

TABLE 8.—COMPARISON OF INCOME AND EXPENDITURES INCURRED PER CAPITA PER MONTH IN FISCAL YEARS 1972-75

Fiscal year	Aged	Income			Expenditures			Net
		Rate ¹	Interest	Total	Benefits	Adminis- trative	Total	
1972.....	\$5.60	\$11.20	\$0.12	\$11.32	\$9.48	\$1.24	\$10.72	\$0.60
1973.....	5.80	11.60	.18	11.78	10.10	1.32	11.42	.36
1974.....	6.30	12.60	.22	12.82	10.90	1.42	12.32	.50
1975.....	6.70	13.40	.24	13.64	12.18	1.58	13.76	-.12
Disabled:								
1974.....		29.00	.04	29.04	25.73	3.21	28.94	² .10
1975.....		36.00	.05	36.05	33.38	3.32	36.70	² -.65

¹ Combined monthly premium and general revenue matching payments.

² Margin included for contingencies in financing for fiscal year 1975.

3. Adequacy of income in fiscal years 1974-75

The financing for the Supplementary Medical Insurance program has been set by promulgation of the adequate actuarial rates and the standard premium rates by the Secretary through fiscal 1975 as described in Appendix A. Since enrollment is voluntary and both income and outgo change directly with enrollment—it is appropriate to assess the adequacy of such financing on a monthly per capita basis. Table 8 compares the monthly income incurred per capita for fiscal years 1972-1975 with the estimated incurred expenditures. A minor deficiency is projected to occur in fiscal year 1975. This deficiency results from the expiry of cost controls in April 1974 after financing had been established by the promulgation of adequate rates in December 1973.

4. Accumulated Surplus or Deficit of the Program

The failure of the program to meet the second test of actuarial soundness at the end of fiscal year 1975 is demonstrated by table 6, which shows the accumulated deficit at the end of fiscal years 1967 through 1975 and the ratio of this deficit to the outstanding liabilities. These ratios show the extent to which funds are available to pay the accumulated liabilities of the program. The deficit shows the burden that would need to be picked up if the source of financing the program were to be changed at some future time.

The program developed a relatively modest deficit of \$207 million during the first 1½ years, due to an initial premium rate that proved to be about 8% low. The deficit increased further as a result of congressional action which retained the initial premium rate for an additional 3 months, through the first quarter of 1968. The deficit further increased by a relatively small amount during the next 15 months, during which the increased premium rate proved to be slightly low. The deficit accumulated by December 1969 was considered sufficiently manageable, so that the statutory provision for a contingency reserve

available on a loan basis from the General Treasury that had been specifically authorized by Congress in view of the difficulties of forecasting the cost of the program was allowed to expire without being used.

The deficit grew substantially during fiscal year 1970 as a result of continuing the same premium rate as in the previous year, and as a result the trust fund was nearly exhausted. The adequate premium rates promulgated for the subsequent periods have reduced the deficit substantially and are projected to reduce it slightly, to \$219 million by the end of fiscal year 1975, which will be 14% of the liabilities that are outstanding and 5% of the disbursements. Thus, although the program still does not fully satisfy this second test of actuarial soundness, there has been a marked improvement in the actuarial status of the program as measured by this test.

5. Reliability of the estimates

Projections of the future income and disbursements of the SMI program are subject to forecasting errors. The principal reasons for errors are the uncertain nature of the trends in physicians' charges and institutional costs and the difficulty of predicting accurately changes in administrative policy. Over-all demand for covered services also fluctuates from year to year, as affected by epidemics, the weather, and many other causes. Further, due to inadequate data, the current cost of the program cannot be determined exactly, and the incurred cost as far back as 1972 must be estimated, with a possible error of a few percent.

Past experience demonstrates that cash expenditures for present enrollees can be estimated within a few percent for several future years. Due to incomplete data on an incurred basis, estimates of the future incurred experience for present enrollees are necessarily less reliable, and may vary by as much as 5% from the actual experience. Estimates as to the cost of the new classes of beneficiaries are much less reliable due to the absence of any reliable data source and the potential impact of undetermined administrative policy on the cost for persons with chronic kidney disease. Although a large relative error is possible in estimating the cost for these new beneficiaries, such an error would be relatively small compared to the overall size of the program.

CONCLUSION

The income generated is expected to be somewhat more than adequate to provide for the benefits and administrative costs paid during fiscal years 1974 and 1975. There is every reason to believe that the trust fund balance will be adequate throughout the period for which financing has been set to ensure payment of benefits as due. On an accrual basis, the projected income exceeds outgo in fiscal year 1974 but is slightly deficient in fiscal year 1975.

APPENDICES

APPENDIX A.—STATEMENT OF ACTUARIAL ASSUMPTIONS AND BASES EMPLOYED IN DETERMINING THE ADEQUATE RATES AND THE STANDARD PREMIUM RATE FOR THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM BEGINNING JULY 1974

This is a statement of actuarial assumptions and bases employed in determining the adequate actuarial rates and the standard monthly premium rate for the Supplementary Medical Insurance Program for the period July 1974 through June 1975. The adequate actuarial rate for enrollees age 65 and over is \$6.70. The adequate actuarial rate for disabled enrollees is \$18. The standard premium rate for both types of enrollees is \$6.70.

I. ADEQUATE ACTUARIAL RATE FOR ENROLLEES AGE 65 AND OLDER

The determination of an adequate actuarial rate for the aged has been made on the basis of the actual operating experience under the program, projected through the year beginning July 1974. Virtually complete operating experience figures through July 30, 1973, are now available as to the cash income and disbursements under the program, and some data are available for the early months of fiscal 1974. The adequate actuarial rate, however, must be sufficient to cover benefits and related administrative costs for all services performed during the period from July 1974 through June 1975 (fiscal 1975). Experience on such a basis (hereafter called an "incurred" basis) is available for most components of the program through calendar 1972; that for the other components must be estimated.

Analysis of Supplementary Medical Insurance Trust Fund

The balance of the SMI Trust Fund at the end of each of the last three fiscal years, the liability outstanding for benefits and related administrative costs for services performed prior to the end of that fiscal year but not yet paid for at the end of that fiscal year ("liability for incurred but unpaid services"), and the monthly premium rate in effect for each of these fiscal years are as follows:

Period ending June 30	Monthly premium rate	Fund at end of period (millions)	Liability for incurred but unpaid services (millions)
1971.....	\$5.30	\$290	\$822
1972.....	5.60	481	848
1973.....	5.80	746	967

Due to past deficiencies in the premium rate, the fund on June 30, 1973, was about 77 percent of the liability then outstanding. The liabilities outstanding on June 30, 1973, for incurred but unpaid services, are estimated to have been \$967 million, while the balance in the trust fund on the same date amounted to \$746 million.

It is expected that the trust fund balance will increase during fiscal year 1974. By the end of June 1974 the trust fund balance is estimated to be about \$1,097 million, about 88 percent of the liability for incurred but unpaid services then outstanding.

