Five Years of Medicare—A Statistical Review

by HOWARD WEST*

THE 1965 AMENDMENTS to the Social Security Act added—as part of the social insurance protection provided under the Act—two coordinated programs of health insurance for the aged, familiarly known as Medicare. On July 1, 1966, a basic hospital insurance plan (HI) and a voluntary supplementary medical insurance plan (SMI) went into effect. The Medicare program was designed to provide the financial means to help older people pay a major portion of their large bills for hospital and medical care. The amounts paid by the beneficiary are shown in table 1.[1]

In the ensuing 5 years, the extent to which Medicare has succeeded in accomplishing its primary purpose has been obscured by growing national concern with the rapid increases in the cost of all forms of medical care and with the degree of efficiency with which medical care services are delivered. This article attempts to enlarge the parameters by focusing on the experience of the aged under Medicare reflected by the currently available data on the utilization of medical care services and on related reimbursement patterns.

THE STATISTICAL SYSTEM

The administration of these two coordinated programs of benefits for the aged generates a variety of data needed to measure and evaluate program operation and effectiveness. Benefit-payment operations furnish information about the amount and kind of hospital and medical care services used by the aged, as well as the expenditures for such services. The applications by hospitals, extended-care facilities, home health agencies, and independent laboratories to participate in the program provide data on the characteristics of such providers of services. The enrollment process results in the identification of each aged person eligible for health insurance benefits and indicates whether he is entitled to hospital benefits, to supplementary medical insurance benefits, or to both. The claim number assigned to each individual serves as the link between the program benefits utilized and his demographic characteristics recorded in the enrollment file.

The data-collection system has two inherent characteristics that determine the scope, detail, and flexibility of the available data. First, data are collected and maintained on an individual basis so that the beneficiary and his medical experience under the program form the basic unit. Second, records of each bill paid under the program and, for a sample of beneficiaries, records of diagnoses and surgical procedures are maintained on a centralized basis.

The benefit-payment operations involve considerable delays in the reporting of utilization and related reimbursement information. Final data for services used during a given period of time do not become available until the hospital and medical bills sent to and paid by intermediaries and carriers throughout the country are received and processed by the Social Security Administration. There is no time limit on filing HI claims for reimbursement; the maximum imposed for filing SMI claims is 27 months from date of service. For this reason, a continuing monthly Current Medicare Survey (CMS)[2] is conducted to obtain current estimates of hospital and medical services used and charges incurred by persons covered by these two programs. The hospital insurance sample of CMS consists of a sample of all hospital admission notices, which must be sent to the Social Security Administration. The medical insurance sample is composed of a household-

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[1] For a full description of the provisions of the health insurance program, see Wilbur J. Cohen and Robert M. Ball, "Social Security Amendments of 1965: Summary and Legislative History," *Social Security Bulletin*, September 1965; see also Robert M. Ball, "Health Insurance for People Aged 65 and Over: First Steps in Administration," the *Bulletin*, February 1966.

[2] See Jack Scharff, "Current Medicare Survey: The Medical Insurance Sample," *Social Security Bulletin*, April 1967.

TABLE 1.—Medicare cost-sharing and premiums

Beginning—	Hospital benefits in benefit period				Outpatient hospital diagnostic services		Supplementary medical		
	Inpatient hospital deductible	Inpatient hospital daily coinsurance		Extended-care facility daily coinsurance after 20 days	Deductible	Coinsurance	Annual deductible	Coinsurance	Monthly premium
		After 60 days	After 90 days						
July 1966	$40	$10	(1)	(1)	[2] $20	20%	$50	20%	$3.00
January 1967			(1)	$5.00					
January 1968			$20						
April 1968					(3)		(4)	(4)	4.00
January 1969	44	11	22	5.50					
January 1970	52	13	26	6.50					
July 1970									5.30
January 1971 [5]	60	15	30	7.50					
July 1971									5.60

[1] Benefit not provided.
[2] Deductible applied to supplementary medical deductible.
[3] Transferred to supplementary medical.
[4] Professional inpatient services of pathologists and radiologists not subject to deductible or coinsurance.
[5] Beginning January 1972, the deductible for inpatient hospital benefits is to be $68. The coinsurance payment for stays from the 61st to the 90th day in a hospital will be $17 a day; after 90 days, it will be $34 daily. The payment for the 21st through the 100th day in an extended-care facility will be $8.50 a day.

interview sample of persons enrolled in the SMI program. The Current Medicare Survey is the source for much of the data for this article.

THE ENROLLED POPULATION

When the Medicare program began operations on July 1, 1966, nearly all persons aged 65 and over—some 19.1 million—were entitled to HI benefits. About 17.7 million persons, or 93 percent of those entitled to HI benefits, also voluntarily enrolled in the SMI program. By July 1, 1970, the most recent date for a midyear enrollment figure, 20.4 million persons were entitled to HI benefits, and 19.6 million, or 96.2 percent of those entitled to HI coverage, had enrolled for SMI benefits. There is some evidence from the Current Medicare Survey that a substantial portion of the increase in the proportion of HI enrollees electing to receive SMI benefits are persons who enrolled in the medical insurance program following an illness that required the use of HI benefits.

The race and sex distributions of enrollees in both HI and SMI have remained about the same since Medicare began. The median age of the Medicare population has been fairly constant: it was 72.8 in 1966 and 73.0 on July 1, 1970. The median age of white women (73.3) and that of white men (72.5) each exceeded the median of all other races by slightly over one-half year. Table 2 shows the age, race and sex, and region of residence of persons on the rolls of the HI program as of July 1, 1966, and July 1, 1970.

