

**NOTE:** This document is a scan of the original report. It is not tagged for accessibility. See the accompanying reconstructed document for a version that is tagged for accessibility.



1974 ANNUAL REPORT OF THE BOARD OF  
TRUSTEES OF THE FEDERAL  
SUPPLEMENTARY MEDICAL INSURANCE  
TRUST FUND

---

LETTER

FROM

BOARD OF TRUSTEES  
FEDERAL SUPPLEMENTARY MEDICAL INSURANCE  
TRUST FUND

TRANSMITTING

THE 1974 ANNUAL REPORT OF THE BOARD (NINTH REPORT),  
PURSUANT TO THE PROVISIONS OF SECTION 1841(b) OF THE  
SOCIAL SECURITY ACT, AS AMENDED (42 U.S.C. 1395t(b)(2))



JUNE 3, 1974.—Referred to the Committee on Ways and Means,  
and ordered to be printed

---

U.S. GOVERNMENT PRINTING OFFICE

34-291 O

WASHINGTON : 1974



## LETTER OF TRANSMITTAL

---

BOARD OF TRUSTEES OF THE  
FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND,  
*Washington, D.C., May 31, 1974.*

THE SPEAKER OF THE HOUSE OF REPRESENTATIVES,  
*Washington, D.C.*

SIR: We have the honor to transmit to you the 1974 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund (the ninth such report), in compliance with the provisions of section 1841(b) of the Social Security Act, as amended.

Respectfully,

WILLIAM E. SIMON,  
*Secretary of the Treasury,*  
*and Managing Trustee of the Trust Funds.*

PETER J. BRENNAN,  
*Secretary of Labor.*

CASPAR W. WEINBERGER,  
*Secretary of Health,*  
*Education, and Welfare.*

JAMES B. CARDWELL,  
*Commissioner of Social Security.*



# CONTENTS

---

	Page
The Board of Trustees.....	1
Highlights.....	1
Social security amendments since 1973 report.....	1
Nature of the trust fund.....	2
Summary of the operations of the trust fund, fiscal year 1973.....	3
Advisory Council on Social Security.....	6
Expected operations and status of the trust fund, July 1, 1973, to June 30, 1976.....	7
Actuarial status of the trust fund.....	8
Conclusion.....	11
Appendixes:	
A. Statement of actuarial assumptions and bases employed in determining the adequate actuarial rates and the standard premium rate for the supplementary medical insurance program beginning July 1974.....	13
B. Actuarial methodology and principal assumptions for cost estimates for the SMI program.....	16
C. Summary of principal provisions.....	26

# **1974 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND**

## **THE BOARD OF TRUSTEES**

The Federal Supplementary Medical Insurance Trust Fund, established on July 30, 1965, is held by the Board of Trustees under the authority of section 1841(b) of the Social Security Act, as amended. The Board is comprised of three members who serve in an ex-officio capacity. The members of the Board are the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health, Education, and Welfare. The Secretary of the Treasury is designated by law as the Managing Trustee. The Commissioner of Social Security is Secretary of the Board. The Board of Trustees reports to the Congress once each year, in compliance with Section 1841(b)(2) of the Social Security Act. This Report is the annual report for 1974, the ninth such report.

## **HIGHLIGHTS**

(a) The growth of the supplementary medical insurance trust fund during fiscal 1973 was somewhat higher than estimated in the 1973 Report. Income for fiscal 1973 of \$2.9 billion was up about 6% from fiscal 1972. Expenditures for benefit payments and administration were \$2.6 billion, an increase of about 4% over those for fiscal 1972. The cash balance of the trust fund grew by \$265 million to reach \$746 million by the end of fiscal 1973.

(b) The solvency of the trust fund, which must be measured on an incurred basis, also improved during fiscal 1973, but the financing was still in a deficit position at the end of that year. The deficit decreased from \$368 million at the end of fiscal year 1972 to \$225 million at the end of fiscal year 1973.

(c) In December 1973, the standard premium rate for fiscal year 1975 was promulgated at \$6.70 per month. Appendix A gives a statement of the actuarial assumptions and bases employed by the Secretary of Health, Education, and Welfare in determining this premium rate.

(d) The number of enrollees had by July 1973 reached 20.6 million, about 96% of the total population age 65 and over.

