53.2	—	59.9	82.8
Department of Defense	32.2	63.1	31.2	8.3	38.0	83.5	32.8	9.2
Other	9.2	36.9	5.2	6.1	8.8	16.5	7.3	8.0
Other Hospitals	\$57,139	\$5,572	\$34,806	\$16,761	\$22,184	\$2,901	\$13,397	\$5,885
Sources of Payment-Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Medicare	28.2	.1	6.0	83.8	22.3	—	—	84.2
Medicaid	9.9	28.1	10.5	2.7	8.8	16.9	9.9	2.3
Workers Compensation	2.3	—	3.7	.2	2.3	—	3.8	.3
State and Local Public Assistance	.7	.3	1.1	.2	.9	1.1	1.1	.2
Other State and Local	5.9	1.3	8.6	1.9	7.0	9.5	8.7	1.9
Department of Defense	.7	1.8	.9	.1	1.1	3.0	1.1	.1
Other Government Programs	1.5	6.6	1.0	.6	.9	2.3	1.0	.1
Philanthropy	1.2	.3	1.9	.2	1.5	.5	1.9	1.0
Private Health Insurance	41.2	57.6	54.8	7.6	44.4	58.8	58.5	5.4
Direct Payments	8.3	4.0	11.5	2.8	10.7	8.0	14.0	4.4

Payments for drugs and drug sundries and for dentists' services are another major expense. Precise dollar amounts for these payments are not currently available, although surveys now under way will provide estimates of out-of-pocket expenses for these types of care, as well as for other health services. Out-of-pocket spending for drugs and dentists' services is estimated at \$150 per capita in 1977 and \$160 in 1978.

Medicare Supplementary Medical Insurance (SMI) and private health insurance premiums are also paid out-of-pocket at a rate of \$78 per capita for SMI and \$90 per capita for private health insurance. Persons aged 65 and over paid an average of about \$698 for health related services and items out-of-pocket in 1977—representing 12 percent of their \$5900 average income.

Conclusions

Spending for health care varies significantly by age group. Per capita health spending increases steadily with age for most health care sectors.

Young persons are spending a decreasing share of the health dollar because they are declining as a percent of the total population. Private sources of payment provide most of the health expenses for the young.

The middle age group spends most of the health care dollar because it is the largest age group. Most health expenses for this group are paid by private sources.

Persons aged 65 and over continue to increase steadily as a percent of the total population. The health care needs of these persons, shown by current use of various sectors of health care, are expected to

grow along with their numbers, resulting in an increasing share of personal health care spending for and by the elderly. Public financing has been and continues to be the major source of funding for personal health care costs for the aged. As the aged population continues to grow in the future, the need for public financing of health care costs is expected to increase, especially for those types of care which aged persons use more often—hospital care, physicians' services, and nursing home care. The population within the age group 65 and over is aging and is expected to add to the need for health care services, especially nursing home care. Health care policy and financing must continue to cope with these trends which are expected to continue for many years to come.

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Technical Note A

CONCEPTS AND DEFINITIONS

All estimates in this report relate to personal health care expenditures—that portion of the total national health care expense representing health services and supplies received directly by individuals. They make up total national expenditures for health, together with spending for research and medical facilities construction, identifiable administrative costs of government programs, government public health activities, expenses incurred by philanthropic organizations in raising funds for health care, and the net costs of private health insurance (the difference between premiums and benefit payments).

All expenditures for health care that are channeled through any program established by public law are treated as public expenditures in these estimates. Expenditures under workers' compensation programs, for example, are included with government expenditures although they involve benefits paid by private insurers from premiums collected from private sources.

Funds disbursed by public programs are reported as program expenditures, even, for example, when they include significant private contributions made by beneficiaries as in the Supplementary Medical Insurance (SMI) program. The benefit expenditures reported in this series are not adjusted to eliminate the duplication that exists when payments are made by State governments into the Medicare trust fund in the form of SMI premiums for public assistance and Supplemental Security Income (SSI) recipients and they are reported as Medicaid expenditures. The amount paid by Medicaid as premiums in 1978 was \$288 million for all beneficiaries; that portion not retained in the trust fund is duplicated as a Medicare expense. The amount does not noticeably affect the relationships that are reported.

Health expenditures by State and local governments that involve funds received from the Federal government under revenue sharing are reported as State and local expenditures, not as Federal expenditures. These funds amounted to \$232 million in the first half of fiscal year 1976, the latest period for which data are available. No information is available on the use of such funds by specific programs.

Responsibility for compiling estimates of national health care spending now resides with the Health Care Financing Administration (HCFA), Department of Health and Human Services. Definitions of the various types of health care and descriptions of the public programs are contained in the various articles in the series carrying estimates for expenditures. (Gibson, 1979; Carroll, 1979)

It should be noted that hospital care includes all expenditures for care in hospitals—both inpatient and outpatient. The data cover all services and supplies provided.