Analysis of Past Experience

Estimates of the basic premium that would have financed both benefit payments and administrative expenses are shown below, on both a cash and an incurred basis. Cash figures must be adjusted for the estimated increase in liability for incurred but unpaid services. Monthly premium rates on both cash and incurred bases are compared below for the three most recent fiscal years with the premium rate actually charged.

Fiscal year ending June 30	Premium rate charged	Premium rate required for benefits and administrative expenses	
		Cash basis	Incurred basis
1971.....	\$5.30	\$4.82	\$4.92
1972.....	5.60	5.28	5.36
1973.....	5.80	5.38	5.71

Basic Estimates for Future Experience on an Incurred Basis

In estimating the cost of the program for July 1974 through June 1975, it is first necessary to project incurred results for fiscal year 1974, and then to continue the projection for one more year. The actuarial assumptions used for the purpose of these projections are shown below:

AVERAGE INCREASE ASSUMED OVER PREVIOUS YEAR (In percent)

Fiscal year	Physicians' services		Institutional services	
	Fees ¹	Number and mix ²	Unit costs	Number and mix ²
1973.....	2.50	2.50	7.0	10.0
1974.....	2.50	2.50	7.0	10.0
1975.....	4.75	2.25	7.0	10.0

¹ As recognized by the program.

² Increase in the number of services received per capita and greater relative use of more expensive services.

The Cost of Living Council has published proposed revised rules that limit the increase in any physician's average fee to a rate of 4 percent per year, effective after January 1, 1974. Previous rulings of the Price Commission have set the precedent that the customary and prevailing charges (which comprise the "fee screens") used by the program in determining reimbursements to physicians and other providers are prices subject to such limit. These fee screens are revised annually at the beginning of each fiscal year. To allow physicians an average increase in reasonable charges of 4 percent per year beginning January 1974, the fee screens would be raised on July 1 by 4.75 percent over those currently in effect: (i) 4 percent to allow for the rate of increase permitted from fiscal year 1974 to fiscal year 1975, and (ii) .75 percent to allow for the higher screens that would have been in effect in fiscal year 1974 if the 4 percent rate of increase allowed during the last half of that year had been anticipated in setting the fiscal 1974 fee screens. Consequently, the customary and prevailing charges used by the program during fiscal year 1975 will be limited to a level 4.75 percent higher than that of fiscal year 1974.

Administrative expenses incurred for the aged and disabled in fiscal 1974 will be 12.3 percent of total incurred benefits paid under the program, based on the amounts in the fiscal 1975 budget, adjusted to an incurred basis.

On the basis of the foregoing assumptions, it is now estimated that, prior to adjustment for interest earnings and a contingency margin, the rate necessary so that income would cover both benefit payments and administrative expenses for aged enrollees on an incurred basis is \$6.77 for fiscal 1975. The projection of the adequate actuarial rate of \$6.70 which takes into account interest and provides a margin for contingencies, is summarized as follows: (See table.)

DERIVATION OF SMI PREMIUM RATE REQUIRED IN FISCAL YEARS 1972-75

	1972	1973	1974	1975
Covered services (at level recognized):				
Physicians' reasonable charges.....	\$6.27	\$6.59	\$6.92	\$7.41
Radiology and pathology.....	.28	.31	.34	.37
Group practice plans.....	.10	.11	.11	.12
Other practitioners.....03	.14	.15
Home health agencies.....	.08	.09	.10	.11
Outpatient hospital and other institutions.....	.55	.65	.77	.90
Total services.....	7.28	7.78	8.38	9.06
Cost sharing:				
Deductible.....	-1.43	-1.56	-1.68	-1.69
Coinsurance.....	-1.11	-1.17	-1.25	-1.38
Total benefits.....	4.74	5.05	5.45	5.99
Administrative expenses.....	.62	.66	.71	.78
Incurred expenditures.....	5.36	5.71	6.16	6.77
Value of interest on fund.....	-.06	-.09	-.11	-.12
Margin for contingencies and to amortize unfunded liabilities.....	.30	.18	.25	.05
Promulgated premium.....	5.60	5.80	6.30	6.70

Calculation of Actuarially Adequate Rate

The \$6.77 rate for fiscal year 1975 is decreased by \$.12 to allow for interest earnings on the trust fund, and increased by \$.05 to provide a margin for contingencies resulting in an adequate actuarial rate of \$6.70. If all assumptions as to fiscal year 1974 were to be exactly met, the margin for contingencies would be sufficient to reduce the unfunded liability for incurred but unpaid services for the aged by approximately \$25 million.

II. ADEQUATE ACTUARIAL RATE FOR THE DISABLED

An adequate actuarial rate for disabled enrollees must take into account (i) enrollees eligible because they have been entitled to Disability Insurance for not less than 24 months, and (ii) enrollees meeting the chronic kidney disease provision. No adequate statistics were available for either portion of the estimate. Eventually program experience will become available, and the potential errors of estimation will be reduced.

The resulting adequate actuarial rate, recognizing the relative number of enrollees in each of the two groups, the \$60 deductible and 20 percent coinsurance, the provision of the law that the rate is computed on an incurred basis, and with a margin of \$0.15 for contingencies, is \$18.

If all assumptions were exactly realized in fiscal year 1975, the \$0.15 margin would reduce the program's unfunded liability as shown in the following table:

Period ending June 30	Monthly premium rate	Fund at end of period (millions)	Liability for incurred but unpaid services (millions)
1973.....	\$5.80	\$746	\$967
1974.....	6.30	1,097	1,249
1975.....	6.70	1,313	1,434

III. STANDARD MONTHLY PREMIUM RATE FOR ALL ENROLLEES

The law provides that the standard monthly premium rate, promulgated in December to apply for both aged and disabled enrollees under the Supplementary Medical Insurance Program, shall be the adequate actuarial rate for enrollees age 65 and older; but not greater than the standard monthly premium rate for the fiscal year in which the promulgation is made, increased by the percent that the old-age, survivors, and disability insurance benefit level increased between June first of the year in which the promulgation is made and June first of the succeeding year (according to the law in effect at the time of promulgation).

The standard monthly premium rate promulgated in December 1972 for fiscal year 1974 was \$6.30.

Pub. Law 93-66 increased the OASDI benefit table by 5.9 percent effective for June 1974. Since 105.9 percent of \$6.30 is \$6.70 (rounded to the nearest \$0.10), the limitation does not apply and the standard monthly premium rate is \$6.70.

APPENDIX B. ACTUARIAL METHODOLOGY AND PRINCIPAL ASSUMPTIONS FOR COST ESTIMATES FOR THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM

I. ACTUARIAL ESTIMATES REQUIRED

Actuarial cost estimates of the SMI program are required for two purposes. First, the cost estimates form the base for the determination of the adequate actuarial rates and for the promulgation of the premium rates to be charged enrollees—on which the financing of the program is based. Second, they are needed for projecting the transactions of the trust fund and the accrued surplus (or deficit) of the program.