## **SOCIAL SECURITY AMENDMENTS SINCE THE 1973 REPORT**

No major amendments to the Social Security Act have been directed to the Supplementary Medical Insurance Program since the close of fiscal year 1973.

However, a drafting error in P.L. 93-233 specifying the method of computation of automatic cash benefit increases effectively prevents further increases in the SMI standard monthly premium rate at the time of automatic cash benefit increases for years after 1975. This



report reflects this inadvertent premium freeze in fiscal year 1976 figures. The Trustees recommend that future amendments correct this oversight.

#### NATURE OF THE TRUST FUND

The Federal supplementary medical insurance trust fund was established on July 30, 1965, as a separate account in the United States Treasury to hold the amounts accumulated under the supplementary medical insurance program. All the financial operations which relate to the system of supplementary medical insurance are handled through this fund.

The major sources of receipts of the trust fund are (1) premiums paid by eligible persons who are voluntarily enrolled in the program and (2) contributions of the Federal government that are authorized to be appropriated and transferred from the general fund of the Treasury according to a fixed ratio to premiums received based on the applicable adequate actuarial rate promulgated for the period in which payable.

Standard monthly premium rates are promulgated each year by the Secretary of Health, Education, and Welfare. The standard premium rates in effect since the beginning of the program, July 1966, through June 1974, and the rate promulgated for the fiscal year beginning July 1974, are shown in table 1.

Expenditures for benefit payments and administrative expenses under the program are paid out of the trust fund. All expenses incurred by the Department of Health, Education, and Welfare and by the Treasury Department in carrying out the supplementary medical insurance provisions of Title XVIII of the Social Security Act are charged to the trust fund. The Secretary of Health, Education, and Welfare certifies benefit payments to the Managing Trustee, who makes the payment from the trust fund in accordance therewith.

Hospitals, at their option, are permitted to combine their billing for both hospital costs and physician components of radiology and pathology services rendered hospital inpatients by hospital-based physicians. Where hospitals elect this billing procedure, payments are made initially from the hospital insurance trust fund, with reimbursement later to it from the supplementary medical insurance trust fund. The reimbursements so made are on a provisional basis and are subject to adjustment, with appropriate interest allowances, as the actual experience develops and is analyzed.

The Social Security Amendments of 1967 and 1972 authorize the Secretary of Health, Education, and Welfare to develop and conduct a broad range of experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services, while maintaining the quality of such services, under the hospital insurance and supplementary medical insurance programs. The costs of such experiments and demonstration projects are paid out of the hospital insurance and supplementary medical insurance trust funds. The costs paid out of the supplementary medical insurance trust fund are included as part of benefit payments in the financial statements of operations of the trust fund as set forth in subsequent sections of this report.

Congress has authorized expenditures from the trust fund for construction of office buildings and related facilities for the Social Security Administration. The costs of such construction are included on a

current basis as part of the administrative expenses in the financial statements of operations of the trust fund as set forth in following sections of this report. The net worth of the resulting facilities—like the net worth of all other fixed capital assets—is not carried as an asset in such statements.

That portion of the trust fund which, in the judgment of the Managing Trustee, is not required to meet current expenditures for benefits and administration is invested in interest-bearing obligations of the United States Government (including special public-debt obligations described below), in obligations guaranteed as to both principal and interest by the United States, or in certain federally-sponsored agency obligations that are designated in the laws authorizing their issuance as lawful investments for fiduciary and trust funds under the control and authority of the United States or any officer of the United States. Obligations of these types may be acquired on original issue at the issue price or by purchase of outstanding obligations at their market price.

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the trust fund. The law requires that such special public-debt obligations shall bear interest at a rate based on the average market yield (computed by the Managing Trustee on the basis of market quotations as of the calendar month next preceding the date of such issue) on all marketable interest-bearing obligations of the United States forming a part of the public debt which are not due or callable until after the expiration of four years from the end of such calendar month.

TABLE 1.—*Standard monthly premium rates*

Period:	Premium rate
July 1966 to March 1968.....	\$3. 00
April 1968 to June 1970.....	4. 00
Fiscal year:	
1971.....	5. 30
1972.....	5. 60
1973.....	5. 80
1974 <sup>1</sup> .....	6. 30
1975.....	6. 70

<sup>1</sup> In accordance with limitations on the costs of health care imposed under Phase III of the Economic Stabilization Program, the standard premium rate for July and August 1973 was set at \$5.80 and \$6.10, respectively. Effective September 1973, the rate increased to \$6.30.