Population estimates used here are selected to correspond to the population covered by expenditure estimates. Since national health expenditures cover all spending for or by United States citizens and residents, population estimates include the institutionalized population, the Armed Forces (both in the United States and overseas), Federal civilian employees overseas, and the civilian population of outlying areas.

The group under age 19 presents some problems in connection with the available demographic information on utilization and expenditures. Extensive interpolation is often required to estimate certain types of expenditures for this group. Because of the nature of some data sources, expenses for certain persons under age 19 who are part of the labor force are not separable from those aged 19 to 64, and expenses of dependent children over age 18 are included with those of the younger group.

Technical Note B

The Health Interview Survey (HIS), which provided the data for Table 2, continuously samples members of households. It was not intended to obtain complete information on the deceased nor on the six percent of the aged population who are institutionalized. Thus, Table 2 tends to underestimate the volume of services used by the aged. The degree of this underestimation can be evaluated by comparing the statistics in Table 2 to other data. A 1973 study (the latest available) determined that six percent of the aged population is institutionalized in psychiatric and long-stay hospitals or nursing homes. Institutionalized persons had more frequent admissions and a longer average length of stay than did the noninstitutionalized elderly [Deacon, 1977]. This study also determined that the institutionalized elderly used 2.5 times more physician services and twice as many drug prescriptions per capita than did their noninstitutionalized counterparts. Thus, Table 2 significantly underestimates hospital use by the elderly.

It is also necessary to evaluate people's health expenditures in the year of their death to assess the underestimate of the values in Table 2. The Health Interview Survey captures only about half of the health care use of persons dying in the survey year. The following table presents the disproportionate share of Medicare dollars spent for aged persons who died in 1976.

Distribution of Medicare Expenditures for Persons Who Died in 1976

Age Group	Percent of Medicare Recipients Who Died in 1976	Percent of Total Medicare Dollars Spent for Those Recipients
All ages 65 and Over	7.9%	20.7%
65-69	4.0	15.3
70-74	5.8	18.5
75-79	8.0	20.3
80-84	11.8	24.9
85 and Over	19.8	32.1

Source: Unpublished HCFA data.

Technical Note C

Table A Personal Health Care Expenditures for Three Age Groups: Aggregate and Per Capita Amount and Percentage Distribution by Type of Expenditure and Source of Funds for Calendar Years 1978, 1977, 1976, 1970, 1965

Table B Estimated Personal Health Care Expenditures under Public Programs by Type of Expenditure and Source of Funds for Three Age Groups for Calendar Years 1978, 1977, 1976, 1970, 1965

Table C Expenditures for Health Services and Supplies under Public Programs by Program for Three Age Groups for Calendar Years 1978, 1977, 1976, 1970, 1965

Table D Estimated Amount and Percentage Distribution of Personal Health Care Expenditures for Persons Aged 65 and Over by Type of Expenditure and Source of Funds for Calendar Years 1978, 1977, 1976, 1970, 1965

TABLE A

Personal Health Care Expenditures for Three Age Groups: Aggregate and Per Capita Amount and Percentage Distribution by Type of Expenditure and Source of Funds for Calendar Year 1978