Tabulations of the populations enrolled in the HI and the SMI programs serve as the base for utilization and reimbursement rates. For most purposes the enrollment as of the midpoint of the calendar year is used (October 1 for the

TABLE 2.—Number and percentage distribution of persons enrolled for hospital insurance, by age, race, sex, and region of residence, July 1, 1966, and July 1, 1970[1]

Age, race and sex, and area of residence	Number enrolled as of July 1 (in thousands)		Percentage distribution	
	1970	1966	1970	1966
Age:				
65 and over	20,361	19,082	100.0	100.0
65 and 66	2,826	2,749	13.9	14.4
67 and 68	2,700	2,529	13.3	13.3
69 and 70	2,484	2,434	12.2	12.8
71 and 72	2,225	2,257	10.9	11.8
73 and 74	2,081	2,022	10.2	10.6
65–69	6,779	6,507	33.3	34.1
70–74	5,537	5,483	27.2	28.7
75–79	4,140	3,769	20.3	19.8
80–84	2,438	2,140	12.0	11.2
85 and over	1,467	1,183	7.2	6.2
Race and sex:				
All persons	20,361	19,082	100.0	100.0
Men	8,507	8,133	41.8	42.6
Women	11,855	10,950	58.2	57.4
White	18,187	17,042	89.3	89.3
Men	7,610	7,357	37.4	38.6
Women	10,577	9,685	51.9	50.8
All other races	1,608	1,445	7.9	7.6
Men	715	656	3.5	3.4
Women	894	789	4.4	4.1
Race unknown	566	596	2.8	3.1
Men	182	120	.9	.6
Women	384	476	1.9	2.5
Residence:				
All areas	20,361	19,082	100.0	100.0
United States [2]	20,015	18,798	98.3	98.5
Northeastern States	5,202	5,021	25.5	26.3
North Central States	5,750	5,548	28.2	29.1
South	5,966	5,402	29.3	28.3
West	3,087	2,813	15.2	14.7

[1] Figures for 1966 based on final data recorded Dec. 29, 1967; figures for 1970 based on provisional data recorded Mar. 31, 1971.
[2] Includes enrollees with residence unknown.

period July–December 1966). Because of the high mortality of the Medicare population, the mid-year figure is approximately 6 percent below the figure for persons enrolled at any time during a calendar period. The "ever-enrolled" population is used for selected analyses of differentials in utilization.

THE PROVIDERS

All hospitals, extended-care facilities, home health agencies, and independent laboratories participating in the Medicare program must be in substantial compliance with the conditions of participation.[3] The great majority of hospitals in the United States have participated in the hospital insurance program since it began. The number of short-stay hospitals remained essentially constant and the number of available beds has increased over the 5-year period (table 3).

TABLE 3.—Number of participating hospitals, and number of beds, by type of hospital, all areas, 1966–71

Year	All hospitals	Short-stay	All long-stay	Tuberculosis	Psychiatric	Other long-stay
	Hospitals					
Dec. 31, 1966	6,790	6,160	630	117	320	193
July 1, 1967	6,857	6,217	640	120	331	189
July 1, 1968	6,865	6,224	641	118	341	182
July 1, 1969	6,825	6,182	643	113	344	186
July 1, 1970	6,776	6,153	623	105	341	177
July 1, 1971	6,745	6,153	592	95	335	162
	Beds					
Dec. 31, 1966	1,149,691	758,282	391,409	23,947	312,950	54,512
July 1, 1967	1,157,603	770,369	387,234	23,474	322,886	40,874
July 1, 1968	1,164,931	782,802	382,129	23,903	318,896	39,330
July 1, 1969	1,176,656	798,652	378,004	23,263	313,519	41,222
July 1, 1970	1,199,030	815,244	383,786	21,712	320,709	41,365
July 1, 1971	1,188,013	834,514	353,499	18,995	300,696	33,808

The ratio of all short-stay hospital beds to the enrolled HI population for the United States was approximately 40 per 1,000 throughout the period. The greatest increase in the number of beds took place in the South where hospitals that initially were not in compliance with title VI of the Civil Rights Act of 1964 and had "special certification" have agreed to provide services on a nondiscriminatory basis.

Changes in the number of participating extended-care facilities and the number of beds in these facilities since this benefit was first available in 1967 have been relatively greater than in the number of hospitals and hospital beds. A peak was reached in 1969 when there were 4,849 facilities with a total of 341,735 beds (table 4). By July 1, 1971, the number of facilities was 4,287, with 307,548 beds certified for participation in the program: 12 percent fewer than in 1969 and providing 10 percent fewer beds. In part the decline has been due to increased efforts to assure that payment is made only for services to patients requiring skilled nursing services for medical conditions that were under treatment in the hospital before admission to the facility. These efforts brought about a decrease in the number of patients eligible for such care and a commensurate decrease in the need for such beds.

TABLE 4.—Number of participating extended-care facilities and number of beds, all areas, 1967–71

Year	Facilities	Beds
1967	4,160	291,307
1968	4,702	321,621
1969	4,849	341,735
1970	4,656	333,630
1971	4,287	307,548

EXPENDITURES AND PRICES

Medicare Trust Funds

Medicare outlays from the two trust funds established for this program amounted to $7.9 billion in fiscal year 1971,[4] an increase of 10.2 percent over the expenditures for the previous fiscal year. These outlays averaged $380 per person aged 65 and over enrolled in the hospital and/or medical insurance programs (table 5).

The first 5 years of Medicare witnessed significant increases in expenditures each year, which rose from $3.4 billion in the first year to the current annual level of $7.9 billion. Under

[3] Social Security Administration, *Conditions of Participation, Hospitals: Federal Health Insurance for the Aged, Regulations* (HIR-10); *Conditions of Participation, Extended-Care Facilities . . .* (HIR-11); *Conditions of Participation: Home Health Agencies . . .* (HIR-12); *Conditions for Coverage of Services of Independent Laboratories . . .* (HIR-13).