#### SUMMARY OF THE OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1973

A statement of the income and disbursements of the Federal supplementary medical insurance trust fund during fiscal year 1973 and of the assets of the fund at the beginning and end of the fiscal year is presented in table 2. Comparable amounts for fiscal year 1972 are also shown in the table.

The total assets of the trust fund amounted to \$481 million on June 30, 1972. During fiscal year 1973, total receipts amounted to \$2,902 million and total disbursements were \$2,637 million. Total assets thus increased \$265 million during the year to a total of \$746 million on June 30, 1973.

Of the total receipts, \$1,427 million represented premium payments by (or on behalf of) the participants, an increase of 6.5 percent over

premium payments by participants in the preceding fiscal year. This growth in premiums from participants resulted primarily from (1) the increase from \$5.60 to \$5.80 per month in the standard premium rate that became effective on July 1, 1972, and (2) the expected growth in the number of persons enrolled in the supplementary medical insurance program.

Matching contributions received from the general fund of the Treasury, less a relatively small interest transfer to the general fund, amounted to \$1,430 million. The remaining \$45 million of receipts consisted almost entirely of interest on the investments of the trust fund.

Of the \$2,637 million in total disbursements, \$2,385 million represented benefits paid directly from the trust fund for health services covered under Title XVIII of the Social Security Act and about \$104,000 represented amounts paid under incentive reimbursement arrangements. In addition, transfers were made to the hospital insurance trust fund consisting of \$6 million for inpatient professional radiology and pathology services that were paid initially from the hospital insurance trust fund but that are liabilities of the supplementary medical insurance trust fund. Total benefit payments from the trust fund in fiscal year 1973, therefore, amounted to \$2,391 million, an increase of 6.0 percent over the corresponding amount paid in fiscal year 1972.

The remaining \$246 million of disbursements was for net administrative expenses. Administrative expenses are allocated and charged directly to each of the four trust funds—old-age and survivors insurance, disability insurance, hospital insurance, and supplementary medical insurance—on the basis of provisional estimates. Periodically, as actual experience develops and is analyzed, adjustments to the allocations of administrative expenses and costs of construction for prior periods are effected by interfund transfers, with appropriate interest allowances.

In table 3, the experience with respect to actual amounts of participants' premiums, Government matching contributions, and benefit payments in fiscal year 1973 is compared with the estimates for fiscal year 1973 which appeared in the 1973 Annual Report of the Board of Trustees. The actual experience was relatively close to the estimates.

The assets of the trust fund at the end of fiscal 1973 totaled \$746 million, consisting of \$700 million in the form of obligations of the United States Government and an undisbursed balance of \$46 million. Table 4 shows a comparison of the total assets of the fund and their distribution at the end of fiscal years 1972 and 1973.

The net increase in the par value of the investments held by the fund during fiscal year 1973 amounted to \$222 million. New securities at a total par value of \$3,186 million were acquired during the fiscal year, through the investment of receipts and reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the year was \$2,965 million. Included in these amounts is \$2,905 million in certificates of indebtedness that were acquired and redeemed within the fiscal year.

The effective annual rate of interest earned by the assets of the supplementary medical insurance trust fund during fiscal year 1973 was 6.1 percent. The interest rate on public-debt obligations issued for purchase by the trust fund in June 1973 was 6% percent, payable semiannually.

