

HIP Incentive Reimbursement Experiment: Utilization and Costs of Medical Care, 1969 and 1970

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The Health Insurance Plan of Greater New York, under contract with the Social Security Administration, carried out a 3-year experiment with financial incentives to reduce the total cost of care for its Medicare enrollment. An added objective was to maintain or improve the standards of care. One part of evaluating the experiment is a detailed statistical study of utilization and reimbursed charges for Medicare-covered services in 1969, the year before the experiment, and in 1970-72, the experiment years. The HIP beneficiaries, by type of group and type of enrollment, are compared with a 5-percent sample of beneficiaries living in the same geographic area but not enrolled in HIP. Data on characteristics of the study populations and utilization and charges for 1969 and 1970 are presented here.

It appears that the objective of cost containment was reached in the experiment's first year. Total reimbursed per capita charges for HIP beneficiaries (including the capitation payment to HIP for Medicare-covered services provided by the plan) were \$442.46 in 1969—about \$42 more than the amount for non-HIP beneficiaries in the same year. In 1970, reimbursed charges for non-HIP rose 8 percent to \$435.96 per capita, and the figure for HIP declined 1 percent to \$438.16.

AMONG THE INDIVIDUALS most affected by the rising costs of medical care are the elderly. In recognition of this fact, the Social Security Administration, in response to a 1967 congressional mandate to experiment with incentives for control of costs of care for the Medicare population, contracted for a series of incentive reimbursement experiments.¹ One such experiment

was carried on by the Health Insurance Plan of Greater New York, Inc. (HIP), during the 3 years 1970-72.² In its incentive reimbursement experiment, HIP was testing its ability to affect the total costs of medical care, including those over which it has no direct administrative control, and to accomplish this objective without sacrificing the quality of care for its Medicare enrollees.

This article is the second in a series of reports on the evaluation of HIP's experimental program. In the first report,³ the general design of the evaluation was discussed. The purpose of this report is twofold—to describe the scope and method of the evaluation in detail and to present the data on utilization of Medicare-covered services and reimbursed charges for these services for the study populations in 1969 and 1970. For purposes of the evaluation, the 1969 data constitute a baseline against which the data for each of the program years 1970-72 are compared. Because of the large size of the population studied, the report also provides, to a degree of detail not previously available, information about patterns of utilization of services by the elderly and constitutes an example of the epidemiologic approach to the study of the health care system.

NATURE OF THE PROGRAM

Since its organization in 1947, HIP has provided comprehensive, fully prepaid physician services in hospitals, homes, and doctors' offices to all subscribers and their covered dependents.

² Sam Shapiro, "Incentive Reimbursement Experiment at the Health Insurance Plan of Greater New York," *Proceedings, 19th Annual Group Health Institute, New York City*, June 1969.

³ Paul M. Densen, Ellen W. Jones, Sam Shapiro, and Howard West, "The Design for Evaluation of HIP's Incentive Reimbursement Experiment," *Proceedings, 6th International Scientific Meeting of the International Epidemiological Association, August 29-September 3, 1971*, vol. 1, pages 405-411.

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¹ See Irwin Wolkstein, "Incentive Reimbursement Plans Offer a Variety of Approaches to Cost Control," *Hospitals*, June 16, 1969, pages 63-67, and G. J. Martin, "Incentives for Economy," *Hospitals*, October 1, 1971, pages 52-54.

Although the major source of enrollment in the plan has been the group contract with employee or union groups, from the beginning subscribers have had the privilege of converting to an individual policy when eligibility for group coverage is terminated. In addition, since the advent of Medicare, HIP has accepted applications from individuals aged 65 or older who have not been enrolled in the plan previously.

Because of the aging of its member enrollment and its policy of open enrollment of persons aged 65 and over, 56,901 individuals, or 8 percent of HIP's total enrollment on December 31, 1970, were Medicare beneficiaries.⁴ For these beneficiaries, HIP receives capitation payments from the Social Security Administration for physician services provided or arranged by the plan that are reimbursable under the supplementary medical insurance (SMI) provisions of Medicare. Medical services provided by the plan that are not reimbursable under Medicare (refractions, immunizations, and physical examinations) are met by a supplemental premium paid to HIP by the enrollee (or by a health and welfare fund or retirement program); the supplement also covers the deductible and coinsurance⁵ for services included in the plan's coverage.

Medicare reimbursement for all other covered charges incurred by HIP Medicare beneficiaries—stays in hospitals or extended-care facilities, home health care, and medically related services by providers outside HIP—is made by the same process of payment as for charges incurred by Medicare beneficiaries not enrolled in HIP. That is, reimbursement is made by payments to providers or to beneficiaries for bills submitted through fiscal intermediaries. HIP is therefore not involved in the reimbursement process for all hospital insurance (HI) services and for those SMI services by providers other than HIP.

As a major part of its experiment, HIP introduced programmatic changes into six of its 30

medical groups that depended upon the following:⁶ (1) Employment in each medical group of a specially trained nurse clinician to carry out general health maintenance activities with the group's elderly patients who were considered to be at high risk of hospitalization and (2) arrangement by the group for an acute general hospital to participate with it in the experiment by involving its own personnel with the HIP nurse clinician in early discharge planning for the group's hospitalized Medicare enrollees.

Only six groups were designated as "special" within the definition above, but all 30 medical groups were eligible for the financial rewards that constituted the incentive. The Social Security Administration and HIP were to share the savings brought about by the experimental program, and savings were to be calculated by comparing costs for HIP Medicare beneficiaries with costs for other Medicare beneficiaries living in the same geographic area. The comparison in the first year of the experiment is based both on absolute costs and on the rate of change in costs from the previous year. In the second and third years of the experiment, the incentive reimbursement is based only on the rate of change from the previous year.

Within HIP, the incentive payment is shared with the medical groups by a formula that takes account of individual group performance, with increased shares going to the special groups to compensate for their extra effort in the experiment. Hospitals, extended-care facilities, and home health agencies that participate in the experiment with the special groups may also share in the reimbursement.⁷

SCOPE AND METHOD OF EVALUATION

The evaluation aims to describe the effects of HIP's program in terms of costs of care, patterns of utilization, and evidence of benefit (or harm)

⁴ Division of Research and Statistics, Health Insurance Plan of Greater New York, Inc., *HIP Statistical Report: 1970-1971*.

⁵ In general, the deductible feature of Medicare's SMI is the sum of charges (\$50 in 1969 and 1970) that must be incurred by the beneficiary each calendar year before medical insurance reimbursements are made. Coinsurance is the proportion (20 percent) of reasonable charges after the deductible is met for which the beneficiary is responsible.

⁶ See Sidney M. Greenberg and Robert Galton, "Nurses Are Key in HIP Experiment to Cut Health Care Costs," *American Journal of Nursing*, February 1972, page 2; and Robert Galton, Sidney M. Greenberg, and Sam Shapiro, "Observations on the Participation of Nurses and Physicians in Chronic Care," *Bulletin of the New York Academy of Medicine*, February 1973, pages 112-119.

⁷ Sam Shapiro, *op. cit.*

to the beneficiaries in the program. Two types of studies are employed: (1) A statistical study of reimbursed charges, components of utilization, and mortality for HIP Medicare enrollees and a comparison group of Medicare beneficiaries not enrolled in HIP; and (2) a study of functioning status, satisfactions with medical care received, and out-of-pocket medical expenses for a subsample of HIP and non-HIP beneficiaries interviewed in their homes. The description of nurse clinician activities in the six special medical groups is being prepared by HIP and is therefore not included in this series of analyses of total program effects.

Data files of the Social Security Administration are the source of all information for both HIP and non-HIP populations on reimbursed charges for Medicare-covered services, on the components of utilization giving rise to the claims, and on the beneficiaries themselves. These files furnish information on demographic characteristics of beneficiaries, type of benefit and amount of claim, and characteristics of the facility or provider of service.

Since the individual health insurance beneficiary number is the link among all types of records in the Social Security Administration's statistical reporting system,⁸ it is possible to segregate under a beneficiary's record all reimbursable services for which claims are made, regardless of place of service or type of provider. Thus, with the addition of the capitation payments to HIP for SMI physician services provided by the plan, it is possible to study the total payments by the Social Security Administration for HIP and non-HIP Medicare beneficiaries, including those resulting from use by HIP enrollees of services by non-HIP providers. This information excludes out-of-pocket payments by beneficiaries for deductibles and coinsurance, as well as the supplemental premium payments to HIP by HIP members.

The system of reporting claims to the Social Security Administration also makes it possible to compare, for HIP and non-HIP study groups, the measures of utilization of HI benefits (discharges from hospitals and days of inpatient hospital care, admissions to skilled nursing homes

and days of skilled nursing-home care, persons using home health benefits, and the number of visits obtained through such benefits).⁹ Utilization of SMI benefits cannot be studied to the same degree of detail as HI, however, since data on the number of physician visits or encounters are not available for either population from the Social Security Administration's statistical files. Use of SMI benefits is described, therefore, as the proportion of each population for whom one or more claims were reimbursed.

The design for analysis of the data on utilization and reimbursed charges is related to HIP project goals, since comparisons are made of the HIP and non-HIP experience in the baseline year 1969 and in each of the 3 years of the incentive reimbursement experiment, 1970-72. Within the HIP population, data are analyzed separately for the special medical groups with nurse clinician coordinators and for the other medical groups.

All data being analyzed are adjusted by the direct method for distributional differences among the study populations in age, sex, and, in certain situations, county of residence. The standard population used in the adjustment is the combined HIP and non-HIP study populations.

Definition of Study Populations

The HIP study population consists of the entire enrollment in the plan meeting the study criteria for age, residence, and coverage as defined below. The non-HIP population is a 5-percent random sample (based on terminal digits of the social security number) of Medicare beneficiaries who are living in the same geographic area as the HIP population but who are not enrolled in the group-practice plan. Both HIP and non-HIP populations are defined for each study year according to the following criteria:

—age-eligible for Medicare benefits as of January of the year in question (must have attained age 65 on or before February 1)

—resident throughout the year in the area comprised of the five county boroughs of New York City, plus Nassau and Suffolk Counties of New York State

⁸ Howard West, "Health Insurance for the Aged: The Statistical Program," *Social Security Bulletin*, January 1967.

⁹ Home health benefits provided under SMI are processed in the same manner as home health benefits provided under HI.

—had HI and SMI Medicare coverage continuously throughout the year except that individuals on public assistance for whom the State of New York paid the SMI premium (State “buy-ins”) are excluded.

Individuals who died during the year but who met the criteria for age, residence, and coverage before death are included in the study populations.

Westchester County, which is a part of HIP’s service area, was not included in the study because the proportion of the county’s aged population enrolled in HIP is very small in comparison with that of the other seven counties. Beneficiaries for whom the State purchased SMI coverage are excluded from the study because public assistance recipients are a group whose health-care characteristics differ considerably from those of the general population. In each of these decisions, the aim was to minimize distributional differences in the HIP and non-HIP study populations with respect to variables other than the program variables.

Characteristics of the Study Populations

The number of HIP Medicare enrollees meeting the criteria for study populations in 1969 was 47,665; the number of such beneficiaries in the 5-percent non-HIP sample was 47,138 (table 1). Those meeting the criteria in 1970 numbered 46,601 in HIP and 46,570 in the non-HIP sample.

The study populations differed significantly in age and sex composition as the table shows. In both HIP and non-HIP populations there were more women than men—a fact that was anticipated because of the known greater life expectancy among women. In the HIP group, however, only about 52 percent were women, compared with 59 percent in the non-HIP group. The higher proportion of men in the HIP population than in the non-HIP sample is probably related to the source of enrollment of Medicare beneficiaries in HIP, since 80 percent of the latter had been enrolled under employer or employee group contracts before reaching age 65.

The HIP Medicare enrollees are a younger population: only 27 percent of them in 1969 (29 percent in 1970) were aged 75 or older, compared with 36 percent in this age group in 1969 and

37 percent in 1970 among the non-HIP population. These HIP/non-HIP age contrasts were apparent for both men and women and, like the differences in the population distributions by sex, are probably related to the earlier group enrollment of many of the HIP beneficiaries.

Although ethnic differences are important considerations in studies of health care, the small percentages of nonwhites in the two study populations and the similarity in percentages led to the decision to omit race from the variables used in the analysis. Table 2 shows that the proportion of the nonwhite in both groups was smaller than that in the Medicare-insured population in the United States and also smaller than that in the total metropolitan area population aged 65 and over. Exclusions from the study populations for one or more of the definitional criteria probably account for some of this disparity in percentages by race. A disproportionately large number of nonwhite Medicare enrollees in New York State, for example, are persons for whom the State purchased coverage—a category excluded from the study. In 1969, only 4 percent of the white medical insurance enrollees in New York State belonged to this group, and 20 percent of the nonwhite were in this category.¹⁰

Age and sex characteristics of subgroups of the HIP study population are shown in table 3. One subgrouping is by type of HIP medical group; the other is by type of enrollment. About one-third of HIP’s Medicare enrollees were members of the medical groups designated as “special” for purposes of the incentive reimbursement experiment; these enrollees resembled enrollees of other HIP medical groups in age and sex distributions. Marked differences were seen, however, among HIP enrollees classified by type or source of enrollment. Those who joined the plan through HIP’s policy of open enrollment for Medicare beneficiaries resembled non-HIP beneficiaries in age and sex characteristics more than they did the HIP enrollees converting from group membership at age 65.