[4] *1971 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund* (93d Cong., 1st sess., House Document No. 92–87); *1971 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund* (House Document No. 92–89).

TABLE 5.—Total and per capita hospital and medical insurance expenditures, fiscal years 1967–71

Program	Fiscal year				
	1967	1968	1969	1970	1971
	Amount (in millions)				
Hospital and medical insurance	$3,395	$5,347	$6,598	$7,149	$7,875
Benefit payments	3,172	5,126	6,299	6,784	7,478
Administrative expenses	223	221	299	366	397
Hospital insurance	2,597	3,815	4,757	4,953	5,592
Benefit payments	2,508	3,736	4,654	4,804	5,443
Administrative expenses	89	79	104	149	149
Medical insurance	798	1,532	1,840	2,196	2,283
Benefit payments	664	1,390	1,645	1,979	2,035
Administrative expenses	134	143	195	217	248
	Per capita amount				
Hospital and medical insurance	$178	$274	$333	$353	$380
Benefit payments	166	263	318	335	361
Administrative expenses	12	11	15	18	19
Hospital insurance	136	196	241	246	272
Benefit payments	131	192	236	238	265
Administrative expenses	5	4	5	7	7
Medical insurance	45	85	98	114	116
Benefit payments	37	77	87	102	103
Administrative expenses	8	8	10	11	13
	Percentage change from preceding fiscal year				
Hospital and medical insurance	--------	57.5	23.4	8.4	10.2
Benefit payments	--------	61.6	22.9	7.7	10.2
Administrative expenses	--------	-.6	35.1	22.4	8.6
Hospital insurance	--------	46.9	24.7	4.1	12.9
Benefit payments	--------	49.0	24.6	3.2	13.3
Administrative expenses	--------	-11.5	32.5	42.7	.6
Medical insurance	--------	92.0	20.1	19.4	3.9
Benefit payments	--------	109.2	18.4	20.3	2.8
Administrative expenses	--------	6.7	36.5	11.5	14.1

HI, the total increased from $2.6 billion in the first year to $5.6 billion in the fifth year. The average per enrollee in 1971 was $272—exactly double the 1967 average. Under SMI, expenditures almost tripled—from about $800 million in fiscal year 1967 to almost $2.3 billion in fiscal year 1971. The SMI average per enrollee rose from $45 to $116. Included in these figures are benefit payments and administrative expenses.

The experience for these 5 years shows considerable variation in the annual rates of increase for each part of the program. More important, a significant slowing down is apparent in the rate of increase during the past year or two.

Medicare outlays in the program's first year were relatively low compared with those for the later years, primarily because of the considerable lag in the program's early days before bills were submitted and processed for reimbursement. Other factors contributing to the substantially lower figures for the first year were the availability of extended-care benefits for only half the year (January–June 1967) and the application of the entire $50 deductible under the SMI program for only a 6-month period in calendar year 1966 (except for the carryover provision).[5]

The annual increases in total and average reimbursements also reflect the increases in prices and utilization, analyzed below for the two programs.

Hospital insurance program.—During the past 3 years, the annual rate of increase in HI benefit payments has fluctuated to a considerable extent—25 percent in fiscal year 1969, 3 percent in fiscal year 1970, and 13 percent in fiscal year 1971. The comparison is somewhat distorted, however, by a transfer of $85 million from the SMI trust fund to the HI trust fund during fiscal year 1970 that covered expenses incurred in earlier years. Without the transfer the increase would have been 23 percent in 1969, 7 percent in 1970, and 10 percent in 1971. Several factors account for the deceleration in HI benefit payments in fiscal year 1970 and the continued relatively moderate rate of increase in fiscal year 1971:

1. Sufficient time may have elapsed since the program began to permit persons aged 65 and over to catch up with their medical care needs.
2. The occurrence of influenza epidemics in the winter months and unusual heat spells in the summer months can cause fluctuations in hospital use for the population aged 65 and over. Data from the National Communicable Disease Center show that no major epidemics occurred in fiscal year 1970 and 1971, but there were epidemics in the 2 previous years, as measured by the total number of deaths.
3. During the past 2 years the average length of hospital stay for persons aged 65 and over has declined by almost one day.
4. Controls on the use of extended-care facilities under Medicare were tightened. The result was a reduction in expenditures for this purpose from $367 million in fiscal year 1969 to $295 million in the following year; in fiscal year 1971, expenditures continued to decline and dropped to $247 million.
5. Cost factors also contribute to changes in rates of Medicare spending. A 2-percent special allowance in the hospital reimbursement formula was removed in fiscal year 1970. (On July 2, 1971, the Social Security Administration issued new regulations for determining the inpatient routine nursing-salary cost differential as an element of reimbursable

[5] The carryover provision permits any expenses incurred in the last 3 months of the calendar year and applied to the deductible for that year to be carried over and applied to the deductible for the next calendar year.

cost under the HI program. The adjustment factor is to be applied to cost reporting periods beginning July 1, 1969, and will be applied retroactively. This adjustment is therefore not reflected in the expenditures for fiscal years 1970 and 1971.)

Throughout the 5-year period, hospital costs per patient day have continued to rise at relatively high annual rates as the data from two sources indicate: the hospital daily service charges component of the Consumer Price Index of the Bureau of Labor Statistics and expenses per patient day as reported by the American Hospital Association. The fiscal year averages and annual percentage increases are shown in table 6.

Medical insurance program.—The fifth year of Medicare saw a sharp decline in the acceleration of the rate of spending under the SMI program. In the 2 previous years, the annual rate of increase was about 20 percent. By contrast, benefit payments in fiscal year 1971 rose only 2.8 percent. As mentioned earlier, the comparison is distorted somewhat by the transfer of $85 million from the SMI trust fund to the HI trust fund during fiscal year 1970 that covered expenses incurred in earlier years. Without that transfer the 1970 increase would have been 10.5 percent and that for 1971, 7.4 percent.