TABLE 2.—STATEMENT OF OPERATIONS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND DURING FISCAL YEARS 1972 AND 1973

[In thousands]

	Fiscal year—	
	1972	1973
Total assets of the trust fund, beginning of year.....	\$290, 056	\$480, 703
Receipts:		
Premiums from participants:		
Deducted from monthly benefits <sup>1</sup> .....	1, 114, 521	1, 192, 934
Deposited by States.....	137, 943	149, 350
Paid to Social Security Administration <sup>2</sup> .....	87, 588	84, 323
Total premiums.....	1, 340, 052	1, 426, 607
Transfers from general fund of the Treasury:		
Government contributions:		
Matching of participants' premiums received in current fiscal year.....	1, 338, 005	1, 428, 604
Delayed matching of participants' premiums received in prior fiscal years.....	24, 991	2, 047
Total matching contributions.....	1, 362, 995	1, 430, 652
Interest on delayed transfers of Government matching contributions <sup>3</sup> .....	2, 300	—201
Total transfers from general fund of the Treasury.....	1, 365, 295	1, 430, 451
Interest:		
Interest on investments.....	28, 947	43, 070
Interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs.....	51	1, 979
Gross interest.....	28, 998	45, 049
Less interest on transfers to the hospital insurance trust fund for reimbursement of benefits paid therefrom.....	5	—
Net interest.....	28, 993	45, 049
Total receipts.....	2, 734, 341	2, 902, 106
Disbursements:		
Benefit payments:		
Paid directly from the trust fund for costs of—		
Health services.....	2, 248, 820	2, 385, 128
Incentive reimbursement arrangements <sup>4</sup> .....	169	104
Transfers to the hospital insurance trust fund for reimbursement of payments made initially from that fund for costs of—		
Radiology and pathology services <sup>4</sup> .....	6, 000	6, 000
Incentive reimbursement arrangements <sup>5</sup> .....	81	—
Total benefit payments.....	2, 255, 069	2, 391, 232
Administrative expenses:		
Department of Health, Education, and Welfare <sup>6</sup> .....	282, 904	269, 887
Treasury Department.....	57	20
Civil Service Commission.....	104	72
Construction of facilities for Social Security Administration.....	1, 373	1, 064
Interfund transfers due to adjustment in allocation of—		
Administrative expenses <sup>7</sup> .....	4, 042	—24, 953
Construction costs <sup>7</sup> .....	147	—223
Gross administrative expenses.....	288, 627	245, 867
Less receipts from sale of surplus supplies, materials, etc.....	8	6
Net administrative expenses.....	288, 619	245, 861
Total disbursements.....	2, 543, 688	2, 637, 093
Net addition to the trust fund.....	190, 653	265, 014
Total assets of the trust fund, end of year.....	480, 709	745, 722

<sup>1</sup> Transferred from the old-age and survivors insurance and disability insurance trust funds, the railroad retirement account, and the civil service retirement and disability fund.

<sup>2</sup> By certain persons not receiving monthly benefits.

<sup>3</sup> The negative figure for fiscal year 1973 represents a transfer from the supplementary medical insurance trust fund to the general fund of the Treasury and results from a downward adjustment in the interest due on delayed transfers in fiscal year 1972.

<sup>4</sup> For explanation, see text.

<sup>5</sup> Beginning March 1972 incentive reimbursement payments are being made on a current basis from each of the two trust funds, supplementary medical insurance and hospital insurance, so that no transfer was necessary in fiscal year 1973.

<sup>6</sup> Includes administrative expenses of the carriers and intermediaries.

<sup>7</sup> A positive figure represents a transfer from the supplementary medical insurance trust fund to the other social security trust funds. A negative figure represents a transfer to the supplementary medical insurance trust fund from the other social security trust funds.

TABLE 3.—COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND, FISCAL YEAR 1973

[Amounts in millions]

Item	Actual amount	Estimated amount published in 1973 report	Actual as percentage of estimate
Premiums from participants.....	\$1, 427	\$1, 424	100
Government matching contributions.....	1, 430	1, 426	100
Benefit payments.....	2, 391	2, 445	98

Note: In interpreting the figures in the above table, reference should be made to the accompanying text.

TABLE 4.—ASSETS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND, BY TYPE, AT THE END OF FISCAL YEARS 1972 AND 1973

	June 30, 1972		June 30, 1973	
	Par value	Book value <sup>1</sup>	Par value	Book value <sup>1</sup>
Investments in public-debt obligations sold only to this fund (special issues):				
Notes:				
5½-percent, 1979.....	\$232, 150, 000	\$232, 150, 000. 00	\$232, 150, 000	\$232, 150, 000. 00
6¼-percent, 1978.....	245, 925, 000	245, 925, 000. 00	185, 719, 000	185, 719, 000. 00
6¾-percent, 1980.....			281, 762, 000	281, 762, 000. 00
Total investments in public-debt obligations.....	478, 075, 000	478, 075, 000. 00	699, 631, 000	699, 631, 000. 00
Undisbursed balance.....		2, 633, 909. 42		46, 091, 485. 58
Total assets.....		480, 708, 909. 42		745, 722, 485. 58

<sup>1</sup> Par value, plus unamortized premium, less discount outstanding.