Classified separately as Medicaid enrollees is a small group (4 percent of the HIP study population) whose source of enrollment is an arrange-

¹⁰ Paula A. Piro, *Medicare: Public Assistance Recipients in the Supplementary Medical Insurance Program, 1969* (Health Insurance Note No. 47), Office of Research and Statistics, July 5, 1973.

TABLE 1.—Age of persons in study populations, total, men, and women: Percentage distribution of non-HIP and HIP Medicare beneficiaries, 1969 and 1970

Age	Non-HIP			HIP		
	All beneficiaries	Men	Women	All beneficiaries	Men	Women
1969						
Total number.....	47,138	19,463	27,675	47,665	23,126	24,539
Total percent.....	100 0	100 0	100 0	100 0	100 0	100 0
65-69.....	34 2	36 6	32 5	41 0	42 1	40 0
70-74.....	29 5	29 5	29 5	32 4	31 1	33 6
75-79.....	20 2	19 7	20 6	17 9	17 5	18 2
80-84.....	11 0	10 0	11 7	6 8	7 2	6 5
85 and over.....	5 1	4 3	5 7	1 9	2 0	1 8
1970						
Total number.....	46,570	19,128	27,442	46,601	22,232	24,369
Total percent.....	100 0	100 0	100 0	100 0	100 0	100 0
65-69.....	34 3	36 6	32 6	38 3	39 1	37 5
70-74.....	28 7	28 9	28 6	33 1	32 1	34 0
75-79.....	20 5	20 0	20 9	19 2	18 7	19 6
80-84.....	11 1	10 0	11 9	7 4	7 9	6 9
85 and over.....	5 4	4 5	6 0	2 0	2 1	1 9

ment between HIP and the New York City Department of Social Services for provision of physician services to certain individuals eligible for medical assistance (Medicaid), many of whom are in nursing homes. It should be recalled that public assistance recipients, who are also eligible for Medicaid, have been excluded from all study populations. The remaining group of Medicaid recipients, not on public assistance but defined as medically needy by State law, has its counterpart in the non-HIP study population, but identification of the latter individuals is not possible.

Despite the lack of comparison capability, the

TABLE 2.—Race of persons in study populations, total U.S. Medicare population, and New York elderly population: Percentage distribution

Population	Percentage distribution, by race			
	Total	White	Non-white	Unknown
Study populations, 1969				
Non-HIP.....	100 0	91 7	5 4	2 9
HIP.....	100 0	93 0	5 6	1 4
U.S. Medicare enrollees, July 1, 1969 ¹				
Hospital insurance.....	100 0	89 3	7 7	3 0
Supplementary medical insurance.....	100 0	89 8	7 3	2 9
Population aged 65 and over in New York City standard metropolitan statistical area, 1970 Census ²	100.0	91 1	8 9

¹ Data from Social Security Administration, Office of Research and Statistics, *Medicare: Health Insurance for the Aged, 1969, Section 2: Enrollment, 1972*

² Data from Bureau of the Census, *1970 Census of Population and Housing, PHC (2)—34, New York, August 1971.*

Medicaid group in HIP will be studied separately because of its special characteristics, both socio-economically and demographically. These Medicaid enrollees are considerably older than all other groups of the study populations: 59 percent of the men and 58 percent of the women in this group were aged 75 or older in 1970. They are also expected to make a greater demand on medical care resources than the other groups because of their health status, as may be inferred from the high mortality of the group in 1969.

Death rates in 1969 for the HIP and non-HIP study groups, and for the HIP subgroups by type of enrollment, are shown in table 4.¹¹ The observed rate was considerably higher for the non-HIP population than for the HIP population, partly because of the older average age of the non-HIP group. Adjustment for distributional differences in age and sex narrows but does not eliminate the difference in mortality rates for HIP and non-HIP populations. The significance

¹¹ Final data presented in this table differ from the preliminary data published previously (Paul M. Densen, Ellen W. Jones, Sam Shapiro, and Howard West, *op. cit.*) because of reallocations of deaths to correct dates of occurrence.

TABLE 3.—Non-HIP and HIP Medicare beneficiaries, by type of HIP medical group and type of HIP enrollment: Percentage distribution, by sex, and percent aged 75 and over, 1969 and 1970

Sex and age group	Non-HIP, total	Type of HIP medical group		Type of HIP enrollment		
		Special	Other	Conversion	Open enrollment	Medicaid
1969						
Total number.....	47,138	14,870	32,795	38,294	7,543	1,828
Total percent.....	100 0	100 0	100 0	100 0	100 0	100 0
Men.....	41 3	49 8	47 9	51 5	36 3	36 7
Women.....	58 7	50 2	52 1	48 5	63 7	63 3
Percent aged 75 and over:						
Men.....	34 0	26 1	27 1	23 7	42 0	51 8
Women.....	38 0	24 7	27.2	21 9	36 0	57 5
1970						
Total number.....	46,570	14,782	31,819	36,980	8,143	1,478
Total percent.....	100 0	100 0	100 0	100 0	100 0	100 0
Men.....	41 1	48 8	47 2	50 9	36 0	31 9
Women.....	58 9	51.2	52 8	49 1	64 0	68 1
Percent aged 75 and over:						
Men.....	34 5	28 4	28 8	25 5	44 3	59 4
Women.....	38 8	27.2	29 1	24 3	37.9	57.5

of this mortality differential is not clear from a single year's data.

Within HIP, the mortality rate was lower among beneficiaries enrolled in the special medical groups than among beneficiaries in other groups. Considerable variation was also observed among the three categories of HIP membership by type of enrollment. The adjusted death rate for Medicaid enrollees (134.0 per 1,000 population) was two and one-half times that for HIP as a whole (52.9). As indicated earlier, these are members of a group known to be at very high risk of death in comparison with a general population. At the other extreme, the low death rate among beneficiaries entering HIP through open individual enrollment procedures may be related to factors of self-selection among enrollees and, to some extent, to the minimal screening¹² of new applications by HIP.

Measures of Utilization and Charges

Data on utilization and charges for HIP and non-HIP study populations, presented in the basic tables as part of the evaluation of the incentive reimbursement program, are the rates of use by beneficiaries and the amounts of money paid by the Social Security Administration for the five major types of benefits. The annual rates and averages included in the basic tables, by type of benefit, are:

1. Hospital care:

a. *Hospital discharges per 1,000 beneficiaries.* Includes all hospital discharges in the calendar year of reference, regardless of date of admission. Some admissions will have been in the previous calendar year. Similarly, the data exclude hospitalizations begun during the year but not terminated by the end of the year. Claims procedures dictate the choice of discharge date (rather than admission date) for identification of hospital episodes, since billing cannot be completed until the episode is ended.

b. *Inpatient days per 1,000 beneficiaries.* Based on days of hospital care during the calendar year of reference for which a claim was reimbursed, regardless of dates of admission and discharge. Includes both fully and partly covered days.

TABLE 4.—Death rates per 1,000 for non-HIP and HIP Medicare beneficiaries, by type of HIP medical group and type of HIP enrollment, 1969

Population	Number of beneficiaries	Deaths per 1,000 beneficiaries	
		Unadjusted	Adjusted ¹
Non-HIP, total.....	47,138	59.6	57.5
HIP, total.....	47,665	48.0	52.9
HIP medical group:			
Special.....	14,870	42.0	47.1
Other.....	32,795	50.7	55.4
Type of HIP enrollment:			
Conversion.....	38,294	44.6	51.2
Open enrollment.....	7,543	40.6	41.5
Medicaid.....	1,828	149.3	134.0

¹ Data adjusted for age and sex.

c. *Average length of stay in hospital.* The average number of days in hospital, from dates of admission to dates of discharge, for all hospital episodes with discharge dates in the calendar year of reference. The numerator for a calendar year is not the same as the number of days in (b) above, since, for example, days in 1968 for episodes beginning in 1968 and ending in 1969 are included in the 1969 data, but days in 1969 for episodes beginning in 1969 and ending in 1970 are included in the 1970 data. In addition, the days used in this calculation may include days not covered by Medicare benefits.

d. *Reimbursed hospital charges per beneficiary.* Based on all reimbursements for hospital care in the calendar year of reference, regardless of dates of admission and discharge.

e. *Reimbursed hospital charges per discharge (estimated).* Total reimbursements for hospital care during the year, as in (d) above, divided by the number of hospital discharges in the year. Approximates the average reimbursed charge per hospital episode on the assumption that 1968 charges for hospital episodes beginning in 1968 and ending in 1969, which are excluded, are compensated for by the 1969 charges for episodes beginning but not ending in 1969.

2. Extended care:

a. *Extended-care facility (ECF) admissions per 1,000 beneficiaries.* Includes all admissions to extended-care facilities in the calendar year for which claims were reimbursed, regardless of length of stay or date of discharge. The admission date rather than the discharge date is used in counting stays in a calendar period because of the variable length of stay associated with nursing-home care. Although current (1974) nomenclature for nursing homes meeting the conditions of participation in Medicare is "skilled-nursing facility," the terminology in use during the study period is used here.

b. *Extended-care facility days per 1,000 beneficiaries.* Based on the number of days of care in ECF's in the calendar year for which a claim was reimbursed, regardless of dates of admission to or discharge from the facility. Includes both fully

¹² The report by the applicant of a diagnosis of cancer within 5 years or major disabling chronic disease was cause for rejection by the plan.

and partly covered days and excludes days not covered.

c. *Reimbursed extended-care facility charges per beneficiary.* Based on all reimbursements for care in participating nursing homes in the calendar year, regardless of dates of admission to or discharge from the nursing home.

d. *Reimbursed extended-care facility charges per admission (estimated).* The ratio of total reimbursements for extended care in the calendar year of reference to the number of admissions to ECF's in the same year. Approximates the average reimbursement per admission on the assumption that the error from including the reference year's charges for admissions in earlier years is balanced by the error from excluding the ensuing year's charges for nursing-home stays begun but not terminated in the reference year.

3. Home health care:

a. *Users of home health benefits per 1,000 beneficiaries* Refers to persons receiving one or more home health visits furnished by a participating home health agency in the year of reference for which a claim was reimbursed. Includes home health benefits covered under both HI (posthospital continued care) and SMI (not necessarily linked with hospitalization).

b. *Home health visits per 1,000 beneficiaries.* Based on total number of home health visits in the year of reference for which a claim was reimbursed, regardless of number of persons receiving those visits. Includes home health benefits under both HI and SMI.

c. *Home health visits per user.* The number of HI and SMI home health visits in the year for which a claim was reimbursed, divided by the number of persons receiving one or more such visits.

d. *Reimbursed charges for home health benefits per beneficiary.* Includes all reimbursements for home health benefits provided in the year under both HI and SMI.

e. *Reimbursed home health charges per user.* Total reimbursed charges for HI and SMI home health benefits in the year, divided by the number of persons receiving one or more such reimbursed services during the same year.

4. Outpatient services in hospitals:

a. *Users of outpatient services per 1,000 beneficiaries.* Persons for whom one or more claims were reimbursed for use of hospital outpatient benefits in the year of reference.

b. *Reimbursed outpatient charges per beneficiary.* Based on total reimbursements for outpatient services provided in the year.

c. *Reimbursed outpatient charges per user.* Total reimbursed charges for outpatient services provided in the year, divided by the number of persons receiving one or more such reimbursed services during the same year.

5 Physician services:

a. *Users of SMI medical services per 1,000 beneficiaries.* Persons for whom one or more claims were reimbursed for use of SMI benefits, other than outpatient benefits and home health visits covered under SMI, in the calendar year of reference. Almost all of these benefits are for services provided by doctors of medicine. For beneficiaries enrolled in HIP, "users" as defined here are only those enrollees using services provided by non-HIP physicians or other non-HIP providers.

b. *Reimbursed medical service charges per beneficiary.* Based on all reimbursements for services provided in the year, as defined in (a) above.

c. *Reimbursed medical service charges per user.* Total reimbursed charges for SMI medical services provided in the year, as defined in item (a) above, divided by the number of persons using one or more such reimbursed services during the same year.

To compare the study populations, all measures of utilization are adjusted by the direct method to take account of differences in age and sex composition of the different groups. In adjusting for calculations in which the number of beneficiaries is the denominator, the standard population employed is the combined HIP and non-HIP study population as defined for the baseline year 1969. Similarly, when the number of discharges, admissions, or "users" constitutes the denominator, the combined total of HIP and non-HIP events in 1969 is used as a standard. This use of 1969 data as the standard throughout the period of the study makes possible the direct comparison of all adjusted annual rates. In the same way, age-sex-specific rates are applied to the standards for men and women combined in the respective age groups in order to make the age-adjusted rates for men and women comparable.

These adjusted utilization data focus on the comparison between HIP and non-HIP populations and between subgroups of the enrollment within HIP. The "crude" or actual rates observed, however, are presented in the detailed tables at the end of the article (tables A-O, pages 20-34).