Physicians' fees, according to that component of the Consumer Price Index, have continued to increase. In fiscal year 1971 they went up at an annual rate of 7.5 percent, as shown below.

Fiscal year	Physicians' fees (index, calendar year 1967=100)	Percentage increase
1967	96.9	7.4
1968	102.8	6.1
1969	109.1	6.1
1970	117.0	7.2
1971	125.8	7.5

It is clear that the reduction in the rate of increase in SMI benefit payments shown in table 5 is the result of the tightening of the regulations related to reimbursement of physicians' services under Medicare.

In December 1970, the Secretary of Health, Education, and Welfare announced that carriers may in each fiscal year recognize only those charges that fall within the 75th percentile of the customary charges (weighted by frequency) made for similar services in the calendar year preceding the start of the fiscal year in which the determination is made. Thus, increases in prevailing charges recognized by the carriers beginning in January 1971 were limited to the levels established by the 75th percentile of calendar year 1969 customary charges.

TABLE 6.—Consumer price index and American Hospital Association data for hospital expenses, each fiscal year, 1967–71, and annual percentage increases

Fiscal year	Hospital daily service charges		Hospital expenses per patient day (AHA)	
	Index (calendar year 1967=100)	Annual percentage increase	Amount	Annual percentage increase
1967	92.2	16.6	$53.67	12.5
1968	106.4	15.4	61.73	15.0
1969	120.5	13.3	70.13	13.6
1970	135.4	12.4	80.71	15.1
1971	152.8	12.9	91.37	13.2

Source: Data for daily service charges are from the *Consumer Price Index*, Bureau of Labor Statistics; data for hospital expenses per patient day are from "Hospital Indicators," *Hospitals*, Journal of the American Hospital Association.

There is evidence from the administrative data that carriers have enforced the regulations. In fiscal year 1971, for example, charges for 19.2 million claims, or 41 percent of all claims approved, were reduced by the carriers. The amount reduced totaled $241.2 million or 11 percent of the covered charges billed by physicians.

THE TRANSITION, 1965 TO 1967

To measure the early effects of Medicare on the health care of the aged, comprehensive baseline data were needed. Early in 1966, the Social Security Administration contracted with the Columbia University School of Public Health and Administrative Medicine and with the National Opinion Research Center of the University of Chicago to conduct a two-part survey. The survey was designed to determine patterns in use of hospital and medical care by the aged and in charges for such services—both before and after the implementation of Medicare.[6] Interview questions were designed to produce information on hospital and medical care utilization and charges during the year before the date of the interview. For the first phase, the period covered was April–May 1965 to April–May 1966. For the second

[6] Regina Loewenstein, "Early Effects of Medicare on the Health Care of the Aged," *Social Security Bulletin*, April 1971.

phase, the period studied was November–December 1966 to November–December 1967.

This two-part survey indicated that the Medicare program had gone a long way toward meeting its goal. For short-stay hospital care, the most significant change occurred in the days of care per enrolled aged person, which rose 25 percent. This increase reflects primarily the longer hospital stays but also reflects an increase in hospital use. Much greater increases occurred for certain segments of the aged population, including persons aged 75 and over, Negroes, residents of the South, persons residing in urban areas other than metropolitan areas, and persons in one-member family units with low incomes.

Before Medicare, for a substantial proportion of hospital stays—17 percent—no charges were incurred; under Medicare this proportion was reduced to 3 percent. The rate of hospital days with charges incurred rose 50 percent but doubled for persons aged 75 and over and for Negroes. The proportion of total hospital charges paid directly by the patient declined from 38 percent to 7 percent, in spite of rising prices, more stays with charges incurred, and a doubling of average hospital charges per person between the two survey periods.

The use of long-term medical institutions did not change with the introduction of Medicare, but there was a shift from the use of nursing homes to using extended-care facilities, which are covered under the program and provide a higher level of skilled nursing care. In contrast to the short-stay hospital experience, in extended-care facilities both the number of days of care per aged person and the average length of stay declined under Medicare. The former nursing homes that were certified as extended-care facilities under Medicare admitted mainly convalescent patients requiring short-term skilled nursing care, while places continuing as nursing homes cared for the long-term patients.

No significant changes occurred in the proportion of persons using ambulatory medical services, and a slight decrease was noted in the number of reported visits per person. There was, however, a shift from clinic and home visits to office visits.

The introduction of Medicare apparently had no effect on the average charges for those services not covered by the program. No changes were reported, for example, in the average charges per aged person for drugs, dental care, and optometrists.

The total impact of the program during the survey period in providing protection for the aged against the high costs of health care is revealed when all institutional, medical, and other charges, whether or not covered under Medicare, are combined. These average charges increased about 40 percent—from $298 per person to $418—because of the larger proportion of stays and visits with charges, more days in short-stay hospitals, and higher charges for institutional and medical services in the later year. Almost half the charges incurred in 1967 were paid for by the Medicare program, and about 6 percent were paid by private health insurance. Thus 47 percent of the total remained to be paid directly—a significant reduction from the 77 percent paid directly in 1965, before Medicare. The substantial rise in the level of charges per person, however, resulted in a decline of only 15 percent in out-of-pocket payments for all health care services.

The immediate impact of the Medicare program on the utilization of covered services, as delineated by this two-part survey, bears repeating.

- Short-stay hospital use rose 25 percent, measured by days of care per enrolled aged person.
- In-patient medical services increased commensurately.
- Use of long-term medical institutions did not change but shifted from nursing homes that were not covered under Medicare to extended-care facilities that were covered.
- The proportion of persons using ambulatory medical services remained the same and the number of such visits per person declined slightly.