The estimates needed, although for the same program, take different forms. In order to determine adequate actuarial rates, cost estimates are needed on an incurred basis, and expressed per enrollee. The transactions related to the trust fund relate to the aggregate cash flow of the program. The accumulated surplus of the program is found by comparing the balance in the trust fund on any date with the assets and liabilities then outstanding, which form the difference between the cash and incurred status of the program.

The important difference between cash and incurred estimates is that in the former a transaction is assigned to the fiscal year in which an entry therefor is made to the trust fund account by the Secretary of the Treasury as Managing Trustee, and in the latter a benefit or premium payment is assigned to the fiscal year in which the service is performed or the premium falls due. Because there is a considerable time lag between the date a covered service is performed and the date that the corresponding cash transaction is charged against the trust fund, cash and incurred disbursement estimates can differ widely for any fiscal year.

The principal reasons for this delay are the time taken by enrollees and providers to submit correctly documented claims, by carriers in processing and paying the amounts due, and by delays between payments and Treasury entries to the trust fund. In addition, the full payment for institutional services is not decided until the final cost settlement, which may be several years after the services were performed.

II. ESTABLISHING A SUITABLE BASE FOR PROJECTIONS

(a) *Primary reliance on program data*

The actuarial cost estimates are based to the extent possible on accounting data from the program, and on such statistical information as can be derived from or reconciled with accounting data. Unconfirmed statistical data from the program is useful also, although less reliable.

Data from outside the program is less useful. There are many important but poorly understood factors that affect the level of services that will be sought and performed for a particular group of persons under a specific insurance program. Only in the absence of any program data, as in the case of new groups of beneficiaries or new types of benefits—is data from outside of the program relied upon to any significant extent.

(b) *Establishing an incurred base*

Establishing an incurred base from which to project the future cost of the program requires reconstructing the incurred experience by adjusting the data for a number of sources of serious bias. A substantial part of the data for recent years is missing, due both to delays in receiving data and because statistical data are not tied to accounting procedures to insure accuracy. In addition, processing and classification errors are inevitable in any large scale data processing operation and overall corrections must be made. Finally, where reliance is made on sample data, corrections must be made for any sample bias present.

This reconstruction must be made separately for each payment route (through carriers,¹ through intermediaries, through combined billing, etc.)—each of which involves a different set of lags in payment and receipt of data, other biases, and other peculiarities. Each requires a different set of adjustments to obtain reliable estimates of the actual incurred cost. Also, administrative policy, which may

¹ The intermediaries who assist the Social Security Administration in paying claims are referred to as "intermediaries" if reimbursement is to be made on the basis of "reasonable costs" (i.e., to institutions) and "carriers" if reimbursement is made on the basis of "reasonable charges."

affect both the amount paid and the promptness of payment, is normally directed to a particular payment route (e.g. the reasonable charge screens apply only to benefits processed by carriers). Finally, the currency and quality of the basic data—and consequently the accuracy of estimates made from it—varies substantially by source of data.

The reconstruction of incurred experience is most readily done by calendar years since the data system is organized to facilitate administration of the calendar year deductible. The incurred experience is reconstructed for each payment route through the most recent calendar year for which the data are sufficiently complete to permit a reasonable estimate of the total. Due to the delays in receiving data, projections must be made of the incurred experience in the most recent periods, as well as of future experience.

Payments are considered to be incurred when the service which makes payment due is performed. The increased reimbursements made in any year due to carry-over of deductible from the prior year are thus assumed to be incurred in the year in which payable and not the year the service was performed, since if no further services had been performed or if enrollment had been terminated no payment would have been made.

The reconstruction of the incurred experience is accomplished principally by tying the incurred data to an accounting base by reconciling incurred data with cash flow by payment route. The total cash experience is complete by definition for any past fiscal year, but must be broken down by payment route (and whether interim or final).

It should be noted that the lag in the collection of data as well as the fact that only a sample is available on an incurred basis of payments to physicians limit the accuracy with which the base year can be estimated. Any inadequacies in the base year data are compounded as the experience is projected to future years.

(c) *Analysis of data by payment route*

(1) *Benefits paid through carriers (on payment records).*—All services reimbursed on the basis of reasonable charges are paid by carriers (Blue Shield plans and commercial insurance companies chosen to act as agents for the program). Approximately 89% of benefits are paid by carriers; and carriers are required to submit payment records covering all payments made. An actuarial sample of 0.1% of these payment records is tabulated by date of service rendered, which permits analysis of the program on an incurred basis. A number of corrections must be made to this data to eliminate biases resulting from the processing system and sampling procedure.

There is a substantial lag between the date on which services are performed, and the date on which payment records are posted to the samples. Payments lag from several months to a year or more behind services performed. There may be a further delay before payment records are submitted and a few are never submitted.²

Finally, editing and processing of payment records by the Social Security Administration is required before tabulation, and if the edit produces any inconsistencies, a very long delay may result from returning the payment records to the carriers for correction.³ Errors are often detected in the tabulations and delays of several months may be required to obtain corrections.

Thus, in order to estimate the level of benefits incurred for any period, adjustments must be made for payment records covering services that have been performed but for which payment records have not been tabulated by the Social Security Administration. These "incurred but unreported" payment records must be added to those received for the period in question.

Further correction must be made to the sample data for the difference between the mean cost of enrollees in the sample and the average cost for all enrollees. This difference is due to statistical fluctuations from year to year, and to selection of a sample whose members are not fully representative of all enrollees by health and geographical distribution.

The appropriate corrections are made through controls to accounting data. Table B1 shows the cash paid and reconstructed reimbursement incurred for

² Beginning with 1972 nearly all payment records submitted are reconciled with cash payments, so that incomplete data is no longer a problem.

³ In the first years of the program, many payment records that were returned to carriers were never resubmitted, probably because some carriers did not maintain adequate documentation with which to meet Social Security Administration specifications. Actuarial samples were maintained for all records processed as well as for those approved by the edit checks to overcome this problem. Currently, the proportion never returned is very small, as determined by actuarial controls.

services for which payment records are submitted by calendar year—both in total and per capita.

(2) *Institutional services reimbursed by intermediaries.*—Payments by intermediaries to hospitals for outpatient hospital services, to hospitals for covered services for beneficiaries who have exhausted their HI program benefits, to skilled nursing facilities for outpatient services, and to home health agencies for services not covered by the HI program are on an interim basis and adjusted by a subsequent settlement with the institution on the basis of an audited cost report. As in the case of benefits under the HI program, interim bills are submitted to support claims for interim payments. A 0.1% sample of these bills is tabulated by date of service, adjustments made for the lags in receiving bills, and an estimate made of the interim payments incurred. It is estimated that statistical data has not been received for around 9% of the benefit paid; consequently, additional adjustments are required to counter this bias in the incurred data.