Type of Expenditure	All Ages			Under 19			19-64			65 and Over		
	Total	Private	Public	Total	Private	Public	Total	Private	Public	Total	Private	Public
Aggregate amount (in millions)												
Total	\$167,911	\$102,870	\$65,042	\$19,875	\$14,180	\$5,696	\$98,668	\$70,497	\$28,172	\$49,366	\$18,192	\$31,175
Hospital Care	76,025	35,107	40,919	7,070	3,835	3,235	47,785	28,626	19,159	21,189	2,645	18,524
Physicians' Services	35,250	25,811	9,439	5,215	4,382	833	21,124	17,808	3,316	8,910	3,620	5,290
Dentists' Services	13,300	12,761	539	2,780	2,546	234	9,137	8,876	261	1,383	1,338	45
Other Professional Services	4,275	3,303	972	398	193	205	2,787	2,480	307	1,080	631	459
Drugs and Drug Sundries	15,098	13,798	1,300	2,823	2,650	173	9,044	8,419	625	3,231	2,728	503
Eyeglasses and Appliances	3,879	3,522	357	481	459	22	2,793	2,659	134	605	405	201
Nursing-Home Care	15,751	7,394	8,358	68	1	67	3,057	600	2,457	12,624	6,790	5,834
Other Health Services	4,333	1,175	3,158	1,040	113	927	2,941	1,028	1,913	354	35	319
Per Capita Amount												
Total	\$752.98	\$461.31	\$291.67	\$286.07	\$204.10	\$81.99	\$763.96	\$545.84	\$218.13	\$2,026.19	\$746.68	\$1,279.55
Hospital Care	340.93	157.43	183.50	101.76	55.20	46.56	369.98	221.64	148.34	868.86	108.56	760.30
Physicians' Services	158.08	115.75	42.33	75.06	63.07	11.99	163.56	137.88	25.67	365.70	148.58	217.12
Dentists' Services	59.64	57.23	2.42	40.01	36.65	3.37	70.75	68.72	2.02	56.76	54.92	1.85
Other Professional Services	19.17	14.81	4.36	5.73	2.78	2.95	21.58	19.20	2.38	44.74	25.90	18.84
Drugs and Drug Sundries	67.70	61.87	5.83	40.63	38.14	2.49	70.02	65.19	4.84	132.61	111.97	20.84
Eyeglasses and Appliances	17.40	15.79	1.60	6.92	6.61	.32	21.62	20.59	1.04	24.83	16.62	8.25
Nursing-Home Care	70.64	33.16	37.48	1.00	.01	.96	23.67	4.65	19.02	518.14	278.69	239.45
Other Health Services	19.43	5.27	14.16	14.97	1.63	13.34	22.77	7.96	14.81	14.53	1.44	13.10
Percentage Distribution												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hospital Care	45.3	34.1	62.9	35.6	27.0	56.8	48.4	40.6	68.0	42.9	14.5	59.4
Physicians' Services	21.0	25.1	14.5	26.2	30.9	14.6	21.4	25.3	11.8	18.0	19.9	17.0
Dentists' Services	7.9	12.4	.8	14.0	18.0	4.1	9.3	12.6	.9	2.8	7.4	.1
Other Professional Services	2.5	3.2	1.5	2.0	1.4	3.6	2.8	3.5	1.1	2.2	3.5	1.5
Drugs and Drug Sundries	9.0	13.4	2.0	14.2	18.7	3.0	9.2	11.9	2.2	6.5	15.0	1.6
Eyeglasses and Appliances	2.3	3.4	.5	2.4	3.2	.4	2.8	3.8	.5	1.2	2.2	.6
Nursing-Home Care	9.4	7.2	12.9	.3	—	1.2	3.1	.9	8.7	25.6	37.3	18.7
Other Health Services	2.6	1.1	4.9	5.2	.8	16.3	3.0	1.5	6.8	.7	.2	1.0

TABLE A (CONTINUED)

Personal Health Care Expenditures for Three Age Groups: Aggregate and Per Capita Amount and Percentage Distribution by Type of Expenditure and Source of Funds for Calendar Year 1977

Type of Expenditure	All Ages			Under 19			19-64			65 and Over		
	Total	Private	Public	Total	Private	Public	Total	Private	Public	Total	Private	Public
Aggregate amount (In millions)												
Total	\$149,139	\$91,048	\$58,091	\$18,259	\$13,063	\$5,206	\$87,578	\$62,382	\$25,196	\$43,303	\$15,613	\$27,690
Hospital Care	67,914	30,964	36,950	6,551	3,578	2,973	42,466	25,128	17,340	18,897	2,259	16,638
Physicians' Services	31,242	23,136	8,106	4,771	4,027	744	18,848	15,923	2,925	7,623	3,186	4,437
Dentists' Services	11,650	11,146	504	2,493	2,279	214	7,969	7,724	245	1,188	1,142	46
Other Professional Services	3,700	2,859	841	352	172	180	2,408	2,131	277	940	555	385
Drugs and Drug Sundries	13,810	12,614	1,196	2,624	2,473	151	8,244	7,665	579	2,941	2,475	466
Eyeglasses and Appliances	3,455	3,158	297	439	418	21	2,481	2,368	113	535	374	161
Nursing-Home Care	13,364	6,086	7,278	61	2	59	2,455	496	1,959	10,847	5,587	5,260
Other Health Services	4,005	1,085	2,920	968	103	865	2,708	949	1,759	332	33	299
Per Capita Amount												
Total	\$674.46	\$411.75	\$262.71	\$258.77	\$184.99	\$73.78	\$690.76	\$492.04	\$198.73	\$1,821.14	\$656.54	\$1,164.59
Hospital Care	307.13	140.03	167.10	92.84	50.71	42.13	334.95	198.18	136.77	794.72	95.00	699.72
Physicians' Services	141.29	104.63	36.66	67.61	57.07	10.54	148.66	125.59	23.07	320.59	133.99	186.60
Dentists' Services	52.69	50.41	2.28	35.33	32.30	3.03	62.85	60.92	1.93	49.96	48.03	1.93
Other Professional Services	16.73	12.93	3.80	4.98	2.44	2.55	18.99	16.81	2.18	39.53	23.34	16.19
Drugs and Drug Sundries	62.45	57.04	5.41	37.19	35.05	2.14	65.02	60.46	4.57	123.69	104.09	19.60
Eyeglasses and Appliances	15.62	14.28	1.34	6.22	5.92	.30	19.57	18.68	.90	22.50	15.73	6.77
Nursing-Home Care	60.44	27.52	32.91	.86	.03	.84	19.36	3.91	15.45	456.18	234.97	221.21
Other Health Services	18.11	4.91	13.21	13.72	1.46	12.26	21.36	7.49	13.87	13.96	1.39	12.57
Percentage Distribution												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hospital Care	45.5	34.0	63.6	35.9	27.4	57.1	48.5	40.3	68.8	43.6	14.5	60.1
Physicians' Services	20.9	25.4	14.0	26.1	30.8	14.2	21.5	25.5	11.6	17.6	20.4	16.0
Dentists' Services	7.8	12.2	.9	13.6	17.5	4.1	9.1	12.4	1.0	2.7	7.3	.2
Other Professional Services	2.5	3.1	1.4	1.9	1.3	3.5	2.8	3.4	1.1	2.2	3.5	1.4
Drugs and Drug Sundries	9.3	13.9	2.1	14.4	18.9	2.8	9.4	12.3	2.3	6.8	15.9	1.7
Eyeglasses and Appliances	2.3	3.5	.5	2.4	3.2	.4	2.8	3.8	.5	1.2	2.4	.6
Nursing-Home Care	9.0	6.7	12.5	.3	—	1.1	2.8	.8	7.8	25.1	35.8	19.0
Other Health Services	2.7	1.2	5.0	5.3	.8	16.7	3.1	1.5	7.0	.8	.2	1.1