UTILIZATION AND REIMBURSEMENT UNDER MEDICARE

What has been the subsequent utilization experience under Medicare? Two sources of information are available that describe hospital utilization by the aged during the 5-year period July 1, 1966–June 30, 1971: (1) data on claims approved for payment under the HI program and recorded in social security records; (2) data on hospital use reported by the American Hospital Association in the midmonth issue of *Hospitals.*

Medicare claims data include all covered hos-

TABLE 7.—Hospital utilization under Medicare, all covered stays, fiscal years 1967–71

Fiscal year	Admissions		Covered days of care		Average length of stay [2]
	Number (in thousands)	Rate per 1,000 enrollees [1]	Number (in thousands)	Rate per 1,000 enrollees [1]	
1967	5,309	278	61,682	3,232	12.2
1968	5,774	297	75,400	3,874	13.1
1969	6,067	307	81,000	4,101	13.1
1970 [3]	6,135	306	79,000	3,944	12.7
1971 [3]	6,300	309	78,000	3,829	12.3

[1] Based on total enrollment in HI program as of January 1 each year.
[2] Based on bills, not discharges, and may be slightly understated.
[3] Estimated.
Source: Social Security Administration control records.

pital stays under the program and include stays in short- and long-stay hospitals. The data for 1970 and 1971 shown in table 7 are adjusted for lags in reporting of claims to the Social Security Administration.

From the beginning of the program, hospital admission rates per 1,000 enrollees have risen steadily: from 278 per 1,000 in fiscal year 1967 to 309 in fiscal year 1971. The rate of increase in this measure has slowed, however, from 7 percent between fiscal year 1967 and 1968 to 1 percent by 1971. Covered days of care per 1,000 enrollees increased from 3,232 in 1967 to 4,101 in 1969 but the number for the most recent fiscal year has dropped to an estimated 3,829. The decline of almost one day in average length of stay in the past 3 years is the key to the apparent inconsistency between these two rates.

The trends shown by Social Security Administration claims data are remarkably consistent with American Hospital Association figures. These data, shown in table 8, are based on discharges from a random sample of approximately 650 non-Federal short-stay hospitals registered by the American Hospital Association.

TABLE 8.—Hospital utilization, persons aged 65 and over, non-Federal, short-term general hospitals, fiscal years 1967–71

Fiscal year	Admissions		Total days of care		Average length of stay (days)
	Number (in thousands)	Rate per 1,000 aged persons [1]	Number (in thousands)	Rate per 1,000 aged persons [1]	
1967	5,208	275	65,918	3,480	12.7
1968	5,505	285	73,093	3,785	13.3
1969	5,904	301	78,048	3,985	13.2
1970	6,145	310	78,481	3,953	12.8
1971	6,346	314	78,938	3,909	12.4

[1] Based on U.S. enrollment in HI program as of January 1 each year.
Source: "Hospital Indicators," *Hospitals*, midmonth issue.

Utilization

It is now possible to examine the utilization of covered services under Medicare in somewhat greater depth as more detailed tabulations of actual experience are becoming available.

The Medicare program provides seven types of benefits, as shown in table 9: four under the HI program and three under the SMI program. In 1967 the largest portion of total expenditures—62.7 percent—was spent for inpatient hospital services. Posthospital stays in extended-care facilities accounted for 6.5 percent. About 29 percent of reimbursement was for physician services. Only 1 percent of 1967 reimbursements under both programs was for outpatient hospital services, and a like amount went for home health services.

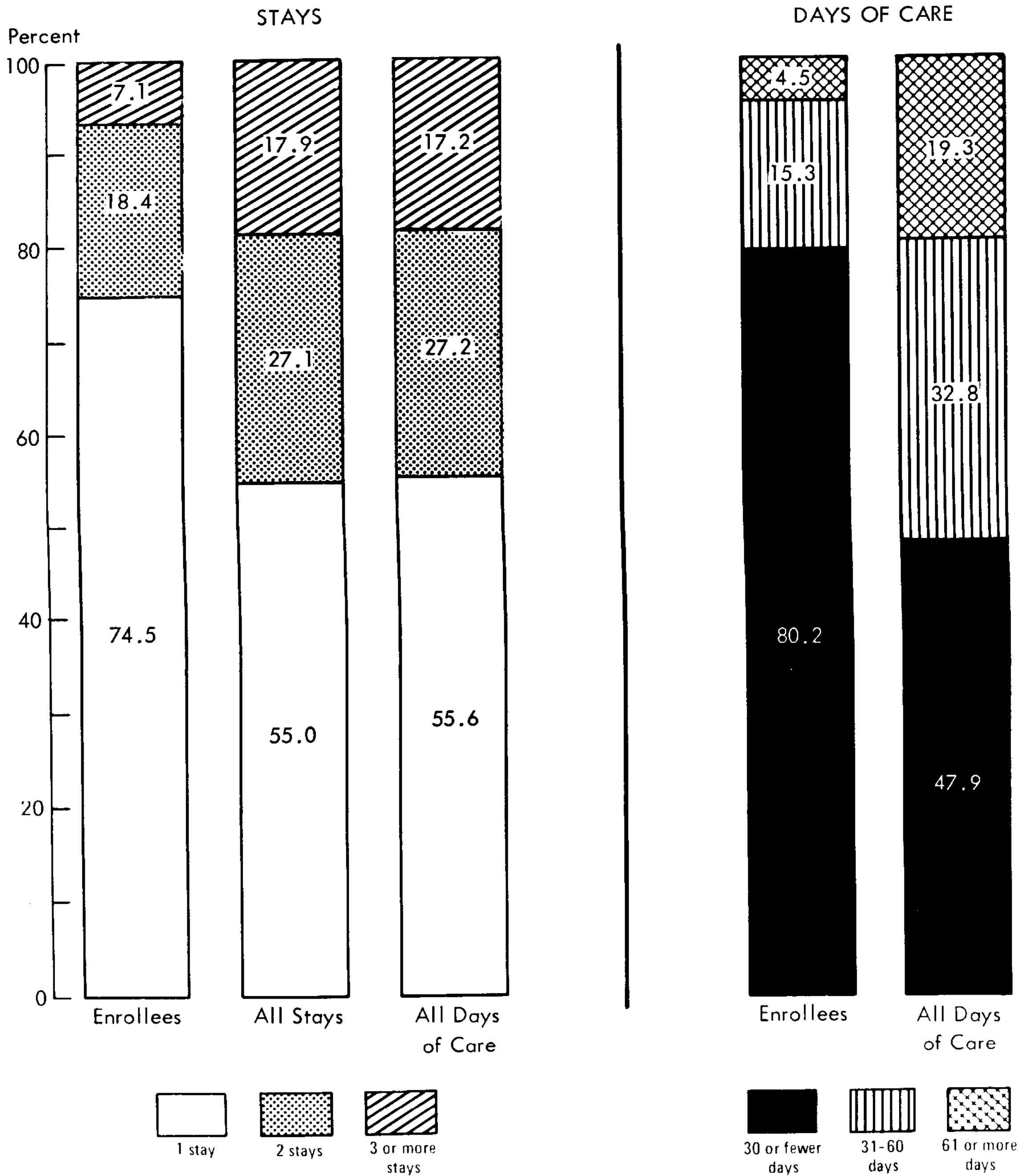
Age, race, and sex influence both the total utilization of reimbursed services and the types of services used. Utilization rates under HI increased with age, were higher for men than women, and were higher for white enrollees than for enrollees of other races. Under SMI, utilization rates for women were higher through age 79 and then slightly lower at older ages; rates for the white population exceeded those for other races to a somewhat greater extent than they did in the HI program.