## ADVISORY COUNCIL ON SOCIAL SECURITY

The Secretary of Health, Education, and Welfare on April 23, 1974, announced the appointment of an Advisory Council on Social Security under the provisions of section 706 of the Social Security Act. The Council, which consists of a Chairman and 12 members representing organizations of employers and of employees, self-employed persons, and the public, is making a comprehensive study of the old-age and survivors insurance, disability insurance, hospital insurance, and supplementary medical insurance programs.

The Council is required to review the status of the old-age and survivors insurance trust fund, the disability insurance trust fund, the hospital insurance trust fund, and the supplementary medical insurance trust fund in relation to the long-term commitments of the programs. The Council will review the scope of coverage, the adequacy of benefits, and other aspects of these four programs, including their impact on public assistance. The Council is required to submit its final reports to the Secretary of Health, Education, and Welfare no later than January 1, 1975. After the Council's reports are transmitted by the Secretary to the Congress and to the Board of Trustees of each of the trust funds, the Council will cease to exist. The Council's report and recommendations with respect to the supplementary medical insurance program will be included in the next annual report of the Board of Trustees.

EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING  
THE PERIOD JULY 1, 1973, TO JUNE 30, 1976

The projected cash income, disbursements, and balance of the trust fund during the period July 1, 1973 to June 30, 1976 are summarized in table 5, along with a summary of the past transactions of the trust fund through June 30, 1973.

Income to the program is projected to increase by about 29% in fiscal year 1974 over fiscal 1973, due to the increase in the premium rate from \$5.80 per month for fiscal 1973 to \$6.30 per month for fiscal 1974, increased enrollment in the program, and increased government contributions for disabled enrollees. An increase of 13% is projected for fiscal 1975.

Benefit expenditures for fiscal year 1974 are expected to increase by 21% over those for fiscal 1973. This increase is due largely to the extension of medicare coverage to the disabled. Benefit payments for fiscal year 1975 are expected to increase 25% over those for fiscal year 1974.

The estimate of benefit payments for fiscal year 1974 assume an average increase in reasonable charges of 2½% above the 1973 level consistent with the guidelines issued by the price commission. The fiscal 1975 screens are to be updated in the usual manner.

TABLE 5.—ESTIMATED PROGRESS OF SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND (CASH BASIS), FISCAL YEARS 1974-76, AND ACTUAL DATA FOR 1967-73

[In millions]

Fiscal year	Premiums from participants	Government contribu- tions <sup>1</sup>	Benefit payments	Administra- tive expenses	Interest on fund	Balance in fund at end of year <sup>2</sup>
Actual experience:						
1967-----	\$647	\$623	\$664	<sup>3</sup> \$134	\$15	\$486
1968-----	698	634	1,390	143	21	307
1969-----	903	984	1,645	195	23	378
1970-----	936	928	1,979	217	12	57
1971-----	1,253	1,245	2,035	248	17	290
1972-----	1,340	1,365	2,255	288	29	481
1973-----	1,427	1,430	2,391	246	45	746
Estimate of future experience:						
1974-----	1,683	2,008	2,900	<sup>4</sup> 441	55	1,151
1975-----	1,845	2,327	3,623	445	72	1,327
1976-----	1,884	3,004	4,245	487	84	1,567

<sup>1</sup> The payments shown as being from the general fund of the Treasury include certain interest-adjustment items.

<sup>2</sup> Represents only a cash balance; financial status of the program depends on total net assets and liabilities of the program.

<sup>3</sup> Administrative expenses shown include those paid in fiscal 1966 and 1967.

<sup>4</sup> Includes some 1973 administrative expense.

Trust fund withdrawals for administrative expenses are expected to increase to \$441 million in fiscal year 1974. This increase is due largely to an understatement of \$26 million in the administrative expenses allocated to the Supplementary Medical Trust Fund in fiscal 1973, which will be reversed in fiscal 1974 and to the coverage of new beneficiaries. Fiscal 1975 administrative expenses are expected to increase to \$445 million.