Finally, allowance must be made for the final cost settlements made with the institutions to bring interim payments up to full reimbursable costs. A study of a very small sample of cost settlements made through June 1972 indicates that the interim payments must be increased by around 27% in order to reflect the level of total incurred costs. Table B2 summarizes the cash and reconstructed incurred experience for the institutional services by calendar year.

(3) *Inpatient radiology and pathology paid initially through the hospital insurance program.*—As a result of the 1967 Amendments, hospital-based radiologists and pathologists have the option of concluding agreements with a hospital under which the hospital bills for their services. Where these agreements are in effect, payment is made initially from the hospital insurance trust fund by the hospital insurance intermediary. The HI trust fund is subsequently reimbursed from the SMI trust fund. Interim payments to hospitals are made on the basis of intermediary estimates, in theory based on the estimated average cost for all inpatient professional radiology and pathology services reimbursed by the HI program for that hospital. The actual liability, however, depends on subsequent cost settlements with the hospitals. No data as to the current cost of these services is available. Consequently, estimates of the liability of the program for these services must be based on cost settlement data. Presently there is little information on which to judge the completeness of this data. This inadequacy in the data available from the program gives rise to the possibility of substantial errors in estimating this component of the cost of the program.

(4) *Institutions reimbursed directly by the Social Security Administration.*—The same basic procedures used by the intermediaries are also followed by the Social Security Administration to reimburse institutions that have elected to be paid directly by the Social Security Administration for SMI services rather than through intermediaries. Although data from this source might be analyzed separately, the amount involved has been too small to merit separate attention. Consequently, direct institutional reimbursements are analyzed jointly with other institutional benefits.

(5) *Group practice plans dealing directly with the Social Security Administration.*—Group practice plans that deal directly with the Social Security Administration are reimbursed on a cost basis. They are financed on an interim payment basis designed to keep current the reimbursements for services performed. Analysis of retroactive cost settlements made to these plans through June 1972, however, suggests that these interim payments should be increased by about 8% to reflect the level of accrued costs. Table B3 shows the reconstructed incurred per capita payments.

TABLE B1.—BENEFITS PAID FOR SERVICES ON PAYMENT RECORDS

Calendar year	Average enrollment (millions)	Incurred		Cash	
		Total (millions)	Per capita	Total (millions)	Per capita
1966.....	17.7	472.1	\$26.67	\$120.9	\$6.82
1967.....	17.9	1,324.0	73.97	1,134.2	63.40
1968.....	18.5	1,446.1	78.17	1,425.9	76.93
1969.....	19.1	1,617.6	84.69	1,599.8	83.75
1970.....	19.5	1,769.2	90.73	1,702.5	87.11
1971.....	19.9	1,914.8	96.22	1,867.7	93.85
1972.....	20.3	2,096.8	103.29	2,025.8	99.79

TABLE B2.—BENEFITS PAID FOR INSTITUTIONAL SERVICES

Calendar year	Average enrollment (millions)	Incurred		Cash			
		Total (millions)	Per capita	Interim	Final	Total	Per capita
1966.....	17.7	\$22.0	\$1.24	\$2.7	0	\$2.7	\$0.15
1967.....	17.9	67.6	3.78	42.0	\$0.3	42.3	2.36
1968.....	18.5	99.9	5.40	71.6	2.1	73.7	3.98
1969.....	19.1	134.4	7.04	102.6	9.9	112.5	5.89
1970.....	19.5	134.6	6.90	108.0	39.6	147.6	7.57
1971.....	19.9	174.9	8.79	123.9	68.5	192.4	9.67
1972.....	20.3	212.1	10.45	150.5	58.0	208.5	10.27

TABLE B3.—SUMMARY OF INCURRED BENEFITS PER CAPITA

Calendar year	All services	Physician services ¹	Inpatient radiology and pathology ²	Group practice plan	Home health agencies	Hospital and clinics
1966.....	\$28.27	\$25.67	\$0.97	\$0.39	\$0.46	\$0.78
1967.....	78.95	71.53	2.48	1.16	1.30	2.48
1968.....	86.03	75.59	3.72	1.34	1.69	3.69
1969.....	94.90	81.59	4.85	1.44	1.96	5.06
1970.....	101.05	87.15	5.69	1.34	1.00	5.87
1971.....	109.03	92.46	6.35	1.45	1.11	7.66
1972.....	118.25	99.17	6.99	1.64	1.25	9.20

¹ Includes all services on payment records other than for inpatient radiology and pathology.

² Includes services on payment records and those using combined billing.

III. PROJECTION OF COSTS FOR AGED ENROLLEES

(a) *Basis of projection.*—Projection of future costs requires ascertaining stable relationships among the payments for services in past periods and projecting these into the future. The pattern of services rendered changes relatively slowly and in similar ways from year to year. Abrupt changes in payments under the program are caused primarily by administrative policy. The most important among other influences on costs are price increases, especially the average increase in physician fees (as affected by administrative policy) and in the average reasonable cost for the institutional services. Most other relationships are stable, or apply only to a small portion of covered services. To obtain these relationships, the reasonable charges (or costs) of services rendered must be reconstructed by payment route from the reimbursements incurred and the effect of administrative policy and price changes on the increases in the per capita amounts must be eliminated. Projections can be made with specific assumptions as to price increases and administrative policy judged most likely to occur, assuming that most other relationships remain stable.

(b) *Trends in reasonable charges and costs incurred.*—(1) Reasonable charges and costs incurred per capita through 1972:

After allowing for the effect of the coinsurance and deductible (including the tendency not to submit claims for all services for which reimbursement would be paid), the reasonable charges and costs incurred per capita for periods for which adequate data are available are as shown in table B4. In allowing for the effect of the deductible and coinsurance, inpatient radiology and pathology on payment records are separated from other services on payment records. To facilitate projections, institutional services are divided into those for home health agencies and those for hospital and clinic services. Projections are made separately for each of these broad categories of services.

TABLE B4.—INCURRED REASONABLE CHARGES OR COSTS PER CAPITA FOR THE AGED: PAST EXPERIENCE

Calendar year	All services	Physician services ¹	Inpatient radiology and pathology	Group practice plans	Home health agencies	Hospital services
1966.....	\$56.92	\$51.92	\$1.72	\$0.78	\$0.92	\$1.58
1967.....	128.46	116.65	3.78	1.88	2.12	4.03
1968.....	138.91	123.66	4.23	2.20	2.77	6.05
1969.....	150.57	132.04	4.85	2.32	3.17	8.19
1970.....	158.79	139.92	5.69	2.15	1.61	9.42
1971.....	168.82	146.30	6.35	2.29	1.76	12.12
1972.....	180.54	154.68	6.99	2.56	1.96	14.35

¹ Includes all services paid on the basis of reasonable charges except those for inpatient radiology and pathology.