TABLE A (CONTINUED)

Personal Health Care Expenditures for Three Age Groups: Aggregate and Per Capita Amount and Percentage Distribution by Type of Expenditure and Source of Funds for Calendar Year 1976

Type of Expenditure	All Ages			Under 19			19-64			65 and Over		
	Total	Private	Public	Total	Private	Public	Total	Private	Public	Total	Private	Public
Aggregate Amount (in millions)												
Total	\$132,127	\$80,531	\$51,596	\$16,590	\$11,789	\$4,801	\$77,861	\$55,367	\$22,494	\$37,674	\$13,372	\$24,302
Hospital Care	59,806	27,037	32,769	5,992	3,261	2,731	37,508	21,941	15,567	16,305	1,831	14,474
Physicians' Services	27,858	20,592	7,066	4,252	3,526	726	16,901	14,318	2,583	6,505	2,746	3,759
Dentists' Services	10,131	9,648	483	2,209	1,997	212	6,909	6,684	225	1,013	967	46
Other Professional Services	3,202	2,545	657	314	196	116	2,078	1,863	215	810	485	325
Drugs and Drug Sundries	12,809	11,667	1,142	2,472	2,315	157	7,621	7,088	533	2,716	2,263	453
Eyeglasses and Appliances	3,201	2,943	258	416	397	19	2,295	2,191	104	490	357	134
Nursing-Home Care	11,452	5,106	6,346	55	—	55	2,001	412	1,589	9,395	4,693	4,702
Other Health Services	3,868	993	2,875	880	94	786	2,548	869	1,679	440	30	410
Per Capita Amount												
Total	\$602.45	\$367.19	\$235.26	\$232.34	\$165.10	\$67.24	\$624.31	\$443.95	\$190.36	\$1,823.88	\$576.38	\$1,047.50
Hospital Care	272.69	123.28	149.41	83.92	45.67	38.25	300.75	175.93	124.82	702.80	78.92	623.88
Physicians' Services	126.11	93.89	32.22	59.55	49.38	10.17	135.52	114.81	20.71	280.39	118.36	162.03
Dentists' Services	48.19	43.99	2.20	30.94	27.97	2.97	55.40	53.59	1.80	43.66	41.66	1.98
Other Professional Services	14.60	11.60	3.00	4.40	2.77	1.62	16.66	14.94	1.72	34.91	20.90	14.01
Drugs and Drug Sundries	58.40	53.19	5.21	34.62	32.42	2.20	61.10	56.83	4.27	117.07	97.54	19.53
Eyeglasses and Appliances	14.60	13.42	1.18	5.83	5.56	.27	18.40	17.57	.83	21.12	15.39	5.73
Nursing-Home Care	52.22	23.29	28.93	.77	—	.77	16.04	3.30	12.74	404.96	202.28	202.67
Other Health Services	17.64	4.53	13.11	12.32	1.32	11.00	20.43	6.97	13.46	18.97	1.30	17.67
Percentage Distribution												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hospital Care	45.3	33.6	63.5	36.1	27.7	56.9	48.2	39.6	69.2	43.3	13.7	59.6
Physicians' Services	20.9	25.6	13.7	25.6	29.9	15.1	21.7	25.9	11.5	17.3	20.5	15.5
Dentists' Services	7.7	12.0	.9	13.3	16.9	4.4	8.9	12.1	1.0	2.7	7.2	.2
Other Professional Services	2.4	3.2	1.3	1.9	1.7	2.4	2.7	3.4	1.0	2.2	3.6	1.3
Drugs and Drug Sundries	9.7	14.5	2.2	14.9	19.6	3.3	9.8	12.8	2.4	7.2	16.9	1.9
Eyeglasses and Appliances	2.4	3.7	.5	2.5	3.4	.4	2.9	4.0	.4	1.3	2.7	.8
Nursing-Home Care	8.7	6.3	12.3	.3	—	1.1	2.6	.7	7.1	24.9	35.1	19.4
Other Health Services	2.9	1.2	5.6	5.3	.8	16.4	3.3	1.6	7.4	1.2	.2	1.7