UTILIZATION AND CHARGES, 1969 AND 1970

Hospital Care

Comparison between HIP and non-HIP populations.—Because of the importance of hospital charges to overall costs of medical care for the

aged, a major goal of HIP's experimental program was reduction in hospital admission rates and shortened length of stay for Medicare beneficiaries in the plan's enrollment.¹³ The data in table 5 show that in 1970, the first program year, such reductions did take place. The hospital discharge rate among HIP Medicare beneficiaries declined from 207 per 1,000 in 1969 to 192 per 1,000 in 1970, and the average length of stay dropped from 17.6 days to 16.9 days. The non-HIP study population also experienced a decline in the hospital discharge rate—from 211 per 1,000 in 1969 to 206 in 1970. The drop in the discharge rate for this group, however, was only 2 percent, compared with 7 percent for the HIP beneficiaries. Moreover, average length of hospital stay in the non-HIP comparison population was only slightly lower in 1970 (18.6 days) than in 1969 (18.8 days). The net effect of these changes in frequency of use and duration of stay in the two study populations was to reduce total inpatient days per 1,000 beneficiaries by 12 percent in the HIP group and by 3 percent in the non-HIP general population. The adjusted rates in 1970 were 3.2 days per HIP beneficiary and 3.8 days per non-HIP beneficiary, a difference of about one-half day per person in the total populations. The HIP/non-HIP differential in inpatient days per discharge was 1.7 days in 1970.

These differences in hospital utilization rates for HIP and non-HIP Medicare beneficiaries may be compared with data from earlier studies, which found that members of group-practice plans tend to have lower annual hospital admission rates than do individuals using other forms of medical care.¹⁴ The earlier studies were based largely on population groups under age 65. Data from this current study indicate continuation of the pattern into the Medicare age group—aged 65 and over.

¹³ Sam Shapiro, *op. cit.*

¹⁴ George S. Perrott, *The Federal Employees Health Benefits Program: Enrollment and Utilization of Health Services, 1961-1968*, Health Services and Mental Health Administration, U.S. Public Health Service, May 1971; Paul M. Densen, Eve Balamuth, and Sam Shapiro, *Prepaid Medical Care and Hospital Utilization* (Hospital Monograph Series No. 3), American Hospital Association, 1958; and Paul M. Densen, Ellen W. Jones, Eve Balamuth, and Sam Shapiro, "Prepaid Medical Care and Hospital Utilization in a Dual Choice Situation," *American Journal of Public Health*, November 1960, pages 1710-1726.

Reimbursed charges for hospital care are also shown in table 5. Medicare beneficiaries in HIP are subject to the same deductible and coinsurance features of HI benefits as are Medicare beneficiaries generally.¹⁵ The data on reimbursed charges for the two study populations would therefore be expected to reflect fairly closely the measures of hospital utilization already given for the two population groups in 1969 and 1970 were it not for inflationary¹⁶ and other factors. Actually, the reimbursed charges per hospital discharge went up in 1970 for both groups. For the non-HIP beneficiaries, the reimbursed charges per person, despite the decreased discharge and inpatient stay rates, increased from \$270 to \$287. In HIP, however, it appears that the decline in use of hospital services was enough to offset a presumed inflationary effect, since the reimbursed charges per HIP beneficiary dropped from \$266 in 1969 to \$260 in 1970.

Other factors that could affect the reimbursed charges per beneficiary and per hospital discharge are the use of specific benefits covered under HI (operating-room charges, intensive care, radiology, laboratory, and certain medical supplies and equipment) and the differences in established per diem rates among individual hospitals used. These factors will be considered in subsequent reports.

Comparison of groups within HIP.—Measures of hospital utilization in table 5 for HIP beneficiaries by type of group and source of enrollment show differences among these subdivisions of the HIP study population even before the start of the incentive reimbursement experiment. The special medical groups, in which the activities of nurse clinician coordinators were a major component of the experimental program, showed a lower hospital discharge rate, shorter average length of stay, and fewer inpatient days per unit of population in 1969 than did the other HIP

¹⁵ The inpatient hospital deductible was \$44 in 1969 and \$52 beginning January 1970. Daily coinsurance from 61 to 90 days was \$11 in 1969 and \$13 in 1970; after 90 days, daily coinsurance was \$22 in 1969 and \$26 in 1970. See Howard West, "Five Years of Medicare: A Statistical Review," *Social Security Bulletin*, December 1971.

¹⁶ The increase from 1969 to 1970 in the Consumer Price Index of the Bureau of Labor Statistics for hospital daily service charges was 12.5 percent. See Loucele A. Horowitz, *Medical Care Prices Fact Sheet, 1966-1970* (Research and Statistics Note No. 2), Office of Research and Statistics, March 23, 1971.

TABLE 5—Utilization of inpatient hospital care by non-HIP and HIP Medicare beneficiaries and reimbursed charges for care received, by sex and by type of HIP medical group and type of HIP enrollment, 1969 and 1970¹

Population	Utilization						Reimbursed charges			
	Hospital discharges per 1,000 beneficiaries		Average inpatient days per discharge		Covered inpatient days per 1,000 beneficiaries		Per beneficiary		Per discharge	
	1969	1970	1969	1970	1969	1970	1969	1970	1969	1970
All beneficiaries										
Non-HIP, total.....	211	206	18.8	18.6	3,957	3,834	\$270	\$287	\$1,280	\$1,404
HIP, total.....	207	192	17.6	16.9	3,660	3,217	266	260	1,295	1,361
HIP medical group:										
Special.....	203	195	16.5	15.7	3,374	3,133	234	242	1,159	1,245
Other.....	208	190	18.0	17.5	3,781	3,262	280	268	1,352	1,418
Type of HIP enrollment:										
Conversion.....	203	192	17.6	16.9	3,580	3,232	264	262	1,309	1,370
Open enrollment.....	197	185	15.5	15.0	3,032	2,800	223	230	1,139	1,250
Medicaid.....	383	303	22.2	23.7	8,979	6,882	586	495	1,562	1,520
Men										
Non-HIP, total.....	243	233	18.3	18.7	4,307	4,328	\$308	\$327	\$1,265	\$1,405
HIP, total.....	234	222	17.0	16.3	3,971	3,687	289	299	1,236	1,351
HIP medical group:										
Special.....	228	225	16.1	15.5	3,651	3,654	253	280	1,110	1,244
Other.....	236	220	17.3	16.7	4,114	3,694	305	308	1,292	1,403
Type of HIP enrollment:										
Conversion.....	230	221	16.9	16.3	3,858	3,697	286	300	1,248	1,358
Open enrollment.....	218	214	15.3	14.4	3,286	3,136	236	262	1,079	1,231
Medicaid.....	456	381	21.3	22.9	10,127	9,077	633	647	1,398	1,699
Women										
Non-HIP, total.....	180	178	19.3	18.5	3,518	3,340	\$232	\$247	\$1,294	\$1,402
HIP, total.....	179	162	18.1	17.5	3,350	2,740	244	222	1,353	1,372
HIP medical group:										
Special.....	178	165	16.9	16.0	3,096	2,612	215	205	1,208	1,247
Other.....	179	160	18.7	18.3	3,478	2,810	255	229	1,413	1,432
Type of HIP enrollment:										
Conversion.....	175	163	18.4	17.5	3,301	2,768	242	225	1,371	1,383
Open enrollment.....	175	155	15.7	15.5	2,777	2,463	210	198	1,199	1,269
Medicaid.....	310	226	23.0	24.4	7,831	4,687	539	343	1,726	1,541

¹ Data adjusted for age; figures for all beneficiaries also adjusted for sex.

medical groups. All these measures of hospital use declined in 1970 among beneficiaries in both types of medical groups. The decrease in total covered inpatient days per 1,000 population, however, was greater for the "other" groups (14 percent) than for the special groups (7 percent). At this point, with data for only one experimental year, the meaning of these differences is not clear.

A difference was also observed between beneficiaries in HIP who had converted from previous membership on reaching age 65 and those who came into the plan through open enrollment (except for Medicaid recipients) after that age. Although utilization rates declined in both groups in 1970, the newly enrolled individuals had lower discharge rates, lower rates of inpatient days, and lower average stays both in the preprogram year

and in the first year of the experimental program. Again, since the data are for just a single year, one can only speculate about the role of selective factors in the difference—either self-selection of applicants or selection on the part of the plan, or both. From the standpoint of the evaluation, the changes, in time, within these subgroups will be of particular interest.

As predicted earlier, the Medicaid population within HIP had extremely high hospital utilization rates. Their adjusted annual discharge rate was almost double that for the other open enrollees in 1969 and one and one-half times as great in 1970. The average length of hospital stay for Medicaid patients was nearly one week longer than that of the total HIP study population.

Variation in rates by sex and age.—The comparison data for HIP and non-HIP Medicare beneficiaries have been presented thus far in the form of rates adjusted for differences in the sex and age distributions of the study populations. For further understanding of the nature of the differences in the two groups, both before and after the first year of the experimental program, the rates of hospital utilization and reimbursed charges for covered services are given for men and women separately in table 5. As before, the effect of differences in age distributions on the rates for total populations has been removed by the direct adjustment method.

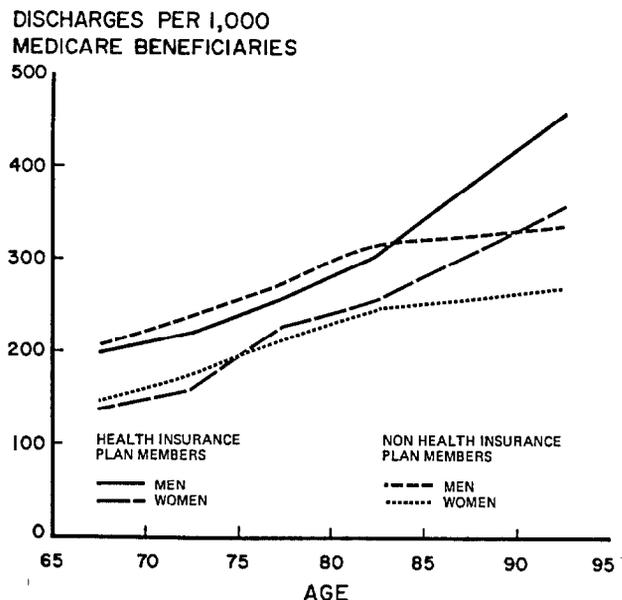
The 1970 decline in hospital discharge rates noted for HIP and non-HIP total populations occurred for both men and women in all study groups. The decrease was especially marked (9.5 percent) among HIP women and among HIP men and women members enrolling through Medicaid. Thus, in 1969, discharge rates were similar for HIP and non-HIP women and were lower for HIP men than for non-HIP men; in 1970, however, the rates for both sexes were lower in HIP than in non-HIP.

Charts 1 and 2 show that the lower hospital discharge rates for HIP men than those for non-HIP men occurred in all age groups under age 85. The lower rates for HIP women occurred under age 80. HIP rates were higher than comparable non-HIP rates for both men and women in the oldest age groups. Populations in these age groups are very small, however.

The variation in hospital discharge rates with age is also evident in charts 1 and 2. The general trend was for rates to increase at successively older age groups, except for those aged 85 and over in 1970. For that group the rates in three of the categories shown were less than those for the group aged 80–84. Note, however, that hospital discharge rates dropped between 1969 and 1970, not only for the oldest groups in the populations but for almost all of the other age-sex-specific groups.

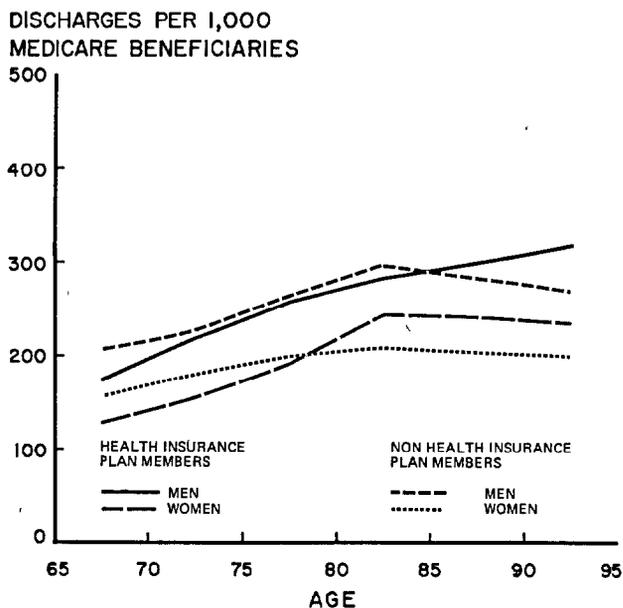
Another major point illustrated by the data is the difference in utilization rates for men and women in both populations. Both hospital discharge rates and inpatient days per 1,000 beneficiaries were higher among men than among women. The average length of stay in hospitals,

CHART 1.—Hospital discharges per 1,000 non-HIP and HIP Medicare beneficiaries, by sex and age, 1969



however, was less for men than for women in all study categories except the non-HIP population in 1970, where length of stay was similar for men and women beneficiaries. These facts about sex differentials in use of hospitals have been reported from other studies—the Current Medicare Survey, for example, and the National Health

CHART 2.—Hospital discharges per 1,000 non-HIP and HIP Medicare beneficiaries, by sex and age, 1970



Survey on the use of short-stay hospitals in 1969 by persons aged 65 and over.¹⁷

The distributions of hospital discharges by length of stay are shown in table 6 in intervals of 1 week up to 1 month, for 30-59 days, and for 60 days or more. These data show that the distributions are similar for all study groups in both years. The distributions of length of stay by single days under 1 month, as shown below, support the observation of similarity between HIP and non-HIP groups, in both 1969 and 1970.