TABLE B5.—COMPONENTS OF INCREASES IN REASONABLE CHARGES PER CAPITA FOR PHYSICIAN AND MISCELLANEOUS SERVICES¹

[In percent]							
Year	Actual fees	Effect of screens ²	Recognized fees	Residual causes	Effect of denials ³	Net residual	Recognized charges
1967.....	6.2	-0.7	5.4	7.9	-1.0	6.9	12.3
1968.....	6.2	-1.2	5.0	4.1	-3.1	1.0	6.0
1969.....	6.6	-2.0	4.6	3.8	-1.6	2.2	6.8
1970.....	6.5	-3.0	3.5	3.5	-1.0	2.5	6.0
1971.....	6.2	-3.3	2.9	2.1	-0.4	1.7	4.6
1972.....	3.1	+1.1	3.2	2.5	0	2.5	5.7

¹ Increase over prior year.

² Change in reduction due to screen from previous to current year.

³ Change in denials from previous to current year.

TABLE B6.—INCREASES IN REASONABLE CHARGES AND COSTS INCURRED PER CAPITA FOR THE AGED (AS RECOGNIZED BY THE PROGRAM)¹

[In percent]						
Calendar year—	Physician services ²	Inpatient radiology and pathology	Group practice plans	Home health agencies	Hospital service	
1967.....	12.3	10.0	20.5	15.2	27.5	
1968.....	6.0	12.0	17.0	30.7	50.1	
1969.....	6.8	14.7	5.5	14.4	35.4	
1970.....	6.0	17.3	-7.3	-49.2	15.0	
1971.....	4.6	11.6	6.5	9.3	28.7	
1972.....	5.7	10.1	11.8	11.4	18.4	

¹ Increase over prior year.

² Includes all services paid for on the basis of reasonable charges except those for inpatient professional radiology and pathology.

(2) Past effects of administrative policy:

Administrative policy has had a substantial impact on amounts paid by carriers—especially as to payment for services not covered by the program (e.g. eye glasses, services for patients not enrolled, etc.) and the reasonable charge screen. Establishing the trends that have been experienced in recognized charges requires allowances for the effect of any changes in policy that have occurred in the past. Similarly, projections require assumptions as to the policies most likely to be followed in the future.

(a) Payment for uncovered services

Currently, 10½% of the amounts claimed are denied by carriers as services not covered by the program (e.g. routine physical exams, eye glasses, patient not enrolled, etc.). The level of denied claims has risen gradually from around 2-3% in the first year of the program, and reached the present level in 1970. Thus if in the pattern of claims submitted has not changed, around 8% of payments during the early years of the program were made for uncovered services, and such payments have been gradually reduced. Such payments were probably somewhat in excess of 8% initially, however, since many claimants have learned through

denials not to submit certain types of claims and are not currently contributing to the 10¼% that are denied. The effect has been to inflate payments in the early years by around 10% and reduce the rate of increase experienced in the cost per capita of physicians and miscellaneous services.

(b) *Reasonable charge screens*

The "reasonable charge" for any service covered by the program is the lower of the "customary charge" by the particular physician for the type of service in question and the "prevailing charge" by physicians in the geographical area for that type of service. Reimbursement under the program is based on the lower of the reasonable and actual charge.

The policy of the Social Security Administration in implementing the requirement for paying at most reasonable charges has consisted of the following components:

(i) A reasonable charge is determined for *each* service reimbursed by carriers.⁴

(ii) The "customary charge" for a physician for any type of service is defined to be the median charge used by that physician for that type of service for enrollees in the program during the calendar year preceeding the fiscal year in which the claim is processed. Thus there is on the average a delay of 1½ years in recognizing any increase in customary charges and such charges are determined solely from services performed for enrollees in the program.⁵

(iii) The "prevailing charge" for any type of service in a geographical area is defined to be the 75th percentile⁶ of the customary fees for that service by the physicians in that area.

(iv) Decisions as to how to group services rendered in combination or to patients with complications (a large proportion of services for persons over age 65) and as to the number of observations required to form a distribution for purposes of determining a customary or a prevailing charge—are left to the individual carriers.

(v) Payment is made on the basis of the paper submitted by the physician or enrollee. The burden of proof is placed on physicians or patients in appealing any disagreement over the classification of services for reasonable charge determinations.

Due to the large number of services that are infrequently performed, there are many covered services for which there is no customary or prevailing charge. Use of relative value scales permits use of estimates for many of these, but there are many that cannot be established in this way. Further, many physicians charge less than the customary charge for some patients. For both these reasons, 20% to 30% of charges are not affected by the screens. Also, the effect of the fee screen must be analyzed jointly with the impact of the economic stabilization program, as discussed subsequently, and the new limitation on increases in prevailing charges specified in the 1972 Amendments.

The increases that have taken place in reimbursements per capita under the program can only be understood after an analysis of the effect of changes in fee screen policy. In the early years of the program, each carrier was required to determine much of its own policy with regard to reasonable charges, following very general guidelines. The policies followed ranged from use of Blue Shield fee schedules to reducing payment only when a joint insurance company—medical society review committee agreed that a charge was out of line.

In 1969, the Social Security Administration instructed the carriers to adopt policies similar to those now followed but with the prevailing fee set at the 83rd percentile of customary charges. Data from the program indicate that these policies were introduced gradually over three years. The level of prevailing fees was reduced to the 75th percentile of customary charge distributions in early 1971 (conforming with pending legislation). Also, introduction of fee screens based on 1969 data was delayed until early 1971. The data, however, indicate delays between policy changes and actual implementation that most likely varied substantially by carrier.

(3) *Price increases:* Data concerning the trends in the average price of health care are available for some of the types of services covered by the program and estimates of the trends of the others can be based on data for similar types of services. Weighted average price increases are estimated for broad categories of services.

⁴ This policy contrasts with that followed by insurance companies operating under similar contractual language, who in general examined only unusually large bills or bills from particular physicians.

⁵ The delay in recognition of customary charges was explicitly authorized by the 1972 Amendments.

⁶ Use of the 75th percentile for defining prevailing fees was mandated by the 1972 Amendments.

(4) **Residual factors:** In addition to administrative policy and price increases, the cost per capita for each type of covered service is affected by a number of other factors. For example, total physician charges for covered services increase due to (a) changes in the mix of services rendered (reflecting trends to use new, more complex, and more expensive techniques) and pattern of specialists (reflecting increased specialization); (b) changes in the level of use of physician services, including chance fluctuations in health (e.g. epidemics); (c) changes in the manner in which physicians bill for their services; (d) any change in the composition of the enrollment by age, sex, geographical distribution—or other significant actuarial variables, and (e) any difference between the actual and estimated increase in reasonable charges (i.e. any error in actuarial estimates of price increases and of the effect of the fee screens). No data bearing directly on any of these components is available. The overall effect appears to be relatively stable from year to year, however, and can be estimated as a residual through examination of historical data.