TABLE A (CONTINUED)

Personal Health Care Expenditures for Three Age Groups: Aggregate and Per Capita Amount and Percentage Distribution by Type of Expenditure and Source of Funds for Calendar Year 1970

Type of Expenditure	All Ages			Under 19			19-64			65 and Over		
	Total	Private	Public	Total	Private	Public	Total	Private	Public	Total	Private	Public
Aggregate Amount (in millions) Total	\$65,723	\$43,281	\$22,442	\$10,366	\$7,878	\$2,479	\$38,096	\$28,708	\$9,389	\$17,270	\$6,694	\$10,577
Hospital Care	27,799	13,227	14,572	3,439	2,001	1,438	17,306	10,421	6,885	7,054	806	6,248
Physicians' Services	14,340	11,253	3,087	2,737	2,451	286	8,573	7,633	940	3,030	1,166	1,864
Dentists' Services	4,750	4,526	223	1,188	1,111	77	3,149	3,030	119	413	386	27
Other Professional Services	1,595	1,374	221	183	144	39	1,022	946	76	389	285	104
Drugs and Drug Sundries	8,406	7,922	484	1,883	1,816	67	4,791	4,580	211	1,732	1,524	208
Eyeglasses and Appliances	2,099	1,992	107	309	297	12	1,486	1,440	46	304	255	49
Nursing-Home Care	4,677	2,395	2,282	61	—	61	472	140	332	4,144	2,255	1,889
Other Health Services	2,058	592	1,466	556	57	499	1,297	518	779	204	18	186
Per Capita Amount Total	\$315.37	\$207.68	\$107.69	\$137.68	\$104.73	\$32.96	\$337.27	\$254.15	\$83.12	\$853.81	\$331.00	\$522.80
Hospital Care	133.39	63.47	69.92	45.72	26.60	19.12	153.21	92.26	60.95	348.74	39.85	308.89
Physicians' Services	68.81	54.00	14.81	36.39	32.58	3.80	75.90	67.58	8.32	149.80	57.85	92.15
Dentists' Services	22.80	21.72	1.07	15.80	14.77	1.02	27.88	26.82	1.05	20.42	19.06	1.33
Other Professional Services	7.65	6.59	1.06	2.43	1.91	.52	9.05	8.37	.67	19.23	14.09	5.14
Drugs and Drug Sundries	40.34	38.01	2.32	25.03	24.14	.89	42.42	40.55	1.87	85.83	75.34	10.28
Eyeglasses and Appliances	10.07	9.56	.51	4.11	3.95	.16	13.16	12.75	.41	15.03	12.81	2.42
Nursing-Home Care	22.44	11.49	10.95	.81	—	.81	4.18	1.24	2.94	204.87	111.48	93.39
Other Health Services	9.90	2.84	7.03	7.39	.76	6.63	11.48	4.59	6.90	10.09	.90	9.20
Percentage Distribution Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hospital Care	42.3	30.6	64.9	33.2	25.4	58.0	45.4	36.3	73.3	40.8	12.0	58.1
Physicians' Services	21.8	26.0	13.8	26.4	31.1	11.5	22.5	26.6	10.0	17.5	17.4	17.6
Dentists' Services	7.2	10.5	1.0	11.5	14.1	3.1	8.3	10.6	1.3	2.4	5.8	.3
Other Professional Services	2.4	3.2	1.0	1.8	1.8	1.6	2.7	3.3	.8	2.3	4.3	1.0
Drugs and Drug Sundries	12.8	18.3	2.2	18.2	23.1	2.7	12.8	16.0	2.2	10.0	22.8	2.0
Eyeglasses and Appliances	3.2	4.6	.5	3.0	3.8	.5	3.9	5.0	.5	1.8	3.8	.5
Nursing-Home Care	7.1	5.5	10.2	.6	—	2.5	1.2	.5	3.5	24.0	33.7	17.9
Other Health Services	3.1	1.4	6.5	5.4	.7	20.1	3.4	1.8	8.3	1.2	.3	1.8

