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1970 ANNUAL REPORT OF THE BOARD OF  
TRUSTEES OF THE FEDERAL SUPPLEMENTARY  
MEDICAL INSURANCE TRUST FUND

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LETTER

FROM

BOARD OF TRUSTEES  
FEDERAL SUPPLEMENTARY MEDICAL  
INSURANCE TRUST FUND

TRANSMITTING

THE 1970 ANNUAL REPORT OF THE BOARD (5TH REPORT),  
PURSUANT TO THE PROVISIONS OF SECTION 1841(b) OF THE  
SOCIAL SECURITY ACT, AS AMENDED



APRIL 2, 1970.—Referred to the Committee on Ways and Means,  
and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE

37-011 O

WASHINGTON : 1970



## LETTER OF TRANSMITTAL

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BOARD OF TRUSTEES OF THE FEDERAL  
SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND,  
*Washington, D.C., April 1, 1970.*

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

SIR: We have the honor to transmit to you the 1970 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund (the 5th such report), in compliance with the provisions of section 1841(b) of the Social Security Act, as amended.

Respectfully,

DAVID M. KENNEDY,  
*Secretary of the Treasury,*  
*and Managing Trustee of the Trust Funds.*

GEORGE P. SHULTZ,  
*Secretary of Labor.*

ROBERT H. FINCH  
*Secretary of Health, Education, and Welfare.*

ROBERT M. BALL  
*Commissioner of Social Security*  
*and Secretary, Board of Trustees.*

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# 1970 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL SUPPLEMENTARY MEDICAL IN- SURANCE TRUST FUND

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## 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.

## FISCAL YEAR HIGHLIGHTS

The fiscal year 1969 was the third full year of operation of the supplementary medical insurance program insofar as both premiums and benefit payments are concerned (benefits were first available on July 1, 1966, and premium collections started then).

Premiums collected in fiscal year 1969 amounted to \$903 million, while the matching contributions from the general fund of the Treasury amounted to \$984 million. The excess of \$81 million in Government matching funds for fiscal year 1969 resulted essentially from making up the deficiency in Government matching for the two prior fiscal years.

Total receipts of the trust fund amounted to \$1,911 million in fiscal year 1969, an increase of 41 percent over the preceding fiscal year (primarily due to the increase in the premium rate that was effective in April 1968). In addition to premiums and Government contributions, receipts consisted of \$23 million in interest on investments.

Total disbursements from the trust fund in fiscal year 1969 amounted to \$1,840 million, an increase of 20 percent over the preceding year (primarily because of the increase in benefit payments due to greater utilization of medical services and higher costs thereof). Of this amount, \$1,645 million was paid out for benefits (this amount is based on Treasury statements; certain additional amounts have been identified by carriers as benefit withdrawals in fiscal year 1969 that did not clear through the Treasury before July 1, 1969). The benefit payments in fiscal year 1969 were about 18 percent higher than those of the preceding fiscal year, when they amounted to \$1,390 million. The remaining \$195 million in fiscal year 1969 was for administrative expenses.

There was an excess of total income over total outgo amounting to \$71 million. Accordingly, the total assets of the trust fund increased from \$307 million on June 30, 1968, to \$378 million on June 30, 1969,



but by December 31, 1969, they had decreased to \$199 million (as a result of the inadequate premium rate that was promulgated for fiscal year 1970 and as a result of the transfer of \$108 million to the hospital insurance trust fund with respect to certain costs for radiology and pathology services during April 1968 through September 1969 that were paid by that trust fund but that are liabilities of the supplementary medical insurance trust fund).

After the close of the fiscal year—in December 1969—the standard premium rate for the period July 1970 through June 1971 was promulgated, at \$5.30 per month. Appendix I gives a statement of the actuarial assumptions and bases employed by the Secretary of Health, Education, and Welfare in arriving at this premium rate. The law requires that this statement be made public at the time the promulgation of the premium rate is made, and such statement was published in the Federal Register for December 31, 1969.

No amendments to the Social Security Act affecting this program were made in fiscal year 1969 or in the succeeding 6-month period.

## SUMMARY OF THE OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1969

A statement of the income and disbursements of the Federal supplementary medical insurance trust fund during fiscal year 1969 and of the assets of the fund at the beginning and end of the fiscal year is presented in table 1.

The total assets of the trust fund amounted to \$307 million on June 30, 1968. By the end of fiscal year 1969, the assets amounted to \$378 million, an increase of \$71 million.