Data from the Current Medicare Survey for 1968 have been used to estimate the use of Medicare services (whether or not reimbursed). About 20 percent of persons enrolled under HI at any time during 1968 used a covered HI service. The use of covered services in that year increased with age, was higher for men than for women, and was higher for white enrollees than for those of other races. Utilization rates varied slightly among the four geographic regions.

Almost all persons using covered HI services were hospitalized during the year. (A few had HI services in 1968 following hospitalization in 1967.) About 75 percent of persons hospitalized were inpatients only once during the year. The remaining 25 percent were hospitalized more than once and accounted for 45 percent of all hospital days of care (chart 1).

The average number of days of care per hospitalized enrollee (including days for which no reimbursement was made) was 19.7 in 1968, and the average number per stay was 14.5. For per-

CHART 1.—Hospital insurance enrollees hospitalized during 1968: Percentage distribution, by number of stays and days of care



sons with one, two, or three or more hospital stays, the average number of days of care was 14.7, 29.1, and 47.9, respectively. These data suggest that the average length of stay of persons hospitalized more than once is about the same for their second stay or their third as it was for their first stay.

About 20 percent of hospitalized enrollees had

TABLE 9.—Persons served under Medicare and amounts reimbursed, by type of service, fiscal year 1967

Type of service reimbursed	Persons using reimbursed services			Reimbursement			
	Number (in thousands)[1]	Percent of persons ever enrolled	Annual rate per 1,000 enrolled, July 1, 1967	Total: Amount (in thousands)	Total: Percentage distribution	Amount per person served	Amount per person enrolled, July 1, 1967
Hospital insurance and/or supplementary medical insurance	7,154	34.5	366.5	$4,238,633	100.0	$592	$217
Both hospital insurance and supplementary medical insurance	3,328	16.1	186.5	3,663,661	86.4	1,101	205
Hospital insurance only	632	3.0	32.6	286,773	6.8	454	15
Supplementary medical insurance only	3,195	15.4	178.7	288,437	6.8	90	16
Hospital insurance	3,960	19.1	203.1	2,966,732	70.0	749	152
Inpatient hospital services	3,601	17.4	184.7	2,659,393	62.7	738	136
Outpatient hospital services	466	2.2	23.9	7,261	.2	16	----------
Extended-care facilities services	354	1.7	18.2	274,295	6.5	774	14
Home health agency services	126	.6	6.5	25,783	.6	204	1
Supplementary medical insurance	6,523	31.5	364.5	1,271,901	30.0	195	71
Physician and other medical services	6,415	31.0	358.5	1,223,845	28.9	191	68
Outpatient hospital services	1,045	5.0	58.4	30,995	.7	30	2
Home health agency services	118	.6	6.6	17,061	.4	145	1

[1] Net count for the indicated type of service. The same person may be counted in more than one line.

Source: Social Security Administration, *Medicare—Health Insurance for the Aged, 1967, Section 1: Summary* (in press).

more than 30 days of care during the year. This relatively small group of patients utilized more than 50 percent of all hospital days during 1968 (chart 1).

The utilization of extended-care facilities under the Medicare program requires a preceding stay of at least 3 days in a hospital. In 1967 a little less than 10 percent and in 1968 a little more than 10 percent[7] of patients discharged from a hospital one or more times during the year utilized these services at least once.

There were very large differences in the use of extended-care facilities related to age. At ages 65–74 about 5 percent of hospitalized persons used reimbursed services. The percentage increased sharply at ages 85 and over to 22 percent in 1967 and 27 percent in 1968. Women made more use of this type of benefit than men did. Of the 2 million women hospitalized in 1967, 11.6 percent were reimbursed for services in extended-care facilities; of the 1.6 million men hospitalized, 7.7 percent were reimbursed for these services.