TABLE A (CONTINUED)

Personal Health Care Expenditures for Three Age Groups: Aggregate and Per Capita Amount and Percentage Distribution by Type of Expenditure and Source of Funds for Calendar Year 1965

Type of Expenditure	All Ages			Under 19			19-64			65 and Over		
	Total	Private	Public	Total	Private	Public	Total	Private	Public	Total	Private	Public
Aggregate amount (In millions)												
Total	\$37,267	\$29,387	\$7,880	\$6,383	\$5,391	\$992	\$22,012	\$17,781	\$4,231	\$8,869	\$6,213	\$2,656
Hospital Care	13,935	8,539	5,395	1,731	1,111	620	8,908	5,753	3,155	3,296	1,677	1,619
Physicians' Services	8,474	7,890	583	1,712	1,673	39	5,025	4,601	424	1,737	1,617	120
Dentists' Services	2,809	2,760	49	772	753	19	1,823	1,805	18	213	201	12
Other Professional Services	1,033	996	37	135	129	6	654	631	23	244	236	8
Drugs and Drug Sundries	5,771	5,575	196	1,397	1,382	15	3,226	3,163	63	1,148	1,030	118
Eyeglasses and Appliances	1,866	1,836	30	306	302	4	1,305	1,281	24	256	254	2
Nursing-Home Care	2,072	1,360	712	—	—	—	247	173	74	1,825	1,187	638
Other Health Services	1,306	429	877	330	41	289	824	375	449	150	13	137
Per Capita Amount												
Total	\$188.43	\$148.59	\$39.84	\$83.02	\$70.12	\$12.90	\$215.58	\$174.14	\$41.43	\$472.31	\$330.97	\$141.35
Hospital Care	70.46	43.18	27.26	22.51	14.45	8.06	87.24	56.34	30.90	175.52	89.31	86.22
Physicians' Services	42.85	39.89	2.95	22.27	21.76	.51	49.21	45.06	4.15	92.50	86.11	6.39
Dentists' Services	14.20	13.96	.24	10.04	9.79	.25	17.85	17.68	.18	11.30	10.70	.64
Other Professional Services	5.22	5.04	.19	1.76	1.68	.08	6.41	6.18	.23	12.99	12.57	.43
Drugs and Drug Sundries	29.18	28.19	.99	18.17	17.98	.20	31.60	30.98	.62	61.14	54.85	6.28
Eyeglasses and Appliances	9.44	9.28	.15	3.98	3.93	.05	12.78	12.55	.24	13.63	13.53	.11
Nursing-Home Care	10.48	6.88	3.60	—	—	—	2.42	1.69	.72	97.19	63.21	33.98
Other Health Services	6.60	2.17	4.43	4.29	.53	3.76	8.07	3.67	4.40	7.99	.69	7.30
Percentage Distribution												
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hospital Care	37.4	29.1	68.5	27.1	20.6	62.5	40.5	32.4	74.6	37.2	27.0	61.0
Physicians' Services	22.7	26.8	7.4	26.8	31.0	4.0	22.8	25.9	10.0	19.6	26.0	4.5
Dentists' Services	7.5	9.4	.6	12.1	14.0	1.9	8.3	10.2	.4	2.4	3.2	.5
Other Professional Services	2.8	3.4	.5	2.1	2.4	.6	3.0	3.5	.6	2.8	3.8	.3
Drugs and Drug Sundries	15.5	19.0	2.5	21.9	25.6	1.6	14.7	17.8	1.5	12.9	16.6	4.4
Eyeglasses and Appliances	5.0	6.2	.4	4.8	5.6	.4	5.9	7.2	.6	2.9	4.1	.1
Nursing-Home Care	5.6	4.6	9.0	—	—	—	1.1	1.0	1.7	20.6	19.1	24.0
Other Health Services	3.5	1.5	11.1	5.2	.8	29.1	3.7	2.1	10.6	1.7	.2	5.2

TABLE C

Estimated Personal Health Care Expenditures for Health Services and Supplies under Public Programs by Program for Three Age Groups for Calendar Years 1978, 1977, 1976, 1970, 1965 (in millions)