The trust fund balance is projected to increase from \$746 million at the beginning of fiscal 1974 to \$1151 million at the end of that year, and to \$1327 million at the end of fiscal 1975.

## ACTUARIAL STATUS OF THE TRUST FUND

*1. Actuarial soundness of the supplementary medical insurance program*

The concept of actuarial soundness, as it applies to the Supplementary Medical Insurance System, is closely related to the concept as it applies to private group insurance. The Supplementary Medical Insurance System is essentially yearly renewable term insurance; and in testing its actuarial soundness, it is not appropriate to look beyond the period for which the premium rate and the level of general revenue financing have been established.

The primary test of actuarial soundness relates to the adequacy of the income for fiscal years not yet completed, but for which the premium rate and the level of general revenue financing have been established. The income for such years should be sufficient to meet the benefits incurred and associated administrative expenses for the period. The law requires the Secretary of Health, Education, and Welfare to establish the income on this basis.

A second test of actuarial soundness is whether the trust fund assets, at the end of the period for which the premium rate and the level of general revenue financing have been established, will be as large as the liabilities—particularly those for services (and associated administrative expenses) that have been performed but for which reimbursement has not yet been made. This test will be met if the primary test of actuarial soundness has been met for all prior periods but it may not be met, even though the financing is currently adequate and the primary test is therefore met, if in the past the income was inadequate to meet incurred benefits and administrative expenses. It is considered desirable that this second test be met, because of the possibility that the financing of the Supplementary Medical Insurance Program might some time be changed, in which event any deficit would become a burden upon the new financing. In addition to the tests of actuarial soundness, a crucial test of the adequacy of the trust fund is that it is never in serious danger of becoming exhausted. This test of adequacy can be met even in the event that neither test of actuarial soundness as described above is met, since the existence of the fund may permit (at least temporarily) the payment of benefits even though the premium rate is inadequate.

*2. Incurred experience of the supplementary medical insurance program*

Both of the tests of actuarial soundness of the Supplementary Medical Insurance program noted above rely on the incurred experience of the program. Cash disbursements for benefits and administrative expenses by themselves are misleading, due to the relatively large liabilities outstanding at any time for benefits and processing costs that must be paid for services already performed. These liabilities result from the lag between the time that services are performed and the time that benefits for them are paid, due to the tendency of enrollees to accumulate bills and submit them together (especially at the end of the year), and the time required by carriers to process and adjudicate the bills received. The liability outstanding at any time for benefits for services performed for which no payment has been made may be referred to as "benefits incurred but unpaid."

Estimates of the amount of benefits incurred but unpaid as of the end of each fiscal year, and of the administrative expenses related to

processing these benefits, appear in table 6. Also included in table 6 are estimates of premiums voluntarily paid in advance and the government matching contributions for such premiums. Since they are paid for services to be performed in a subsequent fiscal year, they are a liability of the program on the valuation date. Offsetting these liabilities are premiums due and uncollected, government matching contributions due but not yet transferred to the trust fund by the Treasury, and the cash and securities in the trust fund.

The incurred experience of the program for any period is obtained by adjusting the cash flow of premiums, matching government contributions, interest, benefit payments, and administrative expenses to an accrual basis by adding the net increase in each asset or liability item during that period to the corresponding item on a "cash" basis. This procedure produces the estimated incurred income and disbursements shown in table 7.

TABLE 6.—SUMMARY OF ESTIMATED ASSETS AND LIABILITIES OF THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM, AT THE END OF FISCAL YEARS 1967-75

[In millions]