Number of days	Percent with specified days of stay			
	Non-HIP		HIP	
	1969	1970	1969	1970
1 or less.....	4.7	4.3	5.5	5.1
2.....	3.8	3.7	3.9	4.4
3.....	3.8	3.8	4.0	4.3
4.....	3.8	3.9	3.6	3.9
5.....	4.2	4.2	4.1	4.3
6.....	4.3	4.4	4.2	5.2
7.....	5.4	6.0	5.2	5.5
8.....	4.7	4.6	4.9	5.2
9.....	4.4	4.7	4.3	4.1
10.....	3.9	4.6	4.4	4.3
11.....	3.8	4.0	3.8	4.1
12.....	3.6	3.4	3.6	3.5
13.....	3.3	3.6	3.0	2.9
14.....	3.4	3.4	3.4	3.2
15.....	2.6	3.3	2.8	2.7
16.....	2.4	2.5	2.5	2.4
17.....	2.9	2.3	2.3	2.3
18.....	2.4	2.0	2.3	2.3
19.....	2.2	2.2	2.1	2.3
20.....	2.0	2.2	2.4	2.0
21.....	2.0	2.3	2.4	2.3
22.....	1.6	1.7	1.7	1.7
23.....	1.5	1.4	1.6	1.7
24.....	1.4	1.6	1.6	1.3
25.....	1.2	1.3	1.4	1.2
26.....	1.3	1.1	1.2	1.0
27.....	1.2	1.4	1.1	1.1
28.....	1.2	1.0	1.2	1.3
29.....	1.1	1.0	.9	.9

Extended Care

HIP enrollees made greater use of extended-care facilities than did the non-HIP sample population, both in terms of admissions during 1969 and 1970 and covered days of care in 1969 (table 7). The outstanding feature of the data, however, is the precipitate drop in utilization of these facilities by both groups in 1970. Admission rates

¹⁷ See "Hospital Insurance Sample: Inpatient Hospital Utilization, 1969," *Health Insurance Statistics, Current Medicare Survey Report*, Office of Research and Statistics, April 2, 1973; and *Utilization of Short-Stay Hospitals: Summary of Nonmedical Statistics, U.S., 1970* (Vital and Health Statistics, National Health Survey, Series 13, No. 14), U.S. Public Health Service, Health Resources Administration, National Center for Health Statistics, August 1973.

TABLE 6—Hospital discharges among non-HIP and HIP Medicare beneficiaries: Percentage distribution, by length of stay and by sex, 1969 and 1970

Length of stay (in days)	Non-HIP			HIP		
	All beneficiaries	Men	Women	All beneficiaries	Men	Women
1969						
Total number.....	9,917	4,777	5,140	9,491	5,257	4,234
Total percent.....	100.0	100.0	100.0	100.0	100.0	100.0
0-7.....	29.9	30.8	29.1	30.6	31.2	29.8
8-14.....	27.2	27.0	27.4	27.4	27.1	27.8
15-21.....	16.6	16.9	16.3	16.8	17.1	16.4
22-29.....	10.6	10.4	10.9	10.6	11.2	9.8
30-59.....	11.7	11.5	11.9	11.3	10.5	12.3
60 or more.....	3.9	3.4	4.4	3.3	2.9	3.9
1970						
Total number.....	9,451	4,495	4,956	8,734	4,868	3,868
Total percent.....	100.0	100.0	100.0	100.0	100.0	100.0
0-7.....	30.2	30.0	30.4	32.7	32.5	32.9
8-14.....	28.1	27.7	28.5	27.3	27.6	26.9
15-21.....	16.8	18.2	15.5	16.4	16.8	15.9
22-29.....	10.5	10.7	10.3	10.2	10.7	9.6
30-59.....	11.0	10.5	11.4	10.6	10.1	11.2
60 or more.....	3.4	2.9	3.8	2.7	2.2	3.4

were cut in half, and the covered days per 1,000 beneficiaries decreased even more (by 58 percent in the non-HIP population and by 66 percent in HIP). Since covered care in extended-care facilities depends on earlier hospitalization, some decline in utilization might be expected as a result of the decline in hospital discharge rates in 1970. The observed decrease was greater, however, than could be accounted for in this way.

In view of the legislative intent to provide, through establishment of extended-care benefits, a lower-cost alternative to lengthy stays in acute-care hospitals, it seems curious that the ratio of extended-care admissions to hospital discharges should drop from 1:13 to 1:29 in the non-HIP population and from 1:10 to 1:22 in the HIP population in the period represented by these data. The data do not indicate, however, whether 1969 utilization was "high" or 1970 was "low." Subsequent analysis of extended-care utilization associated with types of hospitalization, length of stay in hospitals, and use of other covered services may give information about the significance of the change for the populations studied.

Some of the observed decrease in extended-care facility use is doubtless related to the application of Federal guidelines on continuous skilled-nursing services following publication in 1969

TABLE 7.—Utilization of extended-care facilities by non-HIP and HIP Medicare beneficiaries and reimbursed charges for care received, by type of HIP medical group and type of HIP enrollment, 1969 and 1970¹

Population	Utilization				Reimbursed charges			
	Admissions per 1,000 beneficiaries		Covered days per 1,000 beneficiaries		Per beneficiary		Per admission	
	1969	1970	1969	1970	1969	1970	1969	1970
Non-HIP, total.....	15 7	7 2	604	255	\$17 09	\$7 70	\$1,081	\$1,069
HIP, total.....	21 2	8 9	747	255	22 46	8 51	1,028	932
HIP medical group								
Special.....	22 2	8 6	683	222	19 69	7 58	882	849
Other.....	21 5	9 2	765	273	23 40	9 07	1,080	970
Type of HIP enrollment								
Conversion.....	22 6	9 5	820	273	24 44	9 12	1,071	974
Open enrollment.....	25 4	8 5	752	238	22 04	8 16	863	897
Medicaid.....	16 2	7.7	598	161	17 13	5 14	904	347

¹ Data adjusted for age and sex.

of clarified rules for determining covered level of care.¹⁸ The magnitude of the decline among these New York City study populations appears unique, however, since for the United States as a whole the percentage change was -10.2 for fiscal year 1969-70 and -13.4 for fiscal year 1970-71. For New York State as a whole the figures for these years were -5.2 and -11.4.¹⁹ This finding suggests that circumstances may have existed in the general arrangements for providing long-term care in the New York City area that were not characteristic of the rest of the country.

Reimbursed charges per beneficiary in 1969 shown in table 7 reflect the differences in utilization by HIP and non-HIP Medicare enrollees: The amount is about \$5 per capita greater in HIP. In 1970, the dollar amounts reimbursed per beneficiary were \$8.51 in HIP and \$7.70 in non-HIP. Charges per admission to extended-care facilities, however, were lower in HIP than in non-HIP in both years, as a result of lower ratios of covered days to admissions for the HIP group.

Within HIP, admission rates for extended-care facilities were similar for members of special and other HIP medical groups, but the rates of covered days per 1,000 beneficiaries were lower for the members of special groups. When HIP beneficiaries were categorized by type of enroll-

ment, the Medicaid membership had fewer admissions than others in the HIP population and fewer days per 1,000 population. The decrease between 1969 and 1970 in covered days per admission for Medicaid enrollees was also larger than the declines for other HIP enrollment groups. It is possible that alternative methods of payment for costs of nursing-home care (that is, Medicaid instead of Medicare) were used with greater frequency for this segment of the population than for others.

Home Health Care

Home health benefits are provided under both HI and SMI of the Medicare law. Utilization of home health benefits and reimbursements for these services under both parts of Medicare are combined in this study. The data in table 8 show that relatively few people in any of the study groups used the services and that utilization in 1970 was less than it was in 1969. Of the non-HIP population, 1.4 percent used home health benefits in 1969 and 1.0 percent used them in 1970. Among HIP beneficiaries, 1.6 percent used the benefits in 1969 and 1.1 percent in 1970. Although the drop in utilization was smaller than the drop in the use of extended-care facilities, the reasons were probably the same: The implementation of revised Federal guidelines on criteria for covered skilled services.²⁰

¹⁸ *Determining Coverage of Care in an Extended-Care Facility* (Intermediary Letter No. 371), Social Security Administration, April 1969.

¹⁹ Eugene Carter and Charles Fisher, *Health Insurance for the Aged: Hospital and Extended Care Admissions by State, Fiscal Year 1971* (Health Insurance Statistics Note No. 42), Office of Research and Statistics, 1973.

²⁰ *Skilled Nursing Care Provided as a Home Health Benefit* (Intermediary Letter No. 395), Social Security Administration, August 1969.

TABLE 8—Utilization of home health benefits by non-HIP and HIP Medicare beneficiaries and reimbursed charges for care received, by type of HIP medical group and type of HIP enrollment, 1969 and 1970¹

Population	Utilization						Reimbursed charges			
	Users per 1,000 beneficiaries		Visits per 1,000 beneficiaries		Visits per user		Per beneficiary		Per user	
	1969	1970	1969	1970	1969	1970	1969	1970	1969	1970
Non-HIP, total.....	13 7	10 2	271	194	19 9	19 2	\$3 77	\$3 04	\$277	\$297
HIP, total.....	16 0	11 2	320	184	19 4	16 3	3 92	2 71	239	240
HIP medical group										
Special.....	17 8	12 1	348	198	19 2	14 8	4 01	2 93	223	220
Other.....	15 3	10 7	311	176	19 8	16 6	3 90	2 60	248	244
Type of HIP enrollment										
Conversion.....	16 6	11 3	348	182	20 1	15 9	4 21	2 72	246	236
Open enrollment.....	15 0	10 0	287	185	17 6	19 2	3 74	2 58	225	270
Medicaid.....	27 3	21 6	339	313	13 2	15 7	4 16	4 28	158	204

¹ Data adjusted for age and sex.

Table 8 also shows that non-HIP beneficiaries who did use home health benefits received just under 20 visits per person in both years. HIP users received 19 visits per person in 1969 and 16 per person in 1970. This level of utilization is considerably lower than the maximum entitlement provided by the law—100 home health visits in one benefit period under HI and an additional 100 per calendar year under SMI.

Reimbursed charges per beneficiary reflect the low rate of utilization of services by both populations: \$3.77 in 1969 and \$3.04 in 1970 for non-HIP, and \$3.92 in 1969 and \$2.71 in 1970 for HIP. The average reimbursed charges per visit in 1969 were \$14 for non-HIP beneficiaries and \$12 for HIP beneficiaries. In 1970, the average per visit was about \$15 for each of the two groups.

Within HIP, decreased utilization of home health benefits in 1970 was recorded for members of both the special medical groups and the other medical groups in the plan. All three subgroups of HIP membership classified by type of enrollment had fewer users per 1,000 beneficiaries in 1970 than in 1969, but among the open enrollment and Medicaid groups, the number of visits per user increased in 1970.

Medical Services

Use of medical services covered by SMI is shown in tables 9 and 10. Because of interest in the different forms of organization for medical care, data are given separately for outpatient hospital benefits and for the other SMI benefits, comprised largely of services provided by phy-

sicians. As noted earlier, home health benefits under SMI have been combined with home health benefits under HI in table 8 and are excluded in tables 9 and 10.

Table 9 shows that in 1969 about 7 percent (71.0 per 1,000) of the non-HIP beneficiaries and about 5 percent (46.3 per 1,000) of the HIP beneficiaries received one or more outpatient services in hospitals for which a reimbursement was made. Unlike the situation with services provided on an inpatient basis in hospitals and extended-care facilities, the utilization rates for outpatient services increased by about one-third for both study populations in 1970: 9 percent (92.5 per 1,000) of the non-HIP group and 6 percent (61.8 per 1,000) of the HIP group used one or more such services in the first year of the experimental program. Although the utilization rates for HIP members in both years were lower than rates for non-HIP beneficiaries, the reimbursed outpatient charges per user differed by only about \$3, with the HIP figure lower in 1969 and higher in 1970.

Outpatient utilization rates are small compared with the utilization rates for other SMI medical services, shown in table 10, which are primarily services provided by physicians. In the pre-program year 1969, 44 percent of the non-HIP beneficiaries and 24 percent of the HIP beneficiaries used these services. Rates increased for both study groups in 1970—to 50 percent for non-HIP and to 27 percent for HIP. This 50–60 percent medical service “user” rate in the non-HIP sample (roughly combining the figures for outpatient and other medical services in the 2

TABLE 9.—Utilization of outpatient services by non-HIP and HIP Medicare beneficiaries and reimbursed charges for care received, by type of HIP medical group and type of HIP enrollment, 1969 and 1970¹

Population	Users per 1,000 beneficiaries		Reimbursed charges			
			Per beneficiary		Per user	
	1969	1970	1969	1970	1969	1970
Non-HIP, total.....	71.0	92.5	\$3 94	\$6 94	\$55.30	\$74.81
HIP, total.....	46 3	61.8	2 39	4 78	51.74	78 19
HIP medical group						
Special.....	34.0	49 1	1 74	4 11	50.09	87.23
Other.....	51.7	67.7	2 70	5 09	52.65	75 11
Type of HIP enrollment						
Conversion.....	42 0	57.1	2.11	4.39	50.11	77.30
Open enrollment.....	46 6	62 2	2.35	4 01	51.14	64.74
Medicaid.....	147.1	190.9	9 94	19 43	66.38	99.17

¹ Data adjusted for age and sex.

years) is of the same order of magnitude as the percentage of enrollees with SMI coverage who were reported as incurring charges beyond the deductible in 1969 and 1970 by the nationwide Current Medicare Survey.²¹

In looking at the data for HIP groups on use of SMI services it must be understood that the figures given here represent, for these HIP members, only their utilization of medical service benefits outside the group-practice plan. About one-third—33 percent, according to tables L and N—of the HIP enrollees (who had access to fully prepaid physician services within the plan) also had claims reimbursed for services by other than HIP providers. This finding raises a number of questions about the characteristics of beneficiaries, the characteristics of the plan, and the nature of the services. Within HIP, the small groups of Medicaid enrollees were the heaviest users of both outpatient and other SMI services. Other “open” enrollees had higher utilization rates than the conversion group. Members of the special medical groups had the lowest utilization rates of both outpatient and other SMI benefits. Some but not all of this difference between special and other medical groups can be explained by the different percentages of Medicaid enrollees in these two subgroups: 2 percent of the special group population and 5 percent of the other group were Medicaid enrollees in 1969.

