# 1973 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 1973 ANNUAL REPORT OF THE BOARD (8TH REPORT), PURSUANT TO SECTION 1841(b) OF THE SOCIAL SECURITY ACT, AS AMENDED



JULY 16, 1973.—Referred to the Committee on Ways and Means, and ordered to be printed

U.S. GOVERNMENT PRINTING OFFICE

98-649 O

WASHINGTON: 1978

#### LETTER OF TRANSMITTAL

BOARD OF TRUSTEES OF THE FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND, Washington, D.C., July 13, 1973.

The Speaker of the House of Representatives, Washington, D.C.

Sir: We have the honor to transmit to you the 1973 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund (the eighth such report), in compliance with the provisions of section 1841(b) of the Social Security Act, as amended.

Respectfully,

George P. Shultz,
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.
Arthur E. Hess,
Acting Commissioner of Social Security.



# CONTENTS

	Page
The Board of Trustees	1
Highlights	1
Social security amendments since 1972 report	1
Nature of the trust fund	<b>2</b>
Detailed operations of the trust fund, fiscal year 1972	3
Report of the 1971 Advisory Council on Social Security	6
Expected operations and status of the trust fund, July 1, 1972, to June 30,	_
1975	7
Actuarial status of the trust fund	8
Conclusion	11
Appendices:	
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 1973	13
B. Actuarial methodology and principal assumptions for cost estimates for the SMI program	15
C. Summary of principal provisions	28

## 1973 ANNUAL REPORT OF THE BOARD OF TRUST-EES 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 1973, the eighth such report.

HIGHLIGHTS

(a) The growth of the supplementary medical insurance trust fund during fiscal 1972 was close to that predicted in the 1972 report. Income for fiscal 1972 of \$2.7 billion was up nearly 9 percent from fiscal 1971. Expenditures for benefit payments and administration were \$2.5 billion, an increase of more than 11 percent over those for fiscal 1971. The cash balance of the trust fund grew by nearly \$200 million to reach \$481 million by the end of fiscal 1972.

(b) The solvency of the trust fund, which must be measured on an incurred basis, also improved during fiscal 1972, but the financing was still in a deficit position at the end of that year. The deficit decreased from \$391 million at the end of fiscal year 1971 to \$285 million

at the end of fiscal year 1972.

(c) In December 1972, the standard premium rate for fiscal year 1974 was promulgated at \$6.30 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 1972 reached 20.3 million,

about 96 percent of the total population age 65 and over.

## SOCIAL SECURITY AMENDMENTS SINCE 1972 REPORT

Since the close of fiscal year 1972 there have been important amendments to the Social Security Act substantially affecting the supplementary medical insurance program. These were contained in Public Law 92–603, approved October 30, 1972.

Unlike last year's report, which could not consider the changed situation when and if legislation then partway through the legislative process might be enacted, this report fully recognizes the new legislation. Only those portions of the report dealing with fiscal 1972 and earlier are unaffected.

Public Law 92-603, the Social Security Amendments of 1972, among other things, extended coverage to disabled beneficiaries under age 65 who have been eligible for cash benefits for at least 2 years and to certain persons suffering from chronic kidney disease, and provided that the premium rate for these newly eligible persons would be the same as for those age 65 and older. These amendments also limited the increase in the premium rate to the rate of increase in the benefits under the old-age, survivors, and disability insurance system. The effect of these two new provisions is that the financing of the program will rely to a greater extent than formerly on general revenue financing.

NATURE OF THE TRUST FUND

The Federal supplementary medical insurance trust fund was established on July 30, 1965, as a separate account in the U.S. Treasury to hold the amounts accumulated under the supplementary medical

insurance program.

The major sources of receipts of the trust fund are (1) premiums paid by eligible persons who elect to participate 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.

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 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 Treasury which makes the payments from

the trust fund.

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.

Congress has authorized expenditures from the trust funds 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 funds as set forth in following sections of this report. The net worth of the resulting facilities, as in the case with all other non-financial assets, is not carried as an asset

in such statements.

That portion of each 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 U.S. Government, 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.

In addition, 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 have maturities fixed with due regard for the needs of the trust fund and 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 ex-

piration of 4 years from the end of such calendar month.

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.

## DETAILED OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1972

A statement of the income and disbursements of the Federal supplementary medical insurance trust fund during fiscal year 1972 and of the assets of the fund at the beginning and end of the fiscal year is presented in table 1. Also appearing in the table are comparable amounts for fiscal year 1971.