	Past experience, as of June 30—						Projected as of June 30—		
	1967	1968	1969	1970	1971	1972	1973	1974	1975
<b>A. Assets:</b>									
Balance in trust fund.....	\$486	\$307	\$378	\$57	\$290	\$481	\$746	\$1,151	\$1,327
Premiums due and uncollected.....	1	1	1	2	2	2	2	2	2
Government contributions due and unpaid.....	25	90	9	18	26	1	-2	2	3
Total assets.....	512	398	388	77	318	484	746	1,155	1,332
<b>B. Liabilities:</b>									
Benefits incurred but unpaid.....	515	625	679	681	727	750	839	1,184	1,368
Administrative cost thereon.....	55	63	75	82	95	98	128	154	178
Premiums collected in advance.....	1	1	2	2	2	2	2	2	2
Government contributions thereon.....	1	1	2	2	2	2	2	2	3
Total liabilities.....	572	690	758	767	826	852	971	1,342	1,551
C. Net Surplus (or deficit).....	-60	-292	-370	-690	-508	-368	-225	-187	-219
D. Ratio of assets to liabilities.....	.90	.58	.51	.10	.38	.57	.77	.86	.86

TABLE 7.—ESTIMATED INCOME AND DISBURSEMENTS INCURRED UNDER SUPPLEMENTARY MEDICAL INSURANCE PROGRAM, FISCAL YEARS 1967-75

[In millions]

Fiscal year	Premiums from participants	Government contributions <sup>1</sup>	Benefit payments	Administrative expenses	Interest on fund	Net of operations in year
<b>Past experience:</b>						
1967.....	\$647	\$647	\$1,179	\$190	\$15	-\$60
1968.....	699	699	1,500	151	21	-232
1969.....	903	904	1,698	210	23	-78
1970.....	936	937	1,982	223	12	-320
1971.....	1,253	1,253	2,081	260	17	+182
1972.....	1,340	1,342	2,278	293	29	+140
1973.....	1,427	1,430	2,480	279	45	+143
<b>Projected:</b>						
1974.....	1,683	2,008	3,245	463	55	+38
1975.....	1,845	2,327	3,807	469	72	-32

<sup>1</sup> Includes interest for any delay in transfer of Government contributions.

<sup>2</sup> Includes administrative expenses incurred prior to the beginning of the program.



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

Fiscal year	Aged	Income			Expenditures			Net
		Rate <sup>1</sup>	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	.10
1975.....		36.00	.05	36.05	33.38	3.32	36.70	-.65

<sup>1</sup> Combined monthly premium and general revenue matching payments.<sup>2</sup> 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 <sup>1</sup>	Number and mix <sup>2</sup>	Unit costs	Number and mix <sup>2</sup>
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

<sup>1</sup> As recognized by the program.

<sup>2</sup> 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,<sup>1</sup> 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

<sup>1</sup> 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.<sup>2</sup>

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.<sup>3</sup> 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

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

<sup>3</sup> 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 <sup>1</sup>	Inpatient radiology and pathology <sup>2</sup>	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

<sup>1</sup> Includes all services on payment records other than for inpatient radiology and pathology.

<sup>2</sup> 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 <sup>1</sup>	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

<sup>1</sup> 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 SERVICES<sup>1</sup>

[In percent]							
Year	Actual fees	Effect of screens <sup>2</sup>	Recognized fees	Residual causes	Effect of denials <sup>3</sup>	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

<sup>1</sup> Increase over prior year.

<sup>2</sup> Change in reduction due to screen from previous to current year.

<sup>3</sup> 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)<sup>1</sup>

[In percent]						
Calendar year—	Physician services <sup>2</sup>	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	

<sup>1</sup> Increase over prior year.

<sup>2</sup> 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 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 10½% 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.<sup>4</sup>

(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.<sup>5</sup>

(iii) The "prevailing charge" for any type of service in a geographical area is defined to be the 75th percentile<sup>6</sup> 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.

<sup>4</sup> 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.

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

<sup>6</sup> 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<sup>1</sup>

[In percent]					
Calendar year	Physician services <sup>2</sup>	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

<sup>1</sup> Increase over prior year.

<sup>2</sup> 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 <sup>1</sup>	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

<sup>1</sup> 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 SERVICES<sup>1</sup>

Year	Actual fees (percent)	Effect of screens <sup>2</sup>	Recognized fees (percent)	Residual causes	Effect of denials <sup>3</sup> (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

<sup>1</sup> Increase over prior year.

<sup>2</sup> Change in reduction due to screen from previous to current year.

<sup>3</sup> 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 CAPITA<sup>1</sup>

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

<sup>1</sup> 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 1974-75<sup>1</sup>

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

<sup>1</sup> 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.....	<sup>1</sup> 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

<sup>1</sup> 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 of 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.