²¹ See “Use of Medical Care Under Supplementary Medical Insurance, 1967-70,” *Health Insurance Statistics, Current Medicare Survey Report*, Office of Research and Statistics, February 22, 1972.

Also shown in table 10 are the data on reimbursed charges for physician and other medical services covered under SMI (excluding outpatient and home health benefits, shown earlier). Reimbursed charges per beneficiary were greater in 1970 than in 1969 for all population groups. Reimbursed charges per user were also greater in 1970 for all groups except the Medicaid enrollment in HIP.

In presenting these data on reimbursed charges for SMI services, it is again emphasized that the definition of “user” has different implications for the HIP and non-HIP populations, since the two groups account for the deductible by different methods. Non-HIP beneficiaries must have incurred “reasonable” charges of \$50 in a benefit period. HIP members are given credit towards the deductible as a result of the enrollee’s supplementary premium payments to HIP. Thus it is possible for an HIP member to “meet the deductible” without utilizing physician services or other SMI benefits. Units of service giving rise to the reimbursed charges shown in table 10 are not known, since statistics on the number of patient-physician encounters are not available in the sources of data used in this report.

Summary of Per Capita Reimbursed Charges

Reimbursed charges for all Medicare-covered services are summarized in table 11. As in previous tables, the data are adjusted for differences in the sex and age distributions of the HIP and non-HIP study populations. It is clear that, with the capitation payment made to HIP for Medicare-covered services provided or arranged by the plan, the total sum reimbursed for charges incurred by HIP Medicare beneficiaries in 1969 (\$442.46 per capita) exceeded by about 10 percent the sum reimbursed for non-HIP Medicare beneficiaries in the same geographic area (\$400.67 per capita). The amount reimbursed for out-of-plan use of SMI services by HIP members was more than this difference in total per capita payments. Total SMI reimbursed charges for HIP beneficiaries (excluding home health benefits) were 37 percent greater than comparable reimbursed charges for non-HIP beneficiaries.

TABLE 10.—Utilization of physician services and other SMI benefits¹ by non-HIP and HIP Medicare beneficiaries and reimbursed charges for care received, by type of HIP medical group and type of HIP enrollment, 1969 and 1970²

Population	Users per 1,000 beneficiaries		Reimbursed charges			
			Per beneficiary		Per user	
	1969	1970	1969	1970	1969	1970
Non-HIP, total....	442	496	\$105.80	\$131.28	\$229	\$267
HIP, total.....	235	270	54.30	67.06	231	249
HIP medical group						
Special.....	196	233	43.12	53.60	219	231
Other.....	252	288	59.18	73.30	234	257
Type of HIP enrollment						
Conversion.....	227	266	52.89	67.41	232	254
Open enrollment.....	254	276	52.73	63.70	208	231
Medicaid.....	381	443	107.72	111.63	283	252

¹ Users of service for which a charge was reimbursed. Excludes hospital outpatient benefits and home health service benefits. For HIP, includes only the users of services by non-HIP providers.

² Data adjusted for age and sex.

In 1970, however, changes in the use of covered services by the HIP and non-HIP populations resulted in net changes that were in different directions for the two study groups. Total per capita reimbursed charges for HIP decreased by 1.0 percent to \$438.16, while for non-HIP, charges increased by 8.1 percent to \$435.96 per capita. Although the difference between the two populations in SMI reimbursed charges was less in 1970, the major source of savings for the HIP group was the decline in the use of inpatient hospital services. Any significant change in hospital costs for Medicare beneficiaries would necessarily have a major impact on total expenditures because of the relative size of sums expended for services provided under this component of the benefit package.

Analysis of the experience in the second and third years of the incentive reimbursement experiment will show whether or not HIP has succeeded in containing or further reducing the reimbursed charges for hospital care and for out-of-plan physician services obtained by beneficiaries enrolled in HIP. It is emphasized that the comparison of data for one year of the experiment with that for a single earlier year is insufficient for conclusions about the effectiveness of the experimental program.

One question raised by the data thus far is how significant for the well-being of the population are the measures designed to reduce inpatient hospital days, together with Federal policy changes relating to extended care. The

utilization data available for this evaluation do not provide direct evidence of patient outcomes, but it will be possible, in subsequent analyses, to inspect changes in length and type of hospital stays associated with use of extended-care facilities or home health benefits and to obtain utilization profiles of individuals in the study populations. These data on the interrelationship of the different components of utilization may be regarded as one aspect of patient outcomes. The mortality experience of different groups in the study populations will also be available for study.

Out-of-plan use of services is another major issue of general interest. The issue has been recognized as a factor in medical care costs since the advent of prepaid group-practice plans. In a 1969 summary of previous studies,²² the reasons for out-of-plan utilization were described as including dissatisfaction with services offered in the group-practice plan, continuation of relationships established before plan membership, and convenience of obtaining care outside the plan in emergencies. A later conclusion²³ was that the general extent of out-of-plan use of services by members of prepaid group-practice plans may have declined since the earlier studies but that obvious problems remain to be solved in the sphere of plan-patient relationships in these settings.

In HIP specifically, it was calculated in 1959²⁴ that, in a sample of subscribers from three unions, about 20 percent of the total costs for physician services were paid directly by the patients—an indication of the extent of use by HIP members of physicians outside the plan. This finding was in a pre-Medicare period for subscribers under age 65 who were free to obtain care elsewhere but were themselves responsible for meeting its charges (either out-of-pocket or through other insurance).

Under Medicare, HIP beneficiaries have a source of reimbursement for out-of-plan physician services once the deductible has been ac-

²² Avedis Donabedian, "An Evaluation of Prepaid Group Practice," *Inquiry*, September 1969, pages 3-27.

²³ Milton I. Roemer and William Shonick, "HMO Performance: The Recent Evidence," *Milbank Memorial Fund Quarterly* (Health and Society), Summer 1973.

²⁴ Odin W. Anderson and Paul B. Sheatsley, *Comprehensive Medical Insurance: A Study of Costs, Use, and Attitudes Under Two Plans* (Health Information Foundation Research Series 9), Health Information Foundation, 1959.

TABLE 11.—Reimbursed per capita charges¹ for Medicare-covered services used by non-HIP and HIP Medicare beneficiaries, by type of benefit, 1969 and 1970

Type of benefit	1969		1970	
	Non-HIP	HIP	Non-HIP	HIP
Number of beneficiaries.....	47,138	47,665	46,570	46,601
Total per capita reimbursement.....	\$400.87	\$442.46	\$435.96	\$438.18
Inpatient hospital care.....	270.07	266.27	267.00	260.30
Extended-care facility.....	17.09	22.46	7.70	8.51
Home health benefits (HI and SMI).....	3.77	3.92	3.04	2.71
Outpatient services.....	3.94	2.39	6.94	4.78
Other SMI medical benefits.....	105.80	54.30	131.28	67.06
Capitation payment to HIP for Medicare-covered services provided by plan.....		93.12		94.80

¹ Except for the capitation payment to HIP, data adjusted for age and sex.

counted for. It is not known whether, in these circumstances, the medical services sought by individuals beyond those financed by the prepayment mechanism represent complementary or duplicated medical care costs. Those who do use out-of-plan services are by definition, however, a particular subset of the HIP Medicare enrollment. Since very little information is available on this subject, the characteristics of HIP's out-of-plan users of physician services, in comparison with those of other HIP members and with those of the non-HIP sample, will be studied closely. The findings will have implications for the fiscal arrangements by which services are to be provided under universal entitlement.

SUMMARY

In an effort to contain the total costs of care for its Medicare enrollment, including the costs of care in hospitals, nursing homes, and home health programs, the Health Insurance Plan of Greater New York, on contract with the Social Security Administration, carried out an experiment with financial incentives to reduce costs and at the same time maintain or improve the standards of care. In six of its 30 medical groups, special programs using nurse clinician coordinators for health maintenance activities with high-risk patients were instituted. Financial rewards for cost containment were available to all medical groups and to certain non-HIP providers participating in the experiment.

Evaluation of the incentive reimbursement experiment is approached in two ways: (1) De-

tailed statistical studies of utilization and reimbursed charges for 1969, the year before the experiment, and for the experiment years, 1970-72; and (2) interviews with samples of study populations to ascertain their functioning status, satisfactions with care received, and health care costs not covered by Medicare. In all analyses, HIP beneficiaries by type of group and type of enrollment are compared with a 5-percent sample of non-HIP beneficiaries living in the same geographic area. For comparison purposes, measures of utilization and reimbursed charges are adjusted for differences in age and sex composition of the study populations.

Data on characteristics of study populations and utilization and charges for the preprogram year 1969 and for the first program year 1970 are presented. The populations numbered 47,665 in HIP and 47,138 in the non-HIP sample in 1969 and totaled 46,601 for HIP and 46,570 for the non-HIP sample in 1970.

Analysis of different measures of hospital utilization showed differences in the two study populations and in the subgroups of the HIP population before the experimental program began. HIP beneficiaries used hospitals slightly less frequently and experienced shorter lengths of stay than did non-HIP beneficiaries in 1969. Discharge rates for the two groups in that year were 207 per 1,000 and 211 per 1,000 beneficiaries, respectively, and average lengths of stay were 17.6 days and 18.8 days. The drop in hospital discharge rates in 1970, observed for Medicare beneficiaries generally, was greater, however, among HIP members than among the non-HIP sample. For HIP, the 1970 rate of 192 per 1,000 beneficiaries was 7.2 percent less than the 1969 rate; for the non-HIP population, the drop to a rate of 206 represented a 2.4-percent decrease.

Length of hospital stay also declined for both study populations but proportionately more for HIP than for non-HIP. The net effect in terms of inpatient days per 1,000 beneficiaries was a reduction of 12.1 percent for HIP (from 3,660 to 3,217 inpatient days per 1,000) and 3.1 percent for the non-HIP group (from 3,957 to 3,834 per 1,000).

The continued escalation in medical care costs in 1970 was a factor in the amount of reimbursed charges for both groups. Despite the lower hospital utilization rates, the reimbursed inpatient

charges per non-HIP beneficiary increased from \$270 in 1969 to \$287 in 1970. In HIP, however, the decrease in use was sufficient to offset the inflationary factor and reimbursed inpatient charges per beneficiary dropped from \$266 in 1969 to \$260 in 1970.

Within HIP, the decrease in measures of hospital utilization was observed in both the medical groups designated as special groups for the purpose of the experiment and the other medical groups, and in all three categories of membership by type of enrollment. Differences were observed in the utilization experience of these different subgroups of the HIP population in the preprogram year, as well as differences in the rates of change in 1970. Reasons for some of these differences are not yet clear. The Medicaid population, as predicted earlier, had extremely high hospital utilization rates, however.

The data for men and women in the study populations show differences in hospital utilization rates that have been observed in other studies: Men generally had higher discharge rates and a greater number of inpatient days per 1,000 beneficiaries than women but shorter average lengths of stay. Another finding consistent with studies elsewhere was the rise in hospital discharge rates with increasingly older age groups up to age 85, for men and women of both study populations.

The use of extended-care facilities decreased by more than 50 percent in 1970 in both HIP and non-HIP populations. Admission rates per 1,000 population in 1969 and 1970 were 21.2 and 8.9 for HIP; for non-HIP, they were 15.7 and 7.2. The application of Federal guidelines for determining appropriate levels of care, published in 1969, led to reduction nationally in rates of admission in extended-care facilities, but the decrease in rates for the study populations was considerably greater than that observed elsewhere. This finding suggests that factors peculiar to the New York City metropolitan area may have affected the utilization of extended-care facilities participating in Medicare.

Home health benefits (HI and SMI combined) were used by few members of either population, and measures of utilization were lower in 1970 than in 1969. In 1970, the user rate was only 1 percent in either group; the average number of home health visits per user was 16.3 for the HIP

population and 19.2 for non-HIP beneficiaries.

Uses of SMI benefits (excluding SMI home health benefits) are shown separately for outpatient services and for other medical services that are, for the most part, services provided by physicians. The data for HIP members refer only to services by other than HIP providers; claims for these services are processed by the Social Security Administration in the same way that claims for services obtained by non-HIP beneficiaries are processed. In the 2 years of this report, 28-33 percent of all the HIP Medicare beneficiaries used one or more services by non-HIP providers. A greater proportion of beneficiaries enrolled in HIP through Medicaid than of other enrollment groups used out-of-plan services, and members of medical groups not designated as special had higher utilization rates than members of the special groups. The data raise a number of questions about other characteristics of out-of-plan users and the nature of the services that are significant for the reimbursement criteria under universal entitlement.