The total assets of the trust fund amounted to \$290 million on June 30, 1971. By the end of fiscal year 1972, the assets amounted to

\$481 million, an increase of \$191 million.

Total receipts of the fund amounted to \$2,734 million. Of this total, \$1,340 million represented premium payments by (or on behalf of) the participants, an increase of 7.0 percent over premium payments by participants in the preceding fiscal year. This growth in premiums from participants resulted primarily from the increase from \$5.30 to \$5.60 per month in the standard premium rate that became effective on July 1, 1971.

Matching contributions received from the general fund of the Treasury, plus interest on delayed receipts, amounted to \$1,365 million. This amount consisted of \$1,338 million in contributions match-

ing participants' premiums received in fiscal year 1972, \$11 million in contributions matching participants' premiums received in fiscal year 1971, \$14 million in contributions matching participants' premiums received in fiscal year 1970, and \$2 million in interest on delayed receipts of matching contributions. (The remaining deficiency of \$2 million in contributions matching participants' premiums received in fiscal year 1972 was received from the general fund of the Treasury in July 1972 after the close of fiscal year 1972.)

The remaining \$29 million of receipts consisted almost entirely of

interest on the investments of the trust fund.

Disbursements from the fund during fiscal year 1972 totaled \$2,544 million. Of this total, \$2,249 million represented benefits paid directly from the trust fund for covered health services and \$169,000 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, and \$81,000 for costs of incentive reimbursement arrangements, that were paid initially from the hospital insurance trust fund but that are liabilities of the supplementary medical insurance trust fund. Net benefit payments from the trust fund in fiscal year 1972, therefore, amounted to \$2,255 million, an increase of 10.8 percent over the corresponding amount paid in fiscal year 1971.

The remaining \$289 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 transfers among the four trust funds, with ap-

propriate interest allowances.

Table 2 compares the actual experience in fiscal year 1972 with the estimates presented in the 1971 and 1972 Annual Reports of the Board of Trustees. The estimated amounts of participants' premiums, Government matching contributions, and benefit payments in both reports

were quite close to the actual experience.

The assets of this fund at the end of fiscal year 1972, amounting to \$481 million, consisted of \$478 million in the form of obligations of the U.S. Government and \$3 million in undisbursed balances. Table 3 shows a comparison of the total assets of the fund and their distribu-

tion at the end of fiscal years 1971 and 1972.

The net increase in the par value of the investments held by the fund during fiscal 1972 amounted to \$221 million. New securities at a total par value of \$2,945 million were acquired during the fiscal year, through the investment of receipts and reinvestment of funds made available from the maturity of securities. The par value of securities redeemed during the year was \$2,724 million. Included in these amounts is \$2,713 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 1972 was 6.2 percent. The interest rate on public-debt obligations issued for purchase by the trust fund in June 1972 was 53/4 percent, compounded

semiannually.

TABLE 1.—STATEMENT OF OPERATIONS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND DURING FISCAL YEARS 1971 AND 1972