Total receipts of the fund amounted to \$1,911 million. Of this total, \$903 million represented premium payments by—or on behalf of—the enrollees, an increase of 29 percent over premium payments by enrollees in the preceding fiscal year. This growth is largely attributable to the increase in the standard premium rate from \$3 to \$4 per month that became effective in April 1968. Since this increase in the standard premium rate became effective in the latter part of fiscal year 1968, fiscal year 1969 was the first full year during which it was operative.

TABLE 1.—STATEMENT OF OPERATIONS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND DURING  
THE FISCAL YEAR 1969

Total assets of the trust fund, June 30, 1968.....	\$306,703,383.68
Receipts, fiscal year 1969:	
Premiums from participants:	
Deducted from benefits <sup>1</sup> .....	750,754,631.43
Deposited by States.....	75,852,109.60
Collected by Social Security Administration <sup>2</sup> .....	76,214,145.24
Total premiums.....	902,820,886.27
Transfers from general fund of the Treasury:	
Government matching contributions.....	983,145,978.58
Interest on delayed transfer of Government matching contributions.....	1,140,697.00
Total transfers from general fund of the Treasury.....	984,286,675.58
Interest:	
Interest on investments.....	23,514,663.20
Less interest on amounts of interfund transfers for reimbursement of administrative expenses and construction costs.....	48,865.00
Net interest.....	23,465,798.20
Total receipts.....	1,910,573,360.05

TABLE 1.—STATEMENT OF OPERATIONS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND DURING THE FISCAL YEAR 1969—Continued

Disbursements, fiscal year 1969:	
Benefit payments.....	1,644,842,355.93
Administrative expenses:	
Department of Health, Education, and Welfare <sup>1</sup> .....	193,726,117.00
Treasury Department.....	12,022.03
Civil Service Commission.....	73,987.00
Reimbursement to old-age and survivors insurance trust fund due to adjustment in allocation of administrative expenses for fiscal year 1968.....	325,099.00
Reimbursement to old-age and survivors insurance and disability insurance trust funds for costs of construction for fiscal year 1968.....	550,000.00
Gross administrative expenses.....	194,687,225.03
Less receipts from sale of surplus supplies, materials, etc.....	26,970.97
Net administrative expenses.....	194,660,254.06
Total disbursements.....	1,839,502,609.99
Net addition to the trust fund.....	71,070,750.06
Total assets of the trust fund, June 30, 1969.....	377,774,133.74

<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> With respect to uninsured persons and insured persons not receiving monthly benefits.

<sup>3</sup> Includes administrative expenses of the carriers.

Matching contributions received from the general fund of the Treasury, plus interest on part of such transfers that were delayed, amounted to \$984 million. This amount included \$24 million for the deficiency in Government matching contributions in fiscal year 1967, along with \$1 million interest thereon, and \$64 million for the deficiency in fiscal year 1968—all of which was transferred to the trust fund in July 1968. (An amount covering the deficiency in fiscal year 1969, some \$8 million, along with interest thereon, and interest on the deficiency in fiscal year 1968 was transferred to the trust fund after the close of fiscal year 1969, in February 1970.)

The remaining \$23 million consisted of the interest on the investments of the trust fund less the interest on amounts of interfund transfers between this trust fund and the other three trust funds, old-age and survivors insurance, disability insurance, and hospital insurance.

Disbursements from the fund during fiscal year 1969 totaled \$1,840 million. Of this total, \$1,645 million was for benefit payments, and \$195 million was for net administrative expenses. Administrative expenses are allocated and charged directly to each of the four trust funds on the basis of provisional estimates. Periodically, as actual experience develops and is analyzed, adjustments to the allocations of administrative expenses for prior periods are effected by interfund transfers, with appropriate interest allowances.

Table 2 compares the actual experience in the fiscal year 1969 with the estimates presented in the 1969 Annual Report of the Board of Trustees. The estimated premium collections and Government matching contributions were very close to the actual experience. The estimated benefit payments were 6 percent lower than the actual experience. Estimated assets at the end of the fiscal year were 37 percent higher than the actual assets, largely because of the difference between estimated and actual benefit payments.

The assets of this fund at the end of fiscal year 1969, amounting to \$378 million, consisted of \$358 million in the form of obligations

of the U.S. Government and \$20 million in undisbursed balances. Table 3 shows a comparison of the total assets of the fund and their distribution at the end of fiscal years 1968 and 1969.

New securities at a total par value of \$2,109 million were acquired during the fiscal year, through the investment of receipts and the reinvestment of funds made available from the maturity of securities. The par value of securities redeemed during the year was \$2,032 million. A summary of transactions for the fiscal year, by type of security, is presented in table 4.