(5) **Analysis of increases in reasonable charges and costs per capita:** Table B5 summarizes the effects of the principal factors which have produced increases in reasonable charges per capita for services paid by carriers, which comprise 89% of benefits paid. Price increases are estimated by a weighted average of CPI index components chosen to reflect the distribution of services on payment records. The effect of a price increase is reduced by any increase in fee screen reductions. Similarly, the residual increases are reduced by the effect of reductions in payments for uncovered services. The compound increase due to the recognized fee increase and the residual increase net of the effect of increased denials is the increase in reasonable charges per capita. A similar analysis (not shown) is required for the other types of covered services. The increases that have been experienced in the recognized charges and costs per capita are summarized in table B6.

(c) *Projection of future increases in reasonable charges and costs per capita.—*

The rates of increase assumed in projecting the incurred cost of the program are summarized by broad category of service in table B7, and the resulting reasonable charges and costs per capita in table B8. More detail concerning the assumptions used in projecting physicians and miscellaneous services, which account for most of the increase in costs, is provided in table B9.

Price increases for physicians and miscellaneous services are projected under the assumption that the price controls of the economic stabilization program are continued through fiscal 1974. Under previous regulations, the customary and prevailing charges established by the program for each type of service for each physician (which constitutes the "fee screen") were ruled by the Price Commission to be "prices" and were subject to a maximum average increase of 2½% per year.

With the expiring of price controls, the fiscal year 1975 screens will be updated to the calendar 1973 level resulting in an increase of approximately 7.7% in average recognized fees over the fiscal 1974 level.

TABLE B7.—PROJECTED INCREASES IN RECOGNIZED CHARGES AND COSTS INCURRED PER CAPITA FOR THE AGED 1
[In percent]

Calendar year	Physician services ²	Inpatient radiology and pathology	Group practice plans	Home health agencies	Hospital service
1973.....	5.1	10	5.1	10	18
1974.....	7.3	10	7.3	10	18
1975.....	9.8	10	9.8	10	18
1976.....	9.8	10	9.8	10	18

¹ Increase over prior year.

² Includes all services paid on the basis of reasonable charges except those for inpatient professional radiology and pathology.

TABLE B8.—INCURRED RECOGNIZED CHARGES AND COSTS PER CAPITA FOR THE AGED: PROJECTION

Calendar year	All services	Physician services ¹	Inpatient radiology and pathology	Group practice plans	Home health agencies	Hospitals and clinics
1973.....	\$192.93	\$163.47	\$7.69	\$2.69	\$2.15	\$16.93
1974.....	210.12	176.42	8.46	2.89	2.37	19.98
1975.....	232.40	193.76	9.30	3.17	2.60	23.57
1976.....	257.17	212.78	10.23	3.48	2.86	27.82

¹ Includes all services paid on the basis of reasonable charges except those for inpatient radiology and pathology.

TABLE B9.—COMPONENTS OF INCREASES IN REASONABLE CHARGES PER CAPITA FOR PHYSICIAN AND MISCELLANEOUS SERVICES¹

Year	Actual fees (percent)	Effect of screens ²	Recognized fees (percent)	Residual causes	Effect of denials ³ (percent)	Net residual	Recognized charges
1973.....	2.5	0	2.5	2.5	0	2.5	5.1
1974.....	5.1	0	5.1	2.1	0	2.1	7.3
1975.....	8.0	0	8.0	1.7	0	1.7	9.8
1976.....	8.0	0	8.0	1.7	0	1.7	9.8

¹ Increase over prior year.

² Change in reduction due to screen from previous to current year.

³ Change in denials from previous to current year.

Increases in charges per capita for physicians and miscellaneous services from causes other than price increases are projected at approximately the same rate as occurred during the last years adjusted for the temporary impact of the price controls. Denied claims are assumed to have no further impact, i.e. it is assumed that no significant payments are now made for uncovered services which will not be paid during the period projected.

Use of physician and miscellaneous services is affected by the amount of cost sharing. Reductions in payment due to the fee screen become in effect additional cost sharing, borne by the provider or the patient—either financially or through reduced services. In the case of assigned claims, the differential between reasonable and actual charges is borne entirely by the physician. The proportion of claims on which physicians accept assignments is to some extent an index of the willingness of physicians to accept enrollees as patients who provide adequate compensation. On the other hand, collection of cost sharing not previously collected (including any excess of actual over customary fees) allows some physicians to reduce the effect of price controls. The rate of acceptance of assignments has decreased slightly recently from around 61% of all bills submitted for payment in fiscal 1972 to around 58% in fiscal 1973.

TABLE B10.—PROJECTED BENEFITS INCURRED PER CAPITA¹

Calendar year	Benefits	Administration	Total
1973.....	\$124.37	\$16.17	\$140.54
1974.....	138.36	17.99	156.35
1975.....	156.14	20.30	176.44
1976.....	175.99	22.88	198.87

¹ For aged beneficiaries only.

(d) *Benefit payments per capita*

The benefits incurred per capita are obtained from the recognized charges and costs by allowing for the effect of the \$60 deductible and 20% coinsurance rate. The resulting benefits incurred per capita for aged beneficiaries appear in table B10.

(e) Aggregate incurred estimates for fiscal years 1974-76

Aggregate benefits incurred by the aged in fiscal years 1974 through 1976 are estimated by multiplying the incurred rates per capita for fiscal years by the estimated enrollment during the year. The aged enrollment is projected to be 96% of the population over age 65. The projected aggregate incurred benefits are summarized in table B11.

(f) Aggregate cash estimates for fiscal years 1974-76

The estimates of aggregate cash benefits paid in fiscal years 1974 through 1976 are obtained by projecting the lag structure between the dates on which services are performed and the dates on which corresponding entries are made to the SMI trust fund account. Separate estimates are prepared for each payment route, which requires that benefits incurred be broken down accordingly.

Estimates of the cash disbursements for benefits by payment route are also prepared by projecting the cash disbursements in the most recent fiscal year, 1973. The two sets of projected estimates of cash expenditures are compared and adjustments made until the projections agree. These adjustments depend on the relative strength and weaknesses of incurred and cash projections. The projected aggregate cash benefits paid are summarized in table B11.

The principal advantage of a cash projection is the currency of the data base. At the time the projections are made, the final results for the preceding fiscal year are known precisely. Data on an incurred basis, however, are only partially available at that time for the preceding calendar year. Consequently, projections on an incurred basis must be adjusted for incomplete data and projected over a longer period of time, in some cases as much as several years. In the circumstances all incurred items must be controlled to corresponding cash items to insure completeness and currency of the data base.

On the other hand, projections of the cash expenditures can only be made under the assumption that all of the set of complex relationships between cash and incurred expenditures do not change during the projection period or under the assumption that any changes have offsetting impact. In the absence of significant changes in program policy, such changes tend to take place very slowly, so that very accurate projections of the short run cash outlays can be made, using actuarial assumptions appropriate to the periods in which the services were performed. Administrative policy of the SMI program has been frequently changed significantly, however, thus departing from the conditions required for reliable cash projections. Major adjustments must be made in the estimating process to offset the effect of such changes. An additional problem posed for cash projections is the leverage of a fixed (and sometimes changing) deductible.