#### (in thousands)

Total assets of the trust fund, beginning of year		Fiscal yea	ır—
Premiums from participants:   Deducted from monthly benefits   1, 030, 541   1, 114, 521     Deposited by States	_	1971	1972
Premiums from participants:   1,030,541   1,114,52	Total assets of the trust fund, beginning of year	\$57, 181	\$290, 056
Deducted from monthly benefits 1	Receipts:		-1
Total premiums.	Deducted from monthly benefits !	1, 030, 541 131, 472	137, 943
Transfers from general fund of the Treasury:   Government contributions:   Matching of participants' premiums received in current fiscal year.   1, 241, 945   1, 338, 005     Delayed matching of participants' premiums received in prior fiscal years.   3, 130   24, 991     Total matching contributions.   1, 245, 075   1, 362, 995     Interest on delayed transfers of Government matching contributions.   2, 245, 267   2, 300     Total transfers from general fund of the Treasury.   1, 245, 282   1, 365, 295     Interest:   Interest on investments.   16, 182   28, 947     Interest on transfers to the hospital insurance trust fund for reimbursement of benefits paid initially therefrom   796   -5     Interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs   290   51     Total interest.   17, 268   28, 993     Total receipts.   2, 515, 486   2, 734, 341     Disbursements:   1, 997, 639   2, 248, 829     Interest on investment arrangements   1, 997, 639   2, 248, 820     Interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs   2, 515, 486   2, 734, 341     Disbursements:   17, 268   28, 993     Total receipts.   2, 515, 486   2, 734, 341     Disbursements:   1, 997, 639   2, 248, 820     Interest on investment arrangements   1, 997, 639   2, 248, 820     Interest on transfers of the trust fund for costs of—   1, 997, 639   2, 248, 820     Interest on transfers of the trust fund for costs of—   37, 300   6, 000     Read interest on transfers of the cost of transfers of the hospital insurance trust fund for reimbursement of payments made initially from that fund for costs of—   37, 300   6, 000     Interest on the solidal insurance trust fund for reimbursement of payments made initially from that fund for costs of—   37, 300   6, 000     Interest on the solidal insurance trust fund for costs of—   37, 300   6, 000     Interest on the solidal insurance trust fund for costs of—   37, 3	Paid to Social Security Administration 2	90, 923	87,588
Matching of participants' premiums received in current fiscal year.   1,241,945   1,338,005   1,947   1,348,005   1,241,945   1,338,005   1,241,945   1,338,005   1,241,945   1,338,005   1,341,945	Total premiums	1, 252, 936	1, 340, 052
Delayed matching of participants' premiums received in prior fiscal years   3,130   24,991	Government contributions:  Matching of participants' premiums received in current fiscal	1 241 045	1 220 005
Total matching contributions	Delayed matching of participants' premiums received in prior		
Total transfers from general fund of the Treasury   1, 245, 282   1, 365, 295		<del></del>	
Interest on investments	Interest on delayed transfers of Government matching contributions	1, 245, 075	
Interest on investments   16, 182   28, 947     Interest on transfers to the hospital insurance trust fund for reimbursement of benefits paid initially therefrom 3   796   75     Interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs 3   290   51     Total interest	Total transfers from general fund of the Treasury	1, 245, 282	1, 365, 295
ment of benefits paid initially therefrom 3   796   -5     Interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs 3   290   51     Total interest   17, 268   28, 993     Total receipts   2, 515, 486   2, 734, 341     Disbursements:   Benefit payments:   Benefit payments:   Paid directly from the trust fund for costs of—  Health services   1, 997, 639   2, 248, 820     Incentive reimbursement arrangements 4   160     Transfers to the hospital insurance trust fund for reimbursement of payments made initially from that fund for costs of—  Radiology and pathology services 4   37, 300   6, 000     Incentive reimbursement arrangements 4   37, 300   6, 000     Incentive reimbursement arrangements 5   81     Total benefit payments   2, 034, 999   2, 255, 069     Administrative expenses:   Department of Health, Education, and Welfare 5   254, 665   282, 904     Treasury Department   44   57     Civil Service Commission   96   104     Construction of facilities for Social Security Administration   202   1, 3/3     Interfund transfers due to adjustment in allocation of—  Administrative expenses 6   -7, 462   4, 042     Construction costs 6   91   147     Gross administrative expenses   247, 637   288, 627     Less receipts from sale of surplus supplies, materials, etc.   25   8     Net administrative expenses   247, 612   288, 619     Total disbursements   2, 282, 610   2, 543, 688     Net addition to the trust fund   232, 876   190, 653	Interest on investments	16, 182	28, 947
Total interest of administrative expenses and construction costs 3.   290   51	ment of benefits paid initially therefrom 3	796	- 5
Total receipts	Interest on amounts of interfund transfers due to adjustment in allo- cation of administrative expenses and construction costs 3		51
Disbursements:   Benefit payments:   Paid directly from the trust fund for costs of—   Health services.   1, 997, 639   2, 248, 820   Incentive reimbursement arrangements 4   160   Transfers to the hospital insurance trust fund for reimbursement of payments made initially from that fund for costs of—   Radiology and pathology services 4   37, 300   6, 000   Incentive reimbursement arrangements 4   59   81	Total interest	17, 268	28, 993
Benefit payments:   Paid directly from the trust fund for costs of—  Health services.   1, 997, 639   160     Health services   1, 997, 639   160     Transfers to the hospital insurance trust fund for reimbursement of payments made initially from that fund for costs of—  Radiology and pathology services 4   37, 300   6, 000     Incentive reimbursement arrangements 4   59   81     Total benefit payments   2, 034, 999   2, 255, 069     Administrative expenses:   Department of Health, Education, and Welfare 5   254, 665   282, 904     Treasury Department   44   57     Civil Service Commission   96   104     Construction of facilities for Social Security Administration   202   1, 3/3     Interfund transfers due to adjustment in allocation of—  Administrative expenses 6   -7, 462   4, 042     Construction costs 6   91   147     Gross administrative expenses   247, 637   288, 627     Less receipts from sale of surplus supplies, materials, etc.   25   8     Net administrative expenses   247, 612   288, 619     Total disbursements   2, 282, 610   2, 543, 688     Net addition to the trust fund   232, 876   190, 653			
Transfers to the hospital insurance trust fund for reimbursement of payments made initially from that fund for costs of—Radiology and pathology services 4	Benefit payments: Paid directly from the trust fund for costs of— Health services		
Total benefit payments   2, 034, 999   2, 255, 069	Transfers to the hospital insurance trust fund for reimbursement of payments made initially from that fund for costs of— Radiology and pathology services 4	37, 300	6, 000
Department of Health, Education, and Welfare 5   254, 665   282, 904   7   7   7   7   7   7   7   7   7		2, 034, 999	2, 255, 069
Civil Service Commission	Department of Health, Education, and Welfare 5	254, 665	
Administrative expenses   -7, 462   4, 042     Construction costs   91   147     Gross administrative expenses   247, 637   288, 627     Less receipts from sale of surplus supplies, materials, etc   25   8     Net administrative expenses   247, 612   288, 619     Total disbursements   2, 282, 610   2, 543, 688     Net addition to the trust fund   232, 876   190, 653	Civil Service Commission Construction of facilities for Social Security Administration	96	104
Less receipts from sale of surplus supplies, materials, etc.       25       8         Net administrative expenses.       247, 612       288, 619         Total disbursements.       2, 282, 610       2, 543, 688         Net addition to the trust fund.       232, 876       190, 653	Administrative expenses 6		
Total disbursements   2, 282, 610   2, 543, 688	Gross administrative expenses Less receipts from sale of surplus supplies, materials, etc		
Net addition to the trust fund 232, 876 190, 653	Net administrative expenses.	247, 612	288, 619
Total assets of the trust fund, end of year. 290, 056 480, 709		2, 282, 610 232, 876	2, 543, 688 190, 653
	Total assets of the trust fund, end of year	290, 056	480, 709