TABLE 2.—COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND, FISCAL YEAR 1969

[Amounts in millions]

Item	Actual amount	Estimated amount published in 1969 report	Estimate as percentage of actual
Premiums from enrollees .....	\$903	\$905	100
Government matching contributions .....	983	983	100
Benefit payments <sup>1</sup> .....	1,714	1,606	94
Assets, end of year <sup>1</sup> .....	309	424	137

<sup>1</sup> The actual amounts have been adjusted to take into account the effect of the transfer (in October 1969) made from this trust fund to the hospital insurance trust fund to reimburse for the cost of certain physician radiology and pathology services which were paid at first from the latter trust fund, but were an obligation of the supplementary medical insurance trust fund. The amount of such transfer that related to services rendered in fiscal year 1969 was \$69,000,000. This adjustment was made so that the actual experience would be presented on a basis consistent with the basis on which the estimates shown in the 1969 annual report were prepared.

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

TABLE 3.—ASSETS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND, BY TYPE, AT END OF FISCAL YEARS 1968 AND 1969

	June 30, 1968		June 30, 1969	
	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:				
4½ percent, 1974 .....	\$274,886,000	\$274,886,000.00	\$134,238,000	\$134,238,000.00
5½ percent, 1975 .....	6,527,000	6,527,000.00	6,527,000	6,527,000.00
6½ percent, 1976 .....			217,206,000	217,206,000.00
Total investments in public-debt obligations...	281,413,000	281,413,000.00	357,971,000	357,971,000.00
Undisbursed balances .....		25,290,383.68		19,803,133.74
Total assets .....		306,703,383.68		377,774,133.74

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

TABLE 4.—STATEMENT OF TRANSACTIONS IN PUBLIC-DEBT SECURITIES FOR THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND DURING THE FISCAL YEAR 1969

[All amounts represent par values]

	Acquisitions	Dispositions
Obligations sold only to this fund (special issues):		
Certificates of indebtedness:		
5½ percent, 1969	\$144,905,000	\$144,905,000
5¾ percent, 1969	316,165,000	316,165,000
5½ percent, 1969	380,071,000	380,071,000
5¾ percent, 1969	144,206,000	144,206,000
6 percent, 1969	170,399,000	170,399,000
6¾ percent, 1969	282,987,000	282,987,000
6¼ percent, 1969	314,419,000	314,419,000
6½ percent, 1969	138,403,000	138,403,000
Notes:		
4¾ percent, 1974		140,648,000
6½ percent, 1976	217,206,000	
Total transactions	2,108,761,000	2,032,203,000

### EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING THE PERIOD JULY 1, 1969, TO JUNE 30, 1972

The actual progress of the supplementary medical insurance trust fund on a cash basis during fiscal years 1967 through 1969 appears in table 5. Cash income during those fiscal years exceeded cash disbursements by \$378 million, leaving a balance in the trust fund of this amount as of June 30, 1969. This amount was about \$350 million less than the benefit payments and processing costs related thereto based on services furnished prior to June 30, 1969, that would subsequently be claimed, adjudicated, and paid.

Disbursements for benefits and administrative costs in fiscal year 1970 are now estimated at \$2,165 million—on an accrual basis—somewhat higher than the actuarial projections for fiscal year 1970, made in December 1968, of \$1,967 million.<sup>1</sup> About \$85 million of this difference is due to the retroactive reimbursement to the hospital insurance trust fund for certain radiology and pathology services rendered prior to fiscal year 1970.

TABLE 5.—ESTIMATED PROGRESS OF SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND (CASH BASIS), FISCAL YEARS 1970-72, AND ACTUAL DATA FOR 1967-69

[In millions]

Fiscal year	Premiums from participants	Government contributions <sup>1</sup>	Benefit payments	Administrative expenses	Interest on fund <sup>1</sup>	Balance in fund at end of year
Actual experience:						
1967	\$647	\$623	\$664	<sup>2</sup> \$134	\$15	\$486
1968	699	634	1,390	142	20	307
1969	903	984	1,645	195	23	378
Estimate of future experience:						
1970	922	928	1,949	216	4	66
1971	1,242	1,245	2,078	236	10	250
1972 <sup>3</sup>	1,257	1,257	2,243	278	15	258

<sup>1</sup> The payments shown as being from the General Fund of the Treasury do not include any interest-adjustment items (which are included in the interest column).

<sup>2</sup> Administrative expenses shown include those incurred in fiscal 1966 and 1967.

<sup>3</sup> Experience that would result if the standard premium rate remained at \$5.30 per month after June 1971.