The sum of per capita reimbursed charges for HIP beneficiaries, including the capitation payment to HIP for Medicare-covered services provided by the plan, was \$442.46 in 1969. This amount was more than the sum of \$400.67 for non-HIP beneficiaries in the same year. In 1970, however, reimbursed charges for non-HIP increased by 8.1 percent to \$435.96 per capita, and the figure for HIP decreased by 1.0 percent to \$438.16. Although the difference between the HIP and non-HIP populations in total SMI reimbursed charges narrowed in 1970, the major source of savings for the HIP group was the decline in use of inpatient hospital services.

From the data presented here, it appears that the objective of cost containment, as defined in HIP's incentive reimbursement experiment, was attained in the first year of operation of the experimental program. Data for the second and third years of the experiment will be analyzed before final conclusions are reached. Further study of the components of utilization by both HIP and non-HIP populations, including characteristics of provider agencies and types of services, and study of the components of out-of-plan use of services by HIP Medicare beneficiaries will add to the understanding of HIP/non-HIP differentials.

TABLE A.—Number and percentage distribution of non-HIP and HIP Medicare beneficiaries, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total number.....	47,138	47,665	14,870	32,795	38,294	7,543	1,828	46,570	46,601	14,782	31,819	36,980	8,143	1,478
Total percent.....	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0
65-69.....	34 2	41 0	41 3	40 9	44 9	27 0	17 3	34 3	38 3	38 2	38 3	42 2	24 6	16 2
70-74.....	29 5	32 4	33 3	32 0	32 2	34 8	27 3	28 7	33 1	34 1	32 7	32 9	35 2	25 7
75-79.....	20 2	17 9	17 9	17 8	16 2	24 5	25 2	20 5	19 2	19 2	19 2	17 5	25 4	26 9
80-84.....	11 0	6 8	6 1	7 2	5 5	10 9	18 4	11 1	7 4	7 0	7 6	6 0	11 4	20 2
85 and over.....	5 1	1 9	1 3	2 1	1 2	2 8	11 8	5 4	2 0	1 5	2 2	1 4	3 4	11 0
Men														
Total number.....	19,463	23,126	7,405	15,721	19,719	2,737	670	19,128	22,232	7,214	15,018	18,825	2,935	472
Total percent.....	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0
65-69.....	36 6	42 1	41 6	42 4	45 5	23 8	19 0	36 6	39 1	37 9	39 7	42 5	21 2	15 5
70-74.....	29 5	31 1	32 3	30 6	30 8	34 1	29 3	28 9	32 1	33 7	31 4	31 9	34 5	25 2
75-79.....	19 7	17 5	17 8	17 4	16 0	26 8	23 3	20 0	18 7	19 0	18 5	17 2	27 2	26 3
80-84.....	10 0	7 2	6 8	7 5	6 2	12 0	18 5	10 0	7 9	7 7	8 0	6 7	13 0	23 1
85 and over.....	4 3	2 0	1 5	2 2	1 5	3 2	10 0	4 5	2 1	1 7	2 3	1 6	4 1	10 0
Women														
Total number.....	27,675	24,539	7,465	17,074	18,575	4,806	1,158	27,442	24,369	7,568	16,801	18,155	5,208	1,006
Total percent.....	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0	100 0
65-69.....	32 5	40 0	41 0	39 6	44 4	28 8	16 3	32 6	37 5	38 5	37 1	41 8	26 6	16 5
70-74.....	29 5	33 6	34 3	33 3	33 6	35 2	26 2	28 6	34 0	34 4	33 8	34 0	35 6	25 9
75-79.....	20 6	18 2	18 0	18 2	16 3	23 1	26 3	20 9	19 6	19 4	19 7	17 9	24 4	27 1
80-84.....	11 7	6 5	5 5	6 9	4 7	10 3	18 4	11 9	6 9	6 4	7 2	5 3	10 5	18 9
85 and over.....	5 7	1 8	1 2	2 1	.9	2 6	12 8	6 0	1 9	1 4	2 2	1 1	3 0	11 5

TABLE B.—Hospital discharges per 1,000 non-HIP and HIP Medicare beneficiaries, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	210	199	195	201	192	196	385	203	187	192	186	185	182	272
65-69.....	172	168	169	167	166	152	384	179	155	150	157	154	146	280
70-74.....	200	186	176	190	182	172	341	199	184	200	176	185	168	282
75-79.....	238	242	252	237	234	224	423	224	221	230	217	224	208	239
80-84.....	273	280	271	284	274	273	332	241	262	256	265	266	232	328
85 and over.....	291	406	372	416	452	362	349	221	276	269	278	316	240	215
Men														
Total.....	245	227	220	231	220	225	451	235	219	223	217	215	221	373
65-69.....	205	199	194	201	196	187	449	207	182	181	182	179	191	384
70-74.....	239	217	201	225	212	207	423	226	220	232	214	217	216	420
75-79.....	274	257	267	251	248	227	577	261	257	263	254	263	224	306
80-84.....	318	303	291	307	299	301	339	296	281	288	278	273	265	440
85 and over.....	333	456	464	453	473	402	448	268	318	268	335	346	269	255
Women														
Total.....	186	173	171	173	162	179	315	181	169	161	158	155	161	225
65-69.....	145	137	144	134	134	135	307	156	129	120	133	127	126	235
70-74.....	173	169	153	161	154	152	287	180	153	170	144	153	141	218
75-79.....	210	228	238	224	219	222	344	199	190	198	186	185	198	209
80-84.....	246	250	246	260	239	255	329	208	242	220	251	257	209	263
85 and over.....	269	355	258	379	414	333	304	196	234	269	224	263	218	198

TABLE C.—Average length of hospital stay¹ for hospital episodes terminating during year among non-HIP and HIP Medicare beneficiaries, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	19.0	17.4	16.2	17.8	17.2	15.7	22.7	18.7	16.7	15.5	17.3	16.6	15.5	23.7
65-69.....	17.1	16.3	15.1	16.9	16.4	14.1	20.1	18.3	15.5	14.3	16.0	15.7	12.8	20.3
70-74.....	18.2	16.9	16.2	17.2	16.6	16.1	22.4	18.9	16.6	15.2	17.3	16.4	15.3	26.3
75-79.....	18.9	18.0	17.1	18.4	18.2	15.2	22.1	18.6	17.6	16.0	18.4	17.3	16.9	25.5
80-84.....	21.1	19.8	18.2	20.5	19.5	16.7	26.1	21.8	17.8	18.0	17.7	18.0	16.8	19.1
85 and over.....	25.6	20.4	17.6	21.1	20.6	19.6	20.7	23.4	20.5	19.5	20.8	20.4	15.5	30.7
Men														
Total.....	18.3	16.9	16.1	17.2	16.7	15.4	21.9	18.7	16.2	15.3	16.6	16.1	14.9	22.4
65-69.....	16.9	16.2	15.8	16.4	16.2	14.8	18.3	20.2	15.1	13.8	15.7	15.2	12.3	23.0
70-74.....	18.2	16.2	15.5	16.5	16.0	15.4	21.0	17.0	16.1	15.3	16.5	16.1	14.6	20.9
75-79.....	17.3	17.7	17.1	17.9	17.6	15.0	22.9	18.5	16.8	15.9	17.3	16.7	15.7	25.8
80-84.....	20.1	18.7	17.7	19.1	18.3	16.7	27.2	18.6	17.6	17.7	17.6	17.6	17.1	18.8
85 and over.....	26.3	19.0	13.2	20.9	19.3	16.4	20.6	20.6	19.1	19.0	19.2	19.2	14.9	30.1
Women														
Total.....	19.6	18.0	16.4	18.7	17.9	15.9	23.3	18.7	17.4	15.7	18.2	17.2	16.0	24.8
65-69.....	17.4	16.5	14.1	17.6	16.7	13.8	21.8	16.4	16.1	15.0	16.5	16.5	13.1	18.3
70-74.....	18.3	17.7	17.0	18.0	17.5	16.7	23.7	16.8	17.2	15.0	18.4	16.7	16.0	31.0
75-79.....	20.3	18.3	17.1	18.9	19.0	15.3	21.4	18.6	18.5	16.2	19.7	18.2	17.7	25.4
80-84.....	21.8	21.2	18.9	22.0	21.5	16.7	28.6	24.5	18.0	18.5	17.9	18.4	16.5	19.4
85 and over.....	25.1	22.3	27.6	21.4	23.2	22.4	20.8	25.4	22.4	20.2	23.2	22.8	16.0	31.0

¹ Number of days from date of admission to date of discharge.

TABLE D.—Inpatient days¹ per 1,000 non-HIP and HIP Medicare beneficiaries, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	4,032	3,487	3,197	3,619	3,309	3,057	9,003	3,839	3,131	3,047	3,170	3,071	2,877	6,033
65-69.....	2,933	2,758	2,530	2,862	2,736	2,117	8,078	3,346	2,360	2,110	2,461	2,359	1,913	5,473
70-74.....	3,659	3,200	2,927	3,329	3,092	2,756	8,190	3,505	3,020	3,080	3,001	2,998	2,591	7,129
75-79.....	4,472	4,341	4,278	4,369	4,176	3,416	10,265	4,131	4,028	4,137	3,978	4,065	3,593	5,693
80-84.....	5,974	5,617	5,220	5,771	5,446	4,536	9,323	5,012	4,709	4,657	4,781	4,582	3,951	5,763
85 and over.....	7,612	8,521	6,784	9,024	8,966	6,986	9,051	5,229	5,465	5,123	5,674	6,274	3,896	5,626
Men														
Total.....	4,468	3,832	3,515	3,982	3,663	3,408	10,545	4,864	3,621	3,607	3,628	3,541	3,343	8,547
65-69.....	3,468	3,239	3,072	3,317	3,192	2,720	9,213	4,206	2,734	2,483	2,850	2,690	2,459	9,904
70-74.....	4,267	3,582	3,135	3,805	3,490	3,066	8,893	3,847	3,583	3,624	3,561	3,525	3,234	9,479
75-79.....	4,712	4,439	4,339	4,466	4,223	3,380	13,808	4,730	4,590	4,994	4,390	4,764	3,484	7,419
80-84.....	6,440	5,682	5,117	6,781	5,315	4,979	9,323	5,224	5,224	5,373	5,156	5,152	4,588	8,284
85 and over.....	8,637	8,664	7,000	9,183	8,610	6,506	11,642	5,412	6,049	4,854	6,470	6,608	3,975	7,660
Women														
Total.....	3,725	3,162	2,882	3,284	2,932	2,858	8,111	3,473	2,684	2,514	2,761	2,584	2,615	4,854
65-69.....	2,508	2,280	1,984	2,414	2,240	1,833	7,307	2,674	1,985	1,759	2,090	2,009	1,668	3,524
70-74.....	3,233	2,866	2,732	2,626	2,705	2,585	7,736	3,204	2,534	2,533	2,535	2,474	2,239	6,058
75-79.....	4,311	4,251	4,218	4,265	4,126	3,440	8,452	3,731	3,541	3,333	3,632	3,376	3,662	4,908
80-84.....	5,695	5,653	5,346	5,761	5,628	4,241	9,033	4,884	4,173	3,886	4,307	4,525	3,806	4,316
85 and over.....	7,061	8,384	6,472	8,869	9,598	7,325	7,878	5,132	4,873	5,442	4,710	5,747	3,840	4,802

¹ All days in 1969 for which a charge was reimbursed, regardless of date of admission to or discharge from the hospital.

TABLE E.—Reimbursed charges for inpatient hospital care¹ per non-HIP and HIP Medicare beneficiary, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	\$271	\$256	\$225	\$269	\$246	\$226	\$573	\$286	\$254	\$236	\$262	\$251	\$235	\$437
65-69.....	211	206	184	216	205	162	567	239	197	172	209	199	162	397
70-74.....	257	240	211	253	234	211	632	272	248	246	248	247	210	531
75-79.....	303	317	300	324	310	254	661	318	311	285	323	312	293	376
80-84.....	370	393	327	419	398	309	665	358	381	379	382	400	325	415
85 and over.....	420	538	387	581	595	452	497	373	419	366	436	483	278	463
Men														
Total.....	\$311	\$280	\$245	\$297	\$273	\$242	\$646	\$330	\$294	\$276	\$303	\$288	\$279	\$622
65-69.....	259	242	219	252	240	201	567	279	228	201	241	227	210	578
70-74.....	307	268	220	291	262	235	585	319	300	301	299	295	261	646
75-79.....	329	322	309	328	311	244	904	369	346	312	362	353	291	522
80-84.....	402	385	300	422	403	253	478	428	426	432	423	421	402	570
85 and over.....	481	562	490	585	566	454	686	418	477	369	515	532	321	511
Women														
Total.....	\$243	\$232	\$205	\$244	\$218	\$217	\$530	\$255	\$217	\$198	\$225	\$212	\$210	\$350
65-69.....	173	171	148	181	166	144	566	208	168	144	170	170	140	318
70-74.....	221	215	201	221	206	198	498	239	203	196	206	201	182	388
75-79.....	285	312	291	320	308	261	638	283	280	260	289	272	294	310
80-84.....	352	401	360	416	391	327	616	326	334	318	341	372	272	326
85 and over.....	387	513	260	577	648	450	411	319	361	364	360	405	245	444

¹ Reimbursed charges for all days of care in 1969, regardless of date of admission to or discharge from the hospital.