 <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.
 2 By certain persons not receiving monthly benefits.
 3 A positive figure represents a transfer of interest to the supplementary medical insurance trust fund from the other social security trust funds. A negative figure represents a transfer of interest from the supplementary medical insurance trust fund to the other social security trust funds.

For explanation, see text.

For explanation, see text.

Includes administrative expenses of the carriers and intermediaries.
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 2.—COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND, FISCAL YEAR 1972

#### [Amounts in millions]

		Comparison of actual experience with estimates for fiscal year 1972 published in—					
		1972 R	eport	1971 Report			
Item	Actual amount	Estimated amount	Actual as percentage of estimate	Estimated amount	Actual as percentage of estimate		
Premiums from participants Government matching contributions Benefit payments	\$1, 340 1, 365 2, 255	\$1, 355 1, 377 2, 240	99 99 101	\$1,339 1,339 2,300	100 102 98		

TABLE 3.—ASSETS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND, BY TYPE, AT THE END OF FISCAL YEARS 1971 AND 1972

	June 30, 1971			June 30, 1972		
	Par value	Book val	ue 1	Par value	Book value	
Investments in public-debt obligations sold only to this fund (special issues): Notes:						
5%-percent, 1979 6%-percent, 1978 7%-percent, 1977	\$254, 641, 000 2, 786, 000	\$254, 641, 000 2, 786, 000	). 00 ). 00	\$232, 150, 000 245, 925, 000	\$232, 150, 000. 00 245, 925, 000. 00	
Total, investments in public-debt obligations	257, 427, 000	257, 427, 000	. 00	478, 075, 000	478, 075, 000. 00	
Undisbursed balances Total, assets		32, 629, 310 290, 056, 310			2, 633, 909. 42 480, 708, 909. 42	

<sup>5</sup> Par value, plus unamortized premium, less discount outstanding.

#### REPORT OF THE 1971 ADVISORY COUNCIL ON SOCIAL SECURITY

Pursuant to section 706 of the Social Security Act, an Advisory Council on Social Security was appointed in May 1969 and submitted its reports on April 5, 1971. The Council made a number of recommendations which would directly affect the financing policy, the actuarial methodology, and the adequacy of the trust funds. The Trustees have the responsibility to carefully evaluate these recommendations and transmit their views, as part of the Trustees' reports.