The proportion of aged persons utilizing services under the SMI program has been remarkably stable through 1970, the most recent year for which data are available from the Current Medicare Survey. During each year from 1967 to 1970, 79 percent of the enrolled SMI population utilized SMI services (chart 2). But many of these persons did not use sufficient services to meet the program's $50 deductible. In 1967 about 33 percent and in 1970 about 29 percent of the population did not use more than $50 of services; thus, just under 50 percent used sufficient covered services to be eligible for reimbursement. The proportion of persons using covered services varied with age, sex, race, and place of residence, but for each of these characteristics it has remained consistent over the entire period. A higher proportion of persons aged 85 and over (83 percent) used services than did those aged 65–74 (77 percent); the ratio was 81 percent for women and 75 percent for men; and it was essentially the same for white persons (79 percent) and for those of all other races. The percentage of persons utilizing SMI services who live in the West has been consistently slightly higher than the proportion in other geographic regions.

The relative size of the enrolled SMI population using ambulatory medical services, whether or not reimbursed, has been essentially constant through 1970 (table 10). Seventy percent of en-

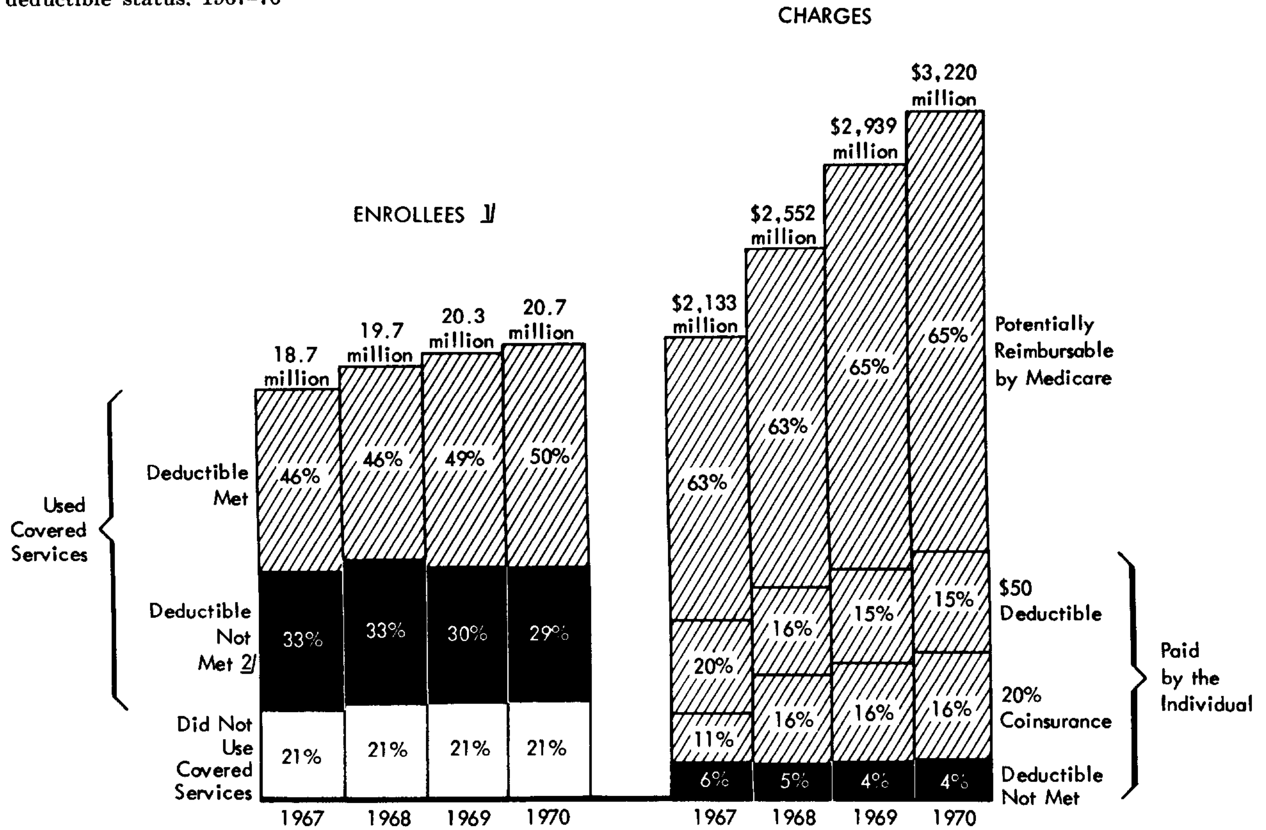
TABLE 10.—Estimated utilization of ambulatory physician services under SMI by place of service, Current Medicare Survey, 1967–70

Place of service	Persons served per 1,000 enrolled [1]				Average number of visits per person using specified services			
	1967	1968	1969	1970	1967	1968	1969	1970
Office	701	688	675	667	6.3	6.2	6.5	6.5
Outpatient	172	162	172	190	2.9	3.1	3.0	3.3
Home	143	137	120	95	3.8	4.4	4.3	4.8

[1] The same person may be counted in more than one line.

[7] Social Security Administration, Office of Research and Statistics, *Current Medicare Survey Report*, "Persons With Covered Hospital Stays, 1968" (CMS 16), in preparation.

CHART 2.—Enrollees and charges under the supplementary medical insurance program: Percentage distribution, by deductible status, 1967–70



[1] Annual totals represent all persons ever enrolled during the year in the supplementary medical insurance program.

[2] Includes persons using services for whom no bill is expected.

rollees used physician office services in 1967 and 67 percent in 1970. The average number of office visits remained constant during the period, with 6.5 visits a year, on the average, for each person using this type of ambulatory care service.

Between 1967 and 1970, the average number of outpatient visits per person using these services remained at about 3 per person. The percentage of persons obtaining physician services at home dropped sharply from 14 percent to 9.5 percent, but the average number of home visits to these patients rose from 3.8 to 4.8 between 1967 and 1970.