TABLE F.—Admissions to extended-care facilities per 1,000 non-HIP and HIP Medicare beneficiaries, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	17 4	20 0	20 1	19 9	18 5	27.6	18 1	8.0	8 5	7 6	8 9	8 2	10 0	8 8
65-69.....	7 4	10 3	10 9	10 1	9 8	14 7	12 7	4 0	4 3	3 4	4 8	4 2	5 0	4 2
70-74.....	14 1	17 2	16 8	17 4	17 0	18 7	14 0	5 1	6 7	5 0	7 6	7 1	5 2	7 9
75-79.....	21 1	30 8	34 5	29 1	30 3	33 0	28 2	11 8	13 4	13 4	13 4	13 1	14 5	12 6
80-84.....	35 5	48 2	51 5	46 9	51 0	55 9	11.9	15 7	21 2	20 2	21 6	22 1	21 6	13 4
85 and over.....	49 0	72 7	50 3	79 1	81 0	104 8	23 3	19 1	23 5	39 6	18 3	32 0	21 8	0
Men														
Total.....	14 8	16 1	16 5	16 0	14 9	23 7	20 9	6 6	7 2	6 5	7.6	6 8	- 9 2	12 7
65-69.....	8 0	8 2	11 4	6 8	7 9	13 8	0	3 1	2 9	2 6	3 0	3 0	1.6	0
70-74.....	11 7	12 2	10 5	13 1	11 5	15 0	20 4	4 4	6 4	4 5	7.4	6 3	5 9	16 8
75-79.....	16 2	26 1	25 8	26 3	26 6	24 4	25 6	10 2	11 1	10 2	11 5	11.1	12 5	0
80-84.....	30 4	40 6	45 8	38 3	41 7	45 6	16 1	13 7	19 4	23 5	17 5	17.4	21.0	36 7
85 and over.....	52 3	66 1	45 5	72.7	56 7	103 4	59 7	18 4	21 2	16 3	22 9	26 1	16.8	0
Women														
Total.....	19 1	23 6	23 7	23 5	22 4	29 8	16 4	9 0	9 6	8 6	10 1	9 6	10 4	7 0
65-69.....	6 9	12 4	10 5	13 3	11 8	15 2	21 2	4 7	5 7	4 1	6 4	5 5	6 5	6 0
70-74.....	15 8	21 5	22 7	20 9	22 3	20 7	9 9	5 6	7 0	5 4	7.8	7 8	4 9	3 8
75-79.....	24 3	35 0	43 1	31 5	34 2	38 7	29 5	12 9	15 5	16 4	15 0	15 1	15 7	18 3
80-84.....	35 5	56 2	58 4	55 4	63 9	62 8	9 4	16 9	23 1	16 6	25 7	28 3	22 0	0
85 and over.....	47 3	79 5	56 2	85.5	124 3	105 7	6 8	19 5	25 8	67 3	13 8	41 2	25 6	0

TABLE G.—Days of care in extended-care facilities¹ per 1,000 non-HIP and HIP Medicare beneficiaries, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	688	664	609	689	633	633	623	287	240	188	264	230	287	213
65-69.....	227	286	277	290	282	275	595	161	103	78	114	103	102	92
70-74.....	535	551	500	575	566	559	144	173	204	134	238	217	157	124
75-79.....	807	1,006	1,114	957	989	1,086	1,117	373	332	234	377	350	293	239
80-84.....	1,679	1,857	1,709	1,915	2,160	1,633	622	613	732	710	741	723	843	452
85 and over.....	2,407	3,290	1,734	3,735	3,761	4,733	874	755	750	1,141	624	786	1,069	98
Men														
Total.....	527	532	517	540	506	640	869	228	171	138	186	159	228	284
65-69.....	234	241	296	216	227	335	787	100	46	45	48	50	2	0
70-74.....	448	418	364	449	427	391	260	133	194	152	216	198	162	260
75-79.....	514	836	799	854	825	802	1,231	338	234	143	279	243	235	0
80-84.....	1,333	1,400	1,705	1,270	1,633	842	589	555	456	512	431	353	701	798
85 and over.....	1,749	2,672	1,427	3,070	2,487	3,460	2,478	653	479	220	570	526	412	340
Women														
Total.....	801	789	700	827	768	943	481	328	302	235	333	304	320	180
65-69.....	221	330	258	363	341	247	466	191	156	111	177	158	147	132
70-74.....	596	668	637	682	701	652	69	201	212	117	255	235	155	61
75-79.....	1,004	1,161	1,423	1,047	1,160	1,192	1,059	396	416	319	459	456	329	348
80-84.....	1,886	2,341	1,713	2,561	2,894	2,160	484	647	1,018	938	1,050	1,213	943	253
85 and over.....	2,208	3,927	2,112	4,387	5,994	5,634	149	810	1,024	2,231	677	1,196	1,570	0

¹ All days in 1969 for which a charge was reimbursed, regardless of date of admission to or discharge from the facility.

TABLE H.—Reimbursed charges for care in extended-care facilities¹ per non-HIP and HIP Medicare beneficiary, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	\$19 23	\$20 08	\$17.76	\$21 13	\$19 16	\$24 66	\$20 33	\$8 59	\$8 03	\$6 43	\$8 77	\$7.70	\$9 77	\$6 77
65-69.....	6 80	8 38	8 11	8 51	8 36	7 85	13 17	4 25	3 73	3 35	3 91	3 70	4 22	1 79
70-74.....	15 26	17.05	14 67	18 17	17 57	17 02	4 43	5 79	6 55	3 90	7 83	6 98	4 96	4 75
75-79.....	22 15	31 55	33 99	30 44	31 08	32 30	34 93	11 18	11 13	8 04	12 58	11.38	10 83	8 82
80-84.....	46 11	54 90	47 03	57.96	63 25	47.31	21 36	17.56	24 65	23.86	24 98	24 38	29 37	12 22
85 and over.....	55 97	92 21	40 64	106 97	102 89	127.02	34 90	22.77	28 30	39.57	18 11	28.22	26.24	3 29
Men														
Total.....	\$15.58	\$16 28	\$14 46	\$17.13	\$15 53	\$19 04	\$26 86	\$7 02	\$6 06	\$4 80	\$6 66	\$5 63	\$8 28	\$9.14
65-69.....	7.24	7 37	8.84	6 69	7 06	9 23	19 93	2 94	1.70	1 66	1 72	1.85	.05	0
70-74.....	12 88	12 73	9 97	14 10	13 13	11.42	6 44	3 98	6 63	4 39	7.78	6 71	5 73	10.36
75-79.....	14 26	27 76	23 59	29 77	27 44	27 75	34 17	11 11	7 67	4 52	9 22	7.96	7.70	0
80-84.....	41 12	38 01	43 67	35 59	44 17	23 50	15 75	17 11	18 81	22 26	17.22	15 51	28 46	23 34
85 and over.....	51 87	80 76	26 90	97.99	74 97	83 43	103 25	19.07	16 07	7.27	19 17	18 19	12.47	11.40
Women														
Total.....	\$21 80	\$23 66	\$21.03	\$24 81	\$23 02	\$27.86	\$16 56	\$9 68	\$9 82	\$7.99	\$10 65	\$9 84	\$10 60	\$5 58
65-69.....	6 45	9 39	7 37	10 30	9 77	7.21	8 62	5 28	5 66	4 94	6 00	5 65	6 11	2 57
70-74.....	16 93	20 82	19 07	21.61	21 87	20 10	3.13	7 06	6 48	3 44	7 87	7.24	4 54	2 20
75-79.....	27.45	35 01	44 20	31 03	34 67	35 32	35 31	11.22	14 15	11 33	15 40	14 80	12 79	12 83
80-84.....	49 09	72 76	51 14	80 34	89 66	63 16	24 62	17 82	30 71	25 68	32 72	36 06	30 01	5 84
85 and over.....	58.17	104 02	57.62	115.78	152.47	157.85	3 96	24 73	30 63	77.77	17.09	44 03	36 74	0

¹ Reimbursed charges for all days of care in 1969, regardless of date of admission to or discharge from the facility.

TABLE I.—Users of home health benefits¹ per 1,000 non-HIP and HIP Medicare beneficiaries, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	14 7	14 9	16 0	14 4	14 0	16 6	27 4	10 7	10 9	12 0	10 5	10 4	11 3	22 3
65-69.....	7 0	8 7	8 8	8 7	8 0	10 3	38 0	7 5	6 9	6 0	7 4	6 7	8 0	16 7
70-74.....	12 1	13 3	13 1	13 4	13 6	11 4	18 0	9 7	11 0	13 5	9 7	10 8	10 1	21 1
75-79.....	18 6	21 6	27 8	18 8	21 6	18 4	34 7	13 4	14 5	17 3	13 3	13 9	14 5	25 2
80-84.....	26 6	34 0	40 5	31 5	34 3	35 2	29 7	17 0	19 2	23 2	17 4	20 7	14 0	23 4
85 and over.....	34 5	43 6	40 2	44 6	53 3	52 4	14 0	13 6	22 4	8 8	26 7	26 0	14 5	24 5
Men														
Total.....	13 4	12 2	12 3	12 2	12 0	12 4	17 9	9 7	9 8	10 8	9 4	9 6	9 2	25 4
65-69.....	7 0	6 4	5 2	6 9	6 1	7 7	15 7	6 7	5 6	3 3	6 7	5 6	3 2	27 4
70-74.....	12 4	12 2	11 3	12 7	12 5	9 6	15 3	8 7	9 8	13 2	8 0	9 5	10 9	16 8
75-79.....	17 8	17 3	20 5	15 7	18 7	10 9	19 2	12 0	14 4	17 5	12 9	15 5	8 8	24 2
80-84.....	26 3	30 4	37 8	27 3	31 1	27 4	32 3	16 8	16 0	23 5	12 5	15 8	15 8	18 4
85 and over.....	24 9	26 4	18 2	29 1	30 0	34 5	0	13 8	25 4	0	34 4	26 1	8 4	63 8
Women														
Total.....	15 6	17 4	19 7	16 5	16 1	18 9	32 8	11 4	11 9	13 1	11 4	11 3	12 5	20 9
65-69.....	8 6	11 1	12 4	10 5	10 1	11 6	52 9	8 0	8 2	8 6	8 0	7 8	10 1	12 0
70-74.....	11 9	14 3	14 8	14 1	14 6	12 4	19 8	10 4	12 0	13 8	11 1	12 2	9 7	23 0
75-79.....	19 1	25 6	34 9	21 6	24 7	23 4	42 6	14 3	14 6	17 0	13 6	12 3	18 1	25 6
80-84.....	26 8	37 9	43 8	35 8	38 8	40 5	28 2	17 2	22 5	22 8	22 4	27 2	12 8	26 3
85 and over.....	39 6	61 4	67 4	59 8	94 7	65 0	20 3	13 4	19 3	19 2	19 3	25 8	19 2	8 6

¹ Benefits under both HI and SMI.

TABLE J.—Home health visits¹ per 1,000 non-HIP and HIP Medicare beneficiaries, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	302	284	283	285	272	320	309	210	182	199	173	171	193	388
65-69.....	146	134	123	140	128	156	373	134	111	116	108	106	140	163
70-74.....	248	229	184	250	247	140	246	168	205	249	183	203	197	313
75-79.....	371	389	410	379	407	312	451	283	215	222	212	200	193	569
80-84.....	520	887	1,261	741	939	835	688	362	347	363	332	348	317	431
85 and over.....	916	1,318	1,492	1,268	1,420	2,205	228	325	217	31	277	228	105	374
Men														
Total.....	232	229	237	225	232	198	270	163	161	164	159	151	199	292
65-69.....	129	93	76	100	84	84	55	109	94	33	122	88	136	315
70-74.....	207	214	141	250	232	110	158	145	202	266	169	188	286	193
75-79.....	257	307	345	289	338	186	250	169	189	181	193	204	88	482
80-84.....	353	823	1,333	606	882	599	839	313	248	353	200	228	357	92
85 and over.....	882	496	564	474	583	575	0	349	191	0	258	203	17	553
Women														
Total.....	352	336	328	339	314	390	474	243	200	233	186	191	189	438
65-69.....	160	176	171	178	164	189	587	154	126	194	95	124	142	96
70-74.....	277	242	224	250	262	156	304	185	207	233	195	218	148	363
75-79.....	447	463	474	458	478	396	554	360	238	201	227	196	260	623
80-84.....	620	954	1,173	877	1,018	892	601	391	451	417	464	508	290	626
85 and over.....	935	2,166	2,640	2,046	2,905	3,358	331	312	245	67	296	268	173	302

¹ Visits under both HI and SMI.