The Trustees discharged this responsibility to a large extent in the 1972 reports. However, one of the Council's financing recommendations has now been more completely evaluated.

4. Securities Issued by Federally Sponsored Agencies.—The Council believes that there is adequate statutory authority for investment of trust fund money in securities issued by federally sponsored agencies. The Council recommends that the Managing Trustee establish a policy of purchasing a portion of new obligations issued by such agencies as investments for the trust funds.

The Board of Trustees recognizes that statutory authority exists for trust fund investment in securities of federally sponsored agencies; and that the trust funds might earn a small amount of additional interest if the Council's recommendation were followed. The Board is nonetheless opposed to this recommendation under present procedures for Federal agency financing. The Secretary of Treasury's dual roles

as Managing Trustee and as chief financial officer of the Government would create conflicts of interest that do not now exist. Purchase of securities of agencies privately owned but federally sponsored would become an expenditure in the Federal accounts, would add to the Federal deficit, and would deprive the President and the Congress of their full range of choice in determining priorities. It is possible that these difficulties may be resolved if plans for a Federal financing bank materialize, in which case the Board of Trustees will reconsider their position.

EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING THE PERIOD JULY 1, 1972 TO JUNE 30, 1975

The projected cash income, disbursements, and balance of the trust fund during the period July 1, 1972 to June 30, 1975 are summarized in table 4, along with a summary of the past transactions of the trust

fund through June 30, 1972.

Income to the program is projected to increase by about 5 percent in fiscal year 1973 over fiscal 1972, due to the increase in the premium rate from \$5.60 per month for fiscal 1972 to \$5.80 per month for fiscal 1973 and to increase enrollment in the program. A larger increase is projected for fiscal 1974 as a result of the premium rate of \$6.30 per month promulgated by the Secretary for fiscal 1974.

Benefit expenditures for fiscal year 1973 are expected to increase by 8 percent over those for fiscal 1972. The rate of increase takes into account the increase in the deductible from \$50 to \$60 at the beginning of 1973. Benefit payments for fiscal 1974 are expected to increase by 23 percent over those for fiscal 1973; the large increase is due to the exten-

sion of medicare coverage to the disabled.

The estimates of benefit payments for fiscal years 1973 and 1974 were developed using assumptions that are consistent with guidelines issued by the Price Commission limiting physician fee increases and the increases in reasonable charges as recognized by the program to  $2\frac{1}{2}$  percent per year.

TABLE 4.—ESTIMATED PROGRESS OF SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND (CASH BASIS), FISCAL YEARS 1973-75, AND ACTUAL DATA FOR 1967-72

Fiscal year	Premiums from participants	Government contributions <sup>1</sup>	Benefit payments	Admin- istrative expenses	Interest on fund	Balance in fund at end of year <sup>2</sup>
Actual experience:						*400
1967	\$647	<b>\$</b> 623	\$664	3 \$134	\$15 21	\$486
1968	699	634	1, 390 1, 645 1, 979 2, 035 2, 255	143	21	307
1969	903 936	984	1,645	195	23	378 57
1970	936	928	1, 979	217	11	290
1971	1, 253 1, 340	1, 245	2, 035	247	17 29	481
1972	1, 340	1, 365	2, 255	288	29	401
Estimate of future ex-						
perience:				070	33	647
1973	1, 424	1, 426	2, 445 3, 003 3, 624	272	33 49	1, 032
1974	1,700	2, 031	3,003	392	70	1, 379
1975	1, 737	2, 615	3, 624	451	/0	1,373

 <sup>1</sup> The payments shown as being from the general fund of the Treasury include certain interest-adjustment items.
 2 Represents only a cash balance; financial status of the program depends on total net assets and liabilities of the program.
 3 Administrative expenses shown include those paid in fiscal 1966 and 1967.

Trust fund withdrawals for administrative expenses are expected to decrease 6 percent to \$272 million in fiscal year 1973. This decrease is due to an overstatement of \$25 million in the administrative expenses allocated to the supplementary medical insurance trust fund in fiscal 1972, which will be reversed in fiscal 1973. Fiscal 1974 administrative expenses are expected to increase to \$392 million. A large part of this increase is due to the coverage of new beneficiaries.