<sup>1</sup> See table 8 of the 1969 Trustees Report, according to "estimates based on projections of physician fees and utilization of services."

In contrast, income in fiscal year 1971 will probably more than cover cash disbursements, resulting in a small cash surplus in that period, although there will continue to be a large deficit, on an accrual basis, resulting from previous inadequate premium rates. If the standard premium rate of \$5.30 per month that has been promulgated for fiscal year 1971 is continued in fiscal year 1972, this estimate shows an almost exact balance between income and outgo for fiscal year 1972; however, if that is to be the experience expected, a higher premium rate than \$5.30 would be required, since the rate is to be determined on an accrual basis, thus reflecting the larger incurred costs arising, so that the incurred but unpaid amounts will be increased.

#### ACTUARIAL STATUS OF THE TRUST FUND

##### *(1) Actuarial status of program dependent on accrued experience*

The actuarial status of the program, and of the trust fund, can appropriately be measured only on an accrual basis; that is the solvency of the trust fund depends on the services performed, on the basis of which benefits must be paid. 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. This lag is due to the \$50 deductible which must be accumulated before any benefits are payable, 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.

This 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 such benefits incurred but unpaid as of the end of each calendar year, and of the administrative expenses related to processing these benefits, appear in table 6. Also included in table 6 are estimates of the excess of premiums collected in advance over premiums due and uncollected, and of Government matching contributions due but not yet transferred to the trust fund.

The actuarial status of the program and the financial status of the trust fund at any time can be found by adjusting the balance in the trust fund account by the net of these asset and liability items on that date (as in item C of table 5). The actuarial experience of the program for any period can be obtained by adjusting the cash flow of premiums, matching Government contributions, benefit payments, and administrative expenses to an accrual basis by adding the net increase in each asset or liability item during the period to the corresponding item on a cash basis for that period.

TABLE 6.—SUMMARY OF PROJECTED ASSETS AND LIABILITIES OF THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM, AT END OF CALENDAR YEARS 1966-69

(In millions)

	As of December 31			
	1966	1967	1968	1969
<b>A. Assets:</b>				
Premiums due and uncollected, less premiums collected in advance	—\$3	\$1	\$3	\$3
Government matching contributions due and unpaid, less such contributions with respect to premiums paid in advance	319	30	5	12
Actual balance in trust fund	122	412	421	199
<b>Total assets</b>	<b>438</b>	<b>443</b>	<b>429</b>	<b>214</b>
<b>B. Liabilities outstanding:</b>				
Benefits incurred but unpaid	395	508	667	648
Administrative cost for processing that are related to benefits incurred but unpaid	38	55	71	81
<b>Total liabilities</b>	<b>433</b>	<b>563</b>	<b>738</b>	<b>729</b>
<b>C. Net actuarial surplus</b>	<b>5</b>	<b>—120</b>	<b>—309</b>	<b>—515</b>

The dependence of the actuarial status of the program on the accrued experience is recognized in section 1839(b)(2), in which it is stated that the premium rate "shall be such amount as the Secretary estimates to be necessary so that the aggregate premiums for such 12-month period will equal one-half of the total for the benefits and administrative costs which he estimates will be *payable* from the Federal Supplementary Medical Insurance Trust Fund for such 12-month period" (italics supplied). Similarly, an assessment of the actuarial status of the program and of the financial status of the trust fund for any period must be made on the basis of estimates of the benefits and administrative expenses "payable . . . for" (i. e., accrued in such period).

The accrual basis of measuring the actuarial status of the supplementary medical insurance program is a reasonable, even essential, procedure. This approach, if successfully carried out, assures that the benefit costs actually incurred in a particular premium period will be met by the premiums paid by the enrollees during that period. Thus, since the enrollee group is not the same from year to year, there would otherwise be the inequity of some persons paying for other person's costs.

(2) *Necessary limitations on accuracy of estimates of past and future experience*

There are many difficulties in projecting the cost of a service benefit program that are not encountered in projecting the cost of cash benefit programs, due to the many economic and social factors involved. This is especially so as to the rate at which physician fee increases will be recognized by the program and as to the increase in utilization of services that continues to result from having placed physician services within the financial means of over 95 percent of those aged 65 or older. Further difficulties result from the absence of firm estimates of the present and immediate past experience of the program, on which projections of future experience can be based (as discussed in app. IV); and any errors in the former are necessarily incorporated into the latter. The resulting estimates of the 1969 experience could vary as much as 10 percent from the actual experience, and estimates for later years could vary further from the actual experience.