IV. COST ESTIMATES FOR THE DISABLED AND PERSONS SUFFERING FROM CHRONIC KIDNEY DISEASE

Estimates for the new groups of beneficiaries are necessarily less reliable than those for the aged. The methodology used to estimate the costs was necessarily improvised to make the best use of such information as was available in proportion to judgments as to its reliability. The projected aggregate incurred and cash expenditures for new groups of enrollees appear in table B12.

(a) Disabled beneficiaries

A survey conducted in 1966 by the Bureau of the Census for the Social Security Administration provided some information as to the medical costs of the disabled. Although such surveys substantially underestimate the level of cost that will be experienced under an insurance program, suitable adjustments can be made. Also, the number of disabled beneficiaries will have more than doubled since this survey, due primarily to expansion of the program. The level of medical expenses for the new groups of beneficiaries added may be different from those surveyed.

Cost estimates were prepared under the general assumptions that (i) the biases in the survey of the disabled resembled those in the survey of the aged (ii) the effect of a full insurance program on the use of covered services by beneficiaries would resemble that which occurred for the aged when the original hospital insurance program began, and (iii) the new groups of beneficiaries added through expansion of coverage under the DI program are less severely disabled than those covered in 1966, and hence have lower medical costs.

(b) Patients suffering from chronic kidney disease

No comprehensive survey was available as to either the number of kidney patients currently treated by any mode of treatment, the number of potential patients not now treated who suffer from comparable conditions, or the average costs of treatment. The cost of treatment varies widely by type of treatment and by the center providing treatment. No precedents exist from which to predict the administrative policies which will implement the benefit provisions. Further, the availability of treatment is expected to have a substantial impact on both the current level of mortality among persons with chronic kidney disease and on technological advance, which in turn affects the rate of decline in mortality rates among kidney patients. Finally, the waiting period between the beginning of dialysis and when benefits begin may have an impact on the pattern of care.

The cost for kidney patients can vary over a very wide range, depending on the administrative policies followed. The cost estimates assume that the program will pay for only the most cost-effective pattern of services for patients for whom dialysis or transplants are clearly appropriate treatment to prolong useful life or reduce pain. Specifically, it is assumed that—

(1) The requirement in the kidney provision for a minimum utilization rate for payment and the authority elsewhere in the 1972 Amendments to limit payment if services are unnecessarily expensive, if services are performed in facilities constructed despite an adverse recommendation by a planning authority, or if more expensive than necessary due to unused capacity—will be used to limit payment to the most cost-effective treatment centers and providers.

(2) The requirement for a medical review board to screen the appropriateness of patients for the proposed treatment procedures and the level of care requirements—will be used to restrict payment to the most cost-effective mode of treatment considering the patient's condition and to patients for whom treatment provides a significant improvement in medical condition.

Departures from this pattern could greatly increase the cost, especially if the provisions are used to finance the creation of a number of partially used treatment centers or to pay the deficits of inefficient programs.

The estimates for patients with kidney failure represent only the most likely among a very wide range of possible costs. Future costs, influenced by changes in medical practice, technology, and administrative policy—are even more uncertain. Although the possible errors in these estimates are large relative to the cost of the care of kidney patients, the potential error in estimating the overall program costs are relatively small, since the care of kidney patients is as a whole a small proportion of the total.

V. ADMINISTRATIVE EXPENSES

In developing incurred administrative expenses, it is assumed that the expense required to settle incurred but unpaid claims would be approximately the same on a percentage basis as required to settle paid claims. The projected administrative expenses are shown in table B13. A comparison of projected administrative expenses and benefits on a cash basis is provided in table B14 together with historical data.

TABLE B11.— PROJECTION OF AGGREGATE INCURRED BENEFITS AND CASH BENEFITS PAID FOR THE AGED IN FISCAL YEARS 1973-76

Fiscal year	Average enrollment (millions)	Benefits incurred		Aggregate benefits paid (millions)
		Per capita	Aggregate (millions)	
1973.....	20.4	\$121.34	\$2,480	\$2,391
1974.....	20.8	129.95	2,703	2,611
1975.....	21.2	146.22	3,096	2,967
1976.....	21.6	165.32	3,571	3,416

TABLE B12.—PROJECTION OF AGGREGATE INCURRED BENEFITS AND CASH BENEFITS PAID FOR DISABLED ENROLLEES AND THOSE WITH CHRONIC KIDNEY DISEASE IN FISCAL YEARS 1974-75¹

Fiscal year	Average enrollment (thousands)	Benefits incurred		Aggregate benefits paid (millions)
		Per capita	Aggregate (millions)	
A. Disabled enrollees:				
1974.....	1,654	\$258.77	\$428	\$279
1975.....	1,762	311.01	548	510
1976.....	1,845	365.85	675	634
B. Enrollees with renal:				
1974.....	9	12,666.67	114	10
1975.....	13	12,538.46	163	146
1976.....	16	13,062.50	209	195

¹ Coverage begins on July 1, 1973.

TABLE B13.—Projected administrative expenses paid in fiscal years 1973-76

Fiscal year:	
1973.....	\$246
1974.....	441
1975.....	445
1976.....	487

TABLE B14.—Ratio of administrative expenses to benefit payments, calendar years 1966-76

Actual experience:	Cash basis
1966.....	¹ 0.586
1967.....	.091
1968.....	.120
1969.....	.106
1970.....	.120
1971.....	.123
1972.....	.125
Projected (for all enrollees):	
1973.....	.124
1974.....	.136
1975.....	.120
1976.....	.120

¹ Excludes expenses before program began.

APPENDIX C.—SUMMARY OF PRINCIPAL PROVISIONS

Public Law 89-97, approved July 30, 1965, amended the Social Security Act by establishing the Supplementary Medical Insurance Program. A summary of its principal provisions, as amended by subsequent legislation up to and including the date of this report, is as follows:

I. ELIGIBLE INDIVIDUALS

Every individual who is over age 65 and either (a) entitled to hospital insurance benefits or (b) is a resident of the United States and is either a citizen or an alien lawfully admitted for permanent residence who has resided in the United States continuously for five years (except with respect to persons convicted or certain specified offenses such as treason, espionage, etc.).

Beginning July 1, 1973 eligibility is extended to disabled persons under 65, who have been entitled to disability insurance benefits for 24 months or more, and to persons who have been receiving hemodialysis for three months or more (coverage terminated one year after a successful kidney transplant).

II. ENROLLMENT PROVISIONS

(a) Persons aged 65 and over on December 31, 1965—voluntary individual election of coverage during period through May 31, 1966, effective July 1, 1966.