The trust fund balance is projected to increase from \$481 million at the beginning of fiscal 1973 to \$647 million at the end of that year,

and to \$1032 million at the end of fiscal 1974.

### 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 thought 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 5. Also included in table 5 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 6.

TABLE 5.—SUMMARY OF ESTIMATED ASSETS AND LIABILITIES OF THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM, AT THE END OF FISCAL YEARS 1967-74

	Past experience as of June 30—					Projected as of June 30—		
	1967	1968	1969	1970	1971	1972	1973	1974
A. Assets:  Balance in trust fund  Premiums due and uncollected  Government contributions due and unpaid	\$486	\$307	\$378	\$57	\$290	\$481	\$647	\$1, 032
	1	1	1	2	2	2	2	2
	25	90	9	18	26	2	2	2
Total assets	512	398	388	77	318	485	651	1, 036
B. Liabilities:  Benefits incurred but unpaid  Administrative cost thereon  Premiums collected in advance  Government contributions thereon	529	640	696	598	637	689	752	1, 029
	55	66	72	62	68	77	116	179
	1	1	1	2	2	2	2	2
	1	1	1	2	2	2	2	2
Total liabilities	586	708	770	664	709	770	872	1, 212
	-74	-310	-382	-587	-391	-285	-221	-176
	(0. 87)	(0.56)	(0.50)	(0.12)	(0. 45)	(0.63)	(0. 75)	(0, 85)

TABLE 6.—ESTIMATED INCOME AND DISBURSEMENTS INCURRED UNDER SUPPLEMENTARY MEDICAL INSURANCE PROGRAM, FISCAL YEARS 1967-74

	mi		

Fiscal year	Premiums from participants	Government contribu- tions !	Benefit payments	Administra- tive expenses	Interest on fund	Net of operations in year
Past experience:						
1967	\$647	\$647	\$1, 193	2 \$190	\$15	_74
1968	\$647 699	699	1,501	154	21	—74 —236
1969	903	904	1, 701	201	23	_72
1970	936	937	1, 701 1, 881	208	11	-205
1971	1, 253	1, 253	2, 074	253	17	196
1972	1, 340	1, 342	2, 307	298	29	106
Projected:	-,	4, 4	_, -,			•••
1973	1.424	1, 424	2, 508	309	33	64
1974	1, 424 1, 700	2, 031	3, 280	455	49	45

### (3) Adequacy of income in fiscal years 1973-1974

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 1974 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 7 compares the monthly income incurred per capita for fiscal years 1971-1974 with the estimated incurred expenditures. As can be seen by examining this table, the primary test of actuarial soundness is met in each of these periods if the estimates prove to be reliable.

TABLE 7.--COMPARISON OF INCOME AND EXPENDITURES INCURRED PER CAPITA PER MONTH IN FISCAL YEARS 1971-74

		Income			Expenditures		
Fiscal year	Rate 1	Interest	Total	Benefits	Adminis- trative	Total	Net
1971 1972 1973 1974:	\$10.60 11.20 11.60	\$0.07 .12 .13	\$10.67 11.32 11.73	\$8. 77 9. 57 10. 23	\$1.07 1.23 1.31	\$9. 84 10. 79 11. 59	\$0.83 .53 .14
Aged Disabled	12.60 29.00	. 16 . 05	12. 76 29. 05	11. 14 24. 88	1. 50 2. 72	12.64 27.60	<sup>2</sup> . 13 <sup>2</sup> 1. 45

Combined monthly premium and general revenue matching payments.
 Margin included for contingencies in financing for fiscal year 1974.

## (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 1973 is demonstrated by table 5, which shows the accumulated deficit at the end of fiscal years 1967 through 1974 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 11/2 years, due to an initial premium rate that proved

Includes interest for any delay in transfer of Government contributions.
 Includes administrative expenses incurred prior to the beginning of the program.

to be about 8 percent 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 further, to \$176 million by the end of fiscal year 1974, which will be 15 percent of the liabilities that are outstanding and 4 percent of the disbursements estimated to be incurred during fiscal 1975. 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 1

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. Overall 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 1971 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 percent 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 incurred during fiscal years 1973 and 1974. If this proves to be the case, the sol-

<sup>&</sup>lt;sup>1</sup> For a more detailed discussion of the accuracy of past estimates, see appendix B, section 6.

vency of the program will be improved by the reduction of the deficit and the resulting increase in the ratio of assets to liabilities. 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.