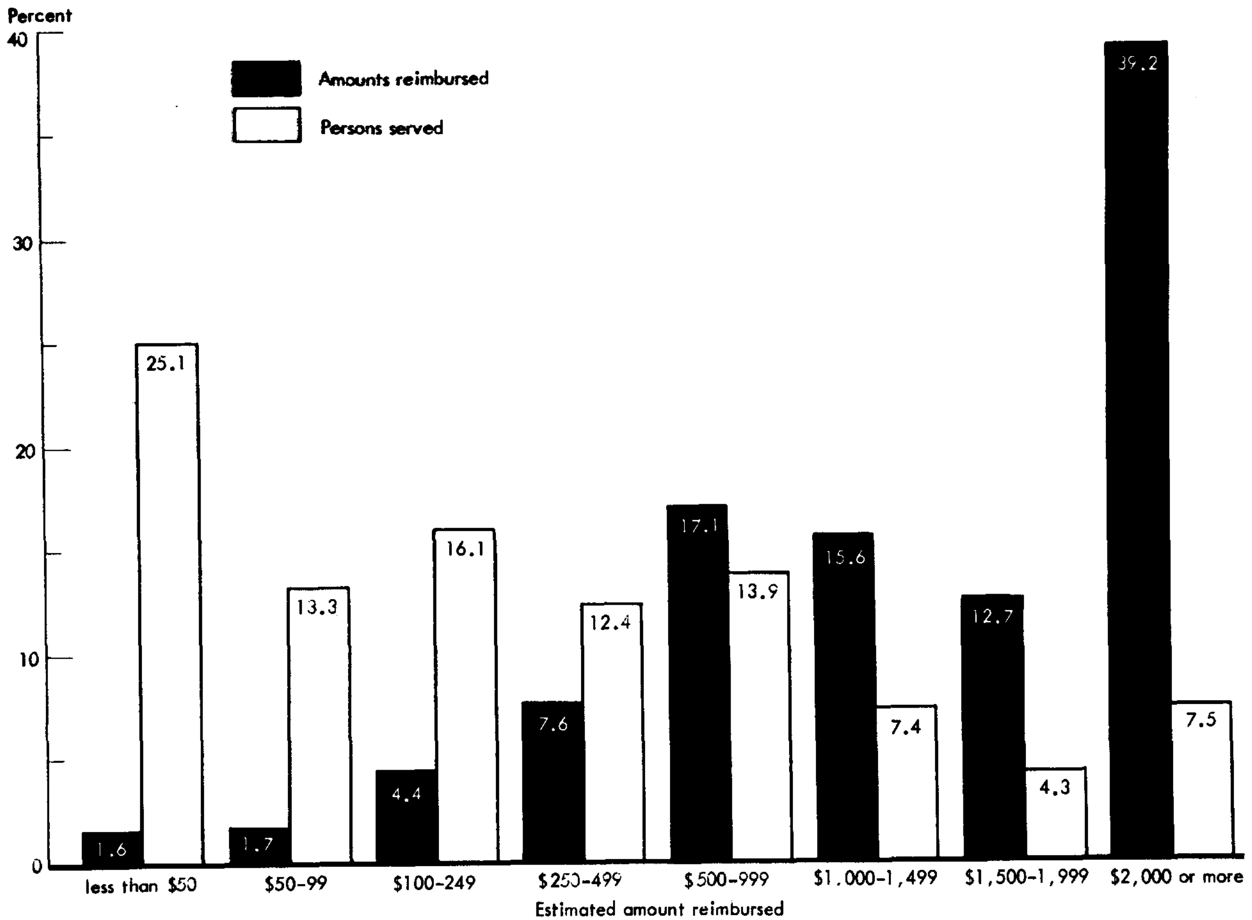
Reimbursement

The Medicare program expenditures previously described were actual outlays for benefit payments and administrative expenses made during each of Medicare's first 5 fiscal years. Data are also available on reimbursements under the program for covered services provided during the year for a 5-percent sample of persons enrolled in the program. For services rendered in calendar year 1967, for example, total reimbursements were $4.2 billion. Of this total, $3.0 billion was spent in the HI program and $1.3 billion in SMI. The proportion of the eligible population receiving some reimbursement was 34.5 percent. Chart 3 shows the percentage distribution of persons reimbursed for any type of service (HI and/or SMI) during 1967, by the amount reimbursed. Twenty-five percent of all persons reimbursed received less than $50 each and accounted for only 1.6 percent of the total amount reimbursed under Medicare. At the other extreme, the 7.5 percent of persons reimbursed $2,000 or more accounted for 39 percent of the total funds expended.

SUMMARY

The Medicare program has provided insurance against part of the cost of medical care for al-

CHART 3.—Persons served and amounts reimbursed under Medicare, by estimated amount reimbursed, 1967



most all persons aged 65 and over since July 1, 1966. The use of inhospital services (and all supporting medical services) rose with the introduction of the program and continued to increase but at a declining rate. The average length of each hospital stay has actually dropped slightly. The use of ambulatory physician services has remained fairly stable throughout the program. There has been very little use of the posthospital alternatives—extended-care facilities and home health services.

Annual per capita expenditures under Medicare have more than doubled since the program began owing mainly to increases in charges to the program for covered services. A large proportion of the funds are spent on behalf of a relatively small number of persons with serious illnesses.

These expenditures reflect the uneven distribution of medical services among the population aged 65 and over. Annually, about 20 percent of the insured population uses *no* covered service. Another 20 percent is hospitalized each year; among these persons, one-fourth are hospitalized more than once in the year. The bulk of physician costs arise out of hospitalized illnesses. In 1967, reimbursements for total covered costs of illness of hospitalized persons accounted for 86 percent of the program funds.