Type of Program	1978				1977				1976			
	Total	Under 19	19-64	65 and Over	Total	Under 19	19-64	65 and Over	Total	Under 19	19-64	65 and Over
All public programs	\$65,042	\$5,696	\$28,172	\$31,175	\$58,091	\$5,206	\$25,196	\$27,690	\$51,596	\$4,801	\$22,494	\$24,302
Federal	48,503	3,757	15,968	26,780	41,096	3,413	13,994	23,689	36,283	3,194	12,493	20,595
State and Local	18,539	1,939	12,204	4,395	16,996	1,793	11,203	4,001	15,314	1,607	10,001	3,707
Major Program Areas:												
Medicare (Federal)	24,919	30	3,114	21,775	21,768	25	2,602	19,141	18,417	17	2,087	16,313
Medical Federal	18,365	3,142	8,612	6,611	16,657	2,849	7,812	5,996	14,849	2,534	6,673	5,642
State and Local	10,234	1,751	4,799	3,684	9,384	1,605	4,401	3,378	8,391	1,432	3,771	3,186
State and Local	8,131	1,391	3,815	2,927	7,273	1,244	3,411	2,618	6,458	1,102	2,902	2,454
Other Medical Public Assistance												
Federal	—	—	—	—	—	—	—	—	—	—	—	—
State and Local	1,157	100	665	391	1,098	93	626	380	1,048	83	594	371
Veterans Administration (Federal)	4,943	—	3,890	1,053	4,380	—	3,431	929	4,111	—	3,235	876
Department of Defense (Federal)	3,625	823	2,671	131	2,336	788	2,437	112	3,230	811	2,327	92
Workers Compensation (Medical Benefits)	3,061	—	2,968	93	2,663	—	2,583	80	2,325	—	2,255	70
Federal Employees	117	—	113	4	79	—	77	2	69	—	67	2
State and Local Programs	2,944	—	2,855	89	2,584	—	2,506	78	2,256	—	2,188	68
State and Local Hospitals (Net)	5,488	85	4,461	942	5,170	88	4,212	870	4,749	83	3,898	768
Other Public Expenditures for Personal Health Care												
Federal	3,484	1,515	1,787	182	3,039	1,363	1,493	183	2,867	1,273	1,425	168
State and Local	2,665	1,151	1,378	136	2,169	995	1,043	131	2,065	935	1,008	122
State and Local	819	364	409	46	870	368	450	52	602	338	417	46

TABLE C (CONTINUED)

Estimated Personal Health Care Expenditures for Health Services and Supplies under Public Programs by Program for Three Age Groups for Calendar Years 1978, 1977, 1976, 1970, 1965
(In millions)

Type of Programs	1970				1965			
	Total	Under 19	19-64	65 and Over	Total	Under 19	19-64	65 and Over
All public programs	\$22,442	\$2,502	\$9,341	\$10,600	\$7,880	\$992	\$4,231	\$2,657
Federal	14,561	1,484	4,215	8,864	3,787	603	1,817	1,367
State and Local	7,881	1,018	5,126	1,736	4,093	389	2,414	1,290
Major Program Areas:								
Medicare (Federal)	7,099	—	—	7,099	—	—	—	—
Medicaid	5,105	913	2,298	1,894	—	—	—	—
Federal	2,795	500	1,258	1,037	—	—	—	—
State and Local	2,310	413	1,040	857	—	—	—	—
Other Medical Public Assistance	849	82	231	536	2,113	217	275	1,621
Federal	243	—	—	243	1,359	140	177	1,043
State and Local	606	82	231	293	753	77	98	578
Veterans Administration (Federal)	1,745	—	1,374	372	1,133	—	892	241
Department of Defense (Federal)	1,875	656	1,162	56	1,012	354	627	30
Workers Compensation (Medical Benefits)	1,044	—	1,010	34	604	—	585	19
Federal Employees	23	—	22	1	12	—	12	—
State and Local Programs	1,021	—	988	33	592	—	573	19
State and Local Hospitals (Net)	3,341	316	2,550	476	2,378	185	1,545	648
Other Public Expenditures for Personal Health Care	1,383	534	716	133	640	237	308	97
Federal	781	327	399	56	269	109	109	52
State and Local	602	207	317	77	372	128	199	44

TABLE D

Estimated Amount and Percentage Distribution of Personal Health Care Expenditures for Persons Aged 65 and Over by Type of Expenditure and Source of Funds for Calendar Years 1978, 1977, 1976, 1970, 1965