(b) Persons attaining age 65 after 1965 whose initial enrollment period begins before March 31, 1973—similar election in the 7-month period centering around

the month of attainment of age 65 (or first subsequent month when eligibility requirements are met), to be effective for month of attaining age 65 if elected in advance (otherwise, effective for first to third month following election).

(c) Persons whose initial enrollment period begins after March 31, 1973—automatic enrollment for those individuals entitled to hospital insurance benefits with coverage beginning in month first eligible (month of attaining age 65, 25th month of eligibility for disability insurance benefits, or three months after the beginning of hemodialysis). In the case of an individual who would otherwise be entitled to hospital insurance benefits but does not establish his entitlement until after the last day of his initial enrollment period, his enrollment shall be deemed to have occurred on the first day of the earlier of the then current or immediately succeeding general enrollment period.

(d) Termination of enrollment—either by failure to pay premiums (for premiums not deducted from retirement benefits) or by election to terminate enrollment at any time (to be effective at the end of the following calendar quarter). An individual who terminates coverage or who failed to enroll in an initial period may reenroll in a general enrollment period (January to March of each year). However, reenrollment is permitted only once.

III. BENEFITS PROVIDED

(a) *Types of benefits*

(1) Physicians (including surgeons and the professional component of anesthesiologist, pathologist, radiologist, and physical medicine in a hospital), (2) services and supplies normally furnished in a physician's office incident to his professional services (including drugs which can not be self-administered), (3) outpatient hospital services, (4) services of independent clinics, (5) home health services, (6) diagnostic x-ray and laboratory tests, (7) x-ray, radium, and radioactive isotope therapy, (8) surgical dressings and splints and other devices used for reduction of fractures and dislocations, (9) rental of durable medical equipment (or purchase thereof if not more expensive), (10) ambulance services in certain circumstances, (11) prosthetic devices, (12) braces and artificial limbs where required due to a change in the patient's physical condition, and (13) manual manipulation of the spine to correct a subluxation (demonstrated by x-rays to exist) by a chiropractor.

(b) *Amount of reimbursement*

Program pays (i) In the case of the professional component of inpatient radiology and pathology, 100% of reasonable costs for those electing to have the hospital reimbursed for their services and 100% of reasonable charges; otherwise, (ii) in the case of home health services, 100% of reasonable charges after the \$60 deductible has been met; (iii) in the case of services received from a group practice prepayment plan electing reimbursement based on costs, 80% of the excess of the reasonable costs of furnishing services to enrollees over the average value of the deductible; (iv) for all other services, 80% of the excess of reasonable charges (or in the case of institutional services, 80% of reasonable costs) over a deductible of \$60 in each calendar year (reduced by any amount applied to meet the deductible during the last quarter of the preceding year). Special limits apply to outpatient care for mental disease (50% coinsurance and \$250 maximum on annual reimbursement), and on home health services (100 visits per calendar year).

(c) *Basis of payment*

Reimbursement on a "reasonable charge" basis to the enrollee or to individual suppliers of services on the basis of an assignment from the enrollee, or on a "reasonable cost" basis to the particular institution for institutional suppliers of services.

The reasonable charge for any service is the lower of the "customary charge" of the provider of the service for the type of service rendered and the "prevailing charge" of all providers of the same type in a geographical area. The customary charge is the median rate charged for a particular type of service by a particular provider to enrollees during the calendar year prior to the fiscal year in which the claim is processed. The prevailing charge for any type of service is the 75th percentile of the distribution of customary charges for that service in an area. Payment is made on the basis of the lowest of the customary, the prevailing, and the actual charge. When payment is made on a reasonable charge basis directly to individual suppliers (by assignment), the reasonable charge determination by the carrier must be accepted as the full charge for the services, and the supplier can-

not bill the patient for amounts in excess of the reasonable charge; otherwise, payment is made to the enrollee on the basis of an itemized bill.

(d) Services not covered

Any service not certified by a physician (and approved upon carrier review) to be necessary for the diagnosis or treatment of an illness, routine procedures followed in eye examinations, routine foot care (including the removal of corns, warts, calluses), elective cosmetic surgery, glasses and hearing aids, services performed by a relative or household member, services performed by a governmental agency (except when it provides services to the public generally as a community institution or agency), cases eligible under workmen's compensation, and services of providers not covered (e.g. prescription drugs, private duty nursing, and dental services).

(e) Administration

By Department of Health, Education, and Welfare, through carriers (such as Blue Shield and insurance companies) who are selected by the Department, according to regulations promulgated by the Secretary of Health, Education, and Welfare. Carriers are paid their reasonable costs of administration.

IV. FINANCING

The Supplementary Medical Insurance system is self-supporting through combined income to the trust fund from premiums and general revenue payments intended to be equal to the incurred cost of benefits and administration, with such margin for contingencies as the Secretary deems appropriate. The incurred cost of the program in any period is the sum of all payments that will be made for services performed in that period, including the administrative cost of making such payments, regardless of when payments are actually made.

The rate of income per month of coverage for which a beneficiary is enrolled is determined by two "adequate actuarial rates", one for the aged and one for the disabled. The trust fund receives twice the applicable adequate actuarial rate for each monthly premium collected, the excess over the premiums coming from general revenues.

(b) The adequate actuarial rates are promulgated by the Secretary of Health, Education, and Welfare before the January 1st preceding each fiscal year—separately for (i) enrollees over age 65 and (ii) enrollees eligible as a result of disability or chronic kidney disease. Each of these rates is the sum of (i) half of the estimated monthly incurred cost per capita for benefits and administration for the applicable enrollees and (ii) a margin for contingencies.

(c) Premiums from enrollees—A standard premium rate for each fiscal year is also promulgated by the Secretary of Health, Education, and Welfare before the January 1st preceding to be the lesser of (i) the adequate actuarial rate for the aged for that fiscal year and (ii) the standard premium rate for the prior fiscal year increased by the rate at which benefits under the OASDI program have increased (or will increase by law) during such prior fiscal year.

Persons who elected not to enroll until more than 3 months after the date of eligibility must pay premiums that are 10% higher for each year not enrolled while eligible.

(d) Government contributions—For each premium payment deposited in the Supplementary Medical Insurance Trust Fund, the excess of (i) twice the appropriate adequate actuarial rate (adjusted if higher than standard premiums are paid) over (ii) the amount of the premium, is transferred to the Trust Fund from General Revenues. If the additional transfers are not made on a timely basis, interest is accrued.

(e) Payment of premiums—by automatic deduction from old-age, survivors, and disability insurance, railroad retirement, or civil service retirement benefits when possible (except for such persons who are public assistance recipients receiving money payments and whose premiums are paid by State agencies). Otherwise, by direct payment, with a grace period determined by the Secretary of Health, Education, and Welfare of up to 90 days. State public assistance agencies may enroll and pay premiums for other persons who are not recipients of money payments but who are eligible under the medical assistance program; at the option of the State, such recipients and other persons who are beneficiaries under the old-age, survivors, and disability insurance program or the railroad retirement program may be included in this group.