TABLE K.—Reimbursed charges for home health benefits¹ per non-HIP and HIP Medicare beneficiary, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	\$4 19	\$3 49	\$3 31	\$3 57	\$3 33	\$3 96	\$4 82	\$3 22	\$2 68	\$2 96	\$2 55	\$2 57	\$2 70	\$5 18
65-69.....	1 90	1 76	1 41	1 92	1 63	2 55	3 89	2 19	1 71	1 60	1 75	1 66	1 86	2 50
70-74.....	3 73	2 92	2 30	3 21	3 15	1 70	3 79	2 79	3 09	3 96	2 67	3 13	2 79	4 18
75-79.....	4 81	4 41	4 81	4 23	4 59	3 32	6 47	4 55	3 05	3 12	3 02	2 90	2 78	6 96
80-84.....	6 81	10 82	14 71	9 31	12 10	9 30	6 56	4 72	4 85	5 59	4 53	4 81	4 52	6 17
85 and over.....	14 04	15 61	14 64	15 90	14 93	30 79	2 29	4 01	2 83	28	3 64	2 94	1 19	5 25
Men														
Total.....	\$3 35	\$2 93	\$2 76	\$3 01	\$2 99	\$2 41	\$3 29	\$2 73	\$2 51	\$2 67	\$2 43	\$2 44	\$2 77	\$3 71
65-69.....	1 08	1 45	.93	1 69	1 41	2 22	1 58	2 01	1 51	.56	1 95	1 44	2 04	5 29
70-74.....	3 31	2 88	1 82	3 33	3 09	1 39	1 49	2 78	3 27	4 70	2 53	3 15	4 04	2 55
75-79.....	3 37	3 60	3 96	3 42	3 91	1 86	5 50	2 78	2 90	2 65	3 03	3 25	1 13	5 33
80-84.....	5 24	9 79	14 45	7 80	11 04	5 88	7 93	4 41	3 47	4 82	2 85	3 25	4 86	1 18
85 and over.....	13 20	4 94	6 58	4 42	5 68	6 19	0	4 40	2 33	0	3 15	2 68	.08	5 78
Women														
Total.....	\$4 78	\$4 02	\$3 86	\$4 09	\$3 70	\$4 85	\$5 70	\$3 57	\$2 83	\$3 23	\$2 66	\$2 72	\$2 66	\$5 87
65-69.....	2 08	2 07	1 89	2 15	1 87	2 70	6 12	2 34	1 89	2 58	1 57	1 93	1 77	1 28
70-74.....	4 03	3 00	2 75	3 11	3 20	1 87	5 27	2 79	2 94	3 27	2 79	3 11	2 10	4 94
75-79.....	5 77	5 18	5 64	4 95	5 29	4 29	6 96	5 73	3 19	3 57	3 02	2 66	3 81	7 70
80-84.....	7 75	11 91	15 03	10 81	13 58	11 58	5 76	4 90	6 29	6 48	6 21	6 88	4 29	9 04
85 and over.....	14 49	26 64	24 61	27 15	31 36	48 18	3 33	3 80	3 33	.62	4 11	3 36	2 03	5 03

¹ Benefits under both HI and SMI.

TABLE L.—Users of hospital outpatient services¹ per 1,000 non-HIP and HIP Medicare beneficiaries, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	70.4	45.7	33.9	51.1	41.2	48.7	128.0	91.2	61.6	49.0	67.5	56.4	65.7	171.2
65-69.....	67.2	38.7	28.3	43.4	35.5	44.7	174.1	89.3	50.3	40.7	54.7	47.6	53.8	192.6
70-74.....	74.0	47.2	34.9	52.9	43.3	49.5	130.3	97.4	66.2	50.1	74.1	62.5	61.1	228.3
75-79.....	72.9	55.7	45.8	60.2	50.2	53.0	141.0	94.8	71.3	59.9	76.6	61.9	53.6	161.2
80-84.....	74.6	53.1	32.9	60.9	48.6	43.7	103.9	86.1	72.8	58.0	79.2	65.3	72.4	130.4
85 and over.....	51.5	52.6	25.1	60.4	44.8	57.1	65.1	66.2	68.2	52.9	73.1	68.0	43.6	110.4
Men														
Total.....	73.3	44.4	31.1	50.7	41.0	43.5	147.8	95.7	59.2	44.4	66.4	55.7	63.7	173.7
65-69.....	65.0	36.2	24.7	41.6	34.5	36.9	157.5	88.1	47.1	38.0	51.3	45.6	49.8	191.8
70-74.....	77.6	45.9	30.9	53.3	43.2	38.6	163.3	98.2	63.2	44.1	73.1	61.2	53.3	252.1
75-79.....	78.1	57.0	47.7	61.4	51.5	52.9	185.9	102.6	71.0	53.1	79.7	63.1	56.4	177.4
80-84.....	87.2	51.3	31.9	59.6	48.2	45.6	96.8	104.5	72.9	56.1	80.6	69.5	73.5	110.1
85 and over.....	60.6	59.5	9.1	75.6	53.3	57.5	89.6	90.8	67.8	40.6	77.4	75.2	42.0	85.1
Women														
Total.....	68.3	46.9	36.7	51.4	41.4	51.6	116.6	88.0	63.8	53.4	68.5	57.1	66.8	170.0
65-69.....	68.9	41.1	32.0	45.3	36.6	48.4	185.2	90.1	53.3	43.3	57.9	49.8	55.6	192.8
70-74.....	71.5	48.3	38.7	52.6	43.4	55.6	108.9	96.9	68.8	55.6	74.9	63.7	65.3	214.6
75-79.....	69.4	54.6	43.8	59.2	48.7	53.1	118.0	89.6	71.6	66.2	74.0	60.7	81.8	153.8
80-84.....	87.1	54.9	34.1	62.2	49.0	42.5	108.0	75.4	72.8	60.2	77.8	59.7	71.6	142.1
85 and over.....	46.7	45.5	44.9	45.6	29.6	56.9	54.1	53.1	68.7	67.3	89.1	56.7	44.9	120.7

¹ Services in 1969 for which a charge was reimbursed.

TABLE M.—Reimbursed charges for hospital outpatient services per non-HIP and HIP Medicare beneficiary, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	\$3 87	\$2 36	\$1 67	\$2 68	\$2 07	\$2 37	\$8 57	\$6 81	\$4 77	\$4 08	\$5 08	\$4 43	\$4 16	\$16 56
65-69.....	3 79	2 04	1 18	2 43	1 81	2 36	12 47	6 55	4 44	4 99	4 19	4 26	4 18	18 41
70-74.....	4 01	2 41	1 84	2 67	2 24	2 22	7 67	7 55	5 09	3 32	5 95	4 83	3 57	24 91
75-79.....	4 10	2 88	2 36	3 11	2 31	2 59	11 59	7 57	4 74	3 66	5 24	4 03	4 82	15 92
80-84.....	3 94	2 54	1 74	2 85	2 32	2 54	3 95	6 01	4 73	4 29	4 82	4 59	4 19	7 48
85 and over.....	2 65	3 17	3 04	3 21	2 67	1 74	5 67	3 18	5 89	2 83	6 87	4 15	5 07	12 62
Men														
Total.....	\$4 15	\$2 28	\$1 52	\$2 64	\$2 03	\$2 37	\$9 24	\$7 11	\$5 05	\$5 07	\$5 04	\$4 91	\$3 95	\$17 59
65-69.....	3 63	1 99	1 02	2 44	1 81	2 55	11 61	6 25	5 08	7 59	3 93	5 08	3 12	21 13
70-74.....	4 40	2 31	1 69	2 61	2 11	1 67	11 35	7 15	4 90	3 01	5 87	4 83	2 62	28 14
75-79.....	4 57	2 68	2 36	2 83	2 26	2 64	11 41	8 68	5 08	4 16	5 54	4 39	5 64	19 51
80-84.....	5 05	2 69	1 79	3 07	2 46	3 32	3 26	7 95	5 10	4 30	5 47	5 34	3 57	7 69
85 and over.....	2 89	3 18	.37	4 07	3 06	2 51	4 55	4 98	6 35	3 10	7 49	6 59	9 49	3 33
Women														
Total.....	\$3 68	\$2 44	\$1 83	\$2 71	\$2 10	\$2 37	\$8 18	\$6 60	\$4 51	\$3 15	\$5 12	\$3 93	\$4 28	\$16 08
65-69.....	3 91	2 09	1 35	2 42	1 81	2 26	13 04	6 79	3 84	2 55	4 44	3 40	4 65	17 21
70-74.....	3 74	2 50	1 99	2 73	2 36	2 51	5 29	7 83	5 25	3 60	6 01	4 83	4 09	23 45
75-79.....	3 78	3 05	2 36	3 36	2 37	2 56	11 67	6 83	4 44	3 19	5 00	3 67	4 31	14 28
80-84.....	3 27	2 38	1 68	2 63	2 11	2 02	4 35	4 88	4 36	4 29	4 38	3 60	4 62	7 37
85 and over.....	2 52	3 17	6 33	2 36	1 96	1 20	6 17	2 23	5 43	2 51	6 27	1 89	1 70	16 38

TABLE N.—Users of physician services and other SMI benefits¹ per 1,000 non-HIP and HIP Medicare beneficiaries, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	443	230	191	248	219	254	368	501	268	232	285	259	283	425
65-69.....	404	197	166	211	192	214	383	458	231	198	246	226	245	423
70-74.....	446	231	188	251	223	245	357	511	271	236	287	264	272	461
75-79.....	477	265	224	284	250	283	390	538	302	264	320	292	311	431
80-84.....	480	307	266	323	299	299	383	533	343	300	361	339	327	425
85 and over.....	476	332	256	354	343	343	298	508	342	251	371	362	313	331
Men														
Total.....	453	233	197	250	221	279	410	482	258	227	273	249	284	466
65-69.....	413	203	172	218	198	233	425	441	227	197	240	223	247	466
70-74.....	455	234	195	253	222	278	393	483	256	231	269	248	280	471
75-79.....	497	256	220	273	241	284	417	523	290	255	308	280	298	500
80-84.....	493	319	279	336	301	350	411	532	326	288	343	318	315	450
85 and over.....	493	352	282	375	343	333	418	610	339	220	381	340	311	404
Women														
Total.....	436	277	185	245	217	240	343	514	277	237	296	269	282	406
65-69.....	397	191	159	205	185	204	354	471	235	199	251	229	244	404
70-74.....	440	228	182	249	223	236	333	530	283	241	302	280	268	456
75-79.....	464	273	228	293	259	283	377	549	313	274	330	303	319	399
80-84.....	472	295	251	311	295	285	366	534	361	315	379	365	336	411
85 and over.....	467	311	225	333	343	350	243	607	345	288	362	397	314	302

¹ Users of services for which a charge was reimbursed Excludes hospital

outpatient benefits and home health service benefits. For HIP, includes only the users of services by non-HIP providers.

TABLE O — Reimbursed charges for physician services and other SMI benefits¹ per non-HIP and HIP beneficiary, by sex and age and by type of HIP medical group and type of HIP enrollment, 1969 and 1970

Age	1969							1970						
	Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment			Non-HIP, total	HIP, total	Type of HIP medical group		Type of HIP enrollment		
			Special	Other	Conversion	Open enrollment	Medicaid			Special	Other	Conversion	Open enrollment	Medicaid
All beneficiaries														
Total.....	\$104 30	\$52.45	\$41 65	\$57 35	\$49 83	\$53 18	\$104 35	\$131 46	\$65 87	\$52 26	\$72 11	\$64 49	\$64 60	\$105 67
65-69.....	90 00	42 41	33 63	46 42	41 63	40 24	98 34	113 03	52 92	40 60	58 62	52 41	51 54	97 75
70-74.....	102 02	51 54	39 54	57 21	49 12	53 02	103 61	130 00	65 18	58 67	71 23	64 78	60 60	112 20
75-79.....	111 89	62 48	55 54	65 65	59 48	60 03	112 68	145 66	77 23	60 58	84 99	76 92	75 52	91 49
80-84.....	127 18	80 32	62 48	87 25	81 88	64 44	109 32	156 48	93 72	81 62	98 92	98 26	75 13	117 64
85 and over.....	133 90	91 02	60 51	99 75	98 44	76 23	89 26	150 83	110 13	94 92	114 99	123 08	83 94	114 60
Men														
Total.....	\$124 68	\$58 00	\$47 31	\$63 03	\$55 49	\$59 00	\$127 69	\$141 28	\$68 77	\$53 66	\$76 02	\$66 89	\$71 26	\$128 28
65-69.....	108 38	49 23	41 67	52 73	48 44	48 68	17 65	122 25	55 52	41 95	61 74	54 39	59 09	148 75
70-74.....	126 23	58 17	44 25	65 09	55 13	59 75	144 58	143 30	69 89	55 38	77 36	67 99	73 22	137 70
75-79.....	134 89	66 25	57 86	70 29	62 74	65 88	139 02	155 84	75 60	53 99	86 26	77 73	65 00	88 04
80-84.....	148 69	78 80	63 39	85 39	80 81	64 83	96 09	171 87	100 10	92 17	103 75	98 78	98 12	122 40
85 and over.....	150 31	93 03	71 83	93 75	93 75	47 95	148 39	150 55	117 17	103 62	125 68	124 39	74 23	192 42
Women														
Total.....	\$89 98	\$47 23	\$36 04	\$52 12	\$43 83	\$49 87	\$90 85	\$124 62	\$63 12	\$50 92	\$68 61	\$62 00	\$60 85	\$95 06
65-69.....	75 44	35 64	25 52	40 21	34 23	36 27	92 08	105 84	50 44	39 34	55 62	50 31	48 15	75 33
70-74.....	85 00	45 76	35 13	50 55	43 28	49 31	77 11	120 65	61 10	50 15	66 13	61 66	53 70	100 57
75-79.....	96 46	59 05	53 27	61 56	56 08	56 16	99 21	138 85	78 67	66 76	83 92	76 10	82 13	93 06
80-84.....	114 40	81 92	61 36	89 12	83 38	64 19	117 03	147 49	87 10	69 52	94 11	97 57	59 06	114 92
85 and over.....	125 07	88 94	46 52	99 69	106 78	96 23	62 50	150 98	100 97	84 75	105 63	119 43	91 35	83 06

¹ Excludes hospital outpatient benefits and home health service benefits. For HIP, includes only the services of non-HIP providers, does not include

the capitation payment from Social Security Administration to HIP for physician services with the plan