	Amount (in millions)						Percentage Distribution					
	Public						Public					
	Total	Private	Total	Medi-care	Medi-caid	Other	Total	Private	Total	Medi-care	Medi-caid	Other
	1978 ¹											
Total	\$49,366	\$18,192	\$31,175	\$21,775	\$6,611	\$2,789	100.0	36.8	63.2	44.1	13.4	5.7
Hospital Care	21,169	2,645	18,524	15,799	754	1,971	100.0	12.5	87.5	74.6	3.6	9.3
Physicians' Services	8,910	3,620	5,290	4,954	260	76	100.0	40.6	59.4	55.6	2.9	.9
Dentists' Services	1,363	1,338	45	—	34	11	100.0	96.8	3.2	—	2.4	.8
Other Professional Services	1,090	631	459	381	72	6	100.0	57.9	42.1	35.0	6.6	.6
Drugs and Drug Sundries	3,231	2,728	503	—	468	35	100.0	84.4	15.6	—	14.5	1.1
Eyeglasses and Appliances	605	405	201	189	—	12	100.0	66.9	33.2	31.2	—	2.0
Nursing-Home Care	12,624	6,790	5,834	380	4,969	485	100.0	53.8	46.2	3.0	39.4	3.8
Other Health Services	354	35	319	72	54	193	100.0	9.9	90.1	20.3	15.3	54.5
	1977											
Total	\$43,303	\$15,613	\$27,690	\$19,141	\$5,999	\$2,552	100.0	36.1	63.9	44.2	13.9	5.9
Hospital Care	18,897	2,259	16,638	14,119	737	1,782	100.0	12.0	88.0	74.7	3.9	9.4
Physicians' Services	7,623	3,186	4,437	4,132	236	69	100.0	41.8	58.2	54.2	3.1	.9
Dentists' Services	1,188	1,142	46	—	33	13	100.0	96.1	3.9	—	2.8	1.1
Other Professional Services	940	555	385	316	62	7	100.0	59.0	41.0	33.6	6.6	.7
Drugs and Drug Sundries	2,941	2,475	466	—	432	34	100.0	84.2	15.8	—	14.7	1.1
Eyeglasses and Appliances	535	374	161	152	—	9	100.0	69.9	30.1	28.4	—	1.7
Nursing-Home Care	10,847	5,587	5,260	364	4,439	457	100.0	51.5	48.5	3.4	40.9	4.2
Other Health Services	332	33	299	58	60	181	100.0	10.0	90.1	17.5	18.1	54.5
	1976											
Total	\$37,674	\$13,372	\$24,302	\$16,313	\$5,644	\$2,345	100.0	35.5	64.5	43.3	15.0	6.2
Hospital Care	16,305	1,831	14,474	12,095	756	1,623	100.0	11.2	88.8	74.2	4.6	10.0
Physicians' Services	6,505	2,746	3,759	3,474	221	64	100.0	42.2	57.8	53.4	3.4	1.0
Dentists' Services	1,013	967	46	—	32	14	100.0	95.4	4.6	—	3.2	1.4
Other Professional Services	810	485	325	252	67	6	100.0	59.9	40.1	31.1	8.3	.7
Drugs and Drug Sundries	2,716	2,263	453	—	419	34	100.0	83.3	16.7	—	15.4	1.3
Eyeglasses and Appliances	490	357	134	125	—	9	100.0	72.8	27.3	25.5	—	1.8
Nursing-Home Care	9,395	4,693	4,702	320	3,964	418	100.0	50.0	50.0	3.4	42.2	4.4
Other Health Services	440	30	410	47	185	178	100.0	6.8	93.2	10.7	42.0	40.5
	1970											
Total	\$17,270	\$6,694	\$10,577	\$7,099	\$1,894	\$1,584	100.0	38.8	61.2	41.1	11.0	9.2
Hospital Care	7,054	806	6,248	4,974	405	869	100.0	11.4	88.6	70.5	5.7	12.3
Physicians' Services	3,030	1,166	1,864	1,718	115	31	100.0	38.5	61.5	56.7	3.8	1.0
Dentists' Services	413	386	27	—	19	9	100.0	93.5	6.5	—	4.6	2.2
Other Professional Services	389	285	104	79	22	3	100.0	73.3	26.7	20.3	5.7	.8
Drugs and Drug Sundries	1,732	1,524	208	—	190	18	100.0	88.0	12.0	—	11.0	1.0
Eyeglasses and Appliances	304	255	49	45	—	4	100.0	83.9	16.1	14.8	—	1.3
Nursing-Home Care	4,144	2,255	1,889	265	1,112	512	100.0	54.4	45.6	6.4	26.8	12.4
Other Health Services	204	18	186	17	31	138	100.0	8.8	91.2	8.3	15.2	67.7
	1965											
Total	\$8,869	\$6,213	\$2,656	—	—	\$2,656	100.0	70.0	30.0	—	—	30.0
Hospital Care	3,296	1,677	1,619	—	—	1,619	100.0	50.9	49.1	—	—	49.1
Physicians' Services	1,737	1,617	120	—	—	120	100.0	93.1	6.9	—	—	6.9
Dentists' Services	213	201	12	—	—	12	100.0	94.4	5.6	—	—	5.6
Other Professional Services	244	236	8	—	—	8	100.0	96.7	3.3	—	—	3.3
Drugs and Drug Sundries	1,148	1,030	118	—	—	118	100.0	89.7	10.3	—	—	10.3
Eyeglasses and Appliances	256	254	2	—	—	2	100.0	99.2	.8	—	—	.8
Nursing-Home Care	1,825	1,187	638	—	—	638	100.0	65.0	35.0	—	—	35.0
Other Health Services	150	13	137	—	—	137	100.0	8.7	91.3	—	—	91.3

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