Final conclusions as to the accrued experience of the program for 1968 or 1969 will not be possible until the deadlines for filing claims based on services performed then have passed, all claims have been adjudicated and decided by carriers, and payment records covering all benefit payments have been prepared by carriers and forwarded to the Social Security Administration.

(3) *"Expected" estimates*

The financing of this program is essentially different from that for the cash benefit programs in that the premium is only set in December of each year for a 1-year period beginning the following July; consequently, estimates are needed only for 1½ years into the future (although due to the lags mentioned and the difficulties in obtaining reliable data from the program, the forecasting period is really 2½ to 3½ years). Thus, there is not the same need for estimates of the highest-cost and lowest-cost experience that might be reasonably expected over many years into the future that are used in considering the cost of the old-age, survivors, and disability insurance and hospital insurance programs, so that the financing of the system can be set at the level thought most likely to be actually required (i.e. a "maximum likelihood" estimate).

The "expected" estimates of the per capita costs of benefits and administrative expenses that were accrued during calendar years 1966-69 and those anticipated for calendar years 1970-72 are given in Appendix I. Since the \$50 deductible applies to each calendar year, these costs can be developed only for calendar-year periods; however, the premium rate is determined for fiscal-year periods (except for the initial period July 1966 through March 1968 and the period from April 1968 through June 1969). The prorated average monthly rate of these costs for the periods for which a particular premium rate was forecast are as follows:

Period	Applicable premium rate	Benefit payments <sup>1</sup>	Admini- strative costs <sup>1</sup>	Total dis- bursements <sup>1</sup>
July 1966 to December 1967.....	\$3	\$5.71	\$0.74	\$6.45
January 1968 to March 1968 <sup>2</sup> .....	3	6.75	.81	7.56
April 1968 to June 1969.....	4	7.76	.89	8.65
July 1969 to June 1970.....	4	8.30	.98	9.28

<sup>1</sup> Assuming disbursements paid due to the carryover deductible are accrued in the year paid (see app. IV for explanation).

<sup>2</sup> The premium-rate forecast was not implemented due to action of Congress.

Although the law requires that the promulgated premium rate should be determined by considering only the estimated incurred benefit costs and administrative expenses, interest is normally earned on the trust fund assets as a result of the lag between payment of premiums and settlement of claims. For example, if the premium rate is exactly adequate to meet the benefit costs and administrative expenses on an accrual basis, the program will show a surplus due to these interest earnings. It was intended that such earnings would provide a small additional margin for contingencies or to build a modest contingency reserve.

When interest earnings on an accrual basis are taken into consideration, the deficiencies indicated—on a monthly per capita basis—are reduced slightly, as indicated in the following table:

Period	Gross deficiency	Effect of interest	Net deficiency
July 1966 to December 1967.....	\$0. 45	\$0. 11	\$0. 34
January 1968 to March 1968.....	1. 56	. 16	1. 40
April 1968 to June 1969.....	. 65	. 17	. 48
July 1969 to June 1970.....	1. 28	. 20	1. 08

These estimates are based on the assumptions that there is a lag of 5 months between the payment of premiums and the settlement of claims, that benefit payments for each month in the period in question are equal to the average for the period, and that the interest earnings are those of special issues during such period. Interest earned in the first period was reduced somewhat due to the failure of the General Fund to make the matching payments during the first 6 months of the program. Although these payments were made up subsequently—by a lump-sum payment in January 1967—no interest was earned by the program with respect to this delay. It should be emphasized that this concept of the effect of interest contains certain artificialities, because no account is taken of the fact that there are deficits on an incurred basis which are never paid off and which will reduce the interest income in future years below the amounts shown. However, the method does provide a useful index of the relative value of the interest that is earned on the funds from each period.

The premium rate for the period from July 1966 through December 1968, was about 7 percent lower than the combined benefits and administrative expenses accrued during this period. The slightly unfavorable experience during this period resulted primarily from an increase of approximately 13 percent in the average fees charged by physicians between July 1965—when the premium rate was determined—and July 1967—the approximate mid-point of the period in which the benefits were paid—as compared with the 6-percent increase assumed for this period. Further, the administrative expenses were higher than originally estimated; the actual ratio of administrative expenses to benefit payments on an accrual basis was 10 percent in 1967 and 12 percent in 1968, as against the initial estimate of 8 percent.

No specific premium rate was promulgated for the period January through March 1968, due to a special action of Congress continuing the \$3 rate until the 1967 amendments went into effect on April 1, 1968. Consequently, a much larger deficit occurred in this period.

A premium rate of \$4 was promulgated for the 15-month period April 1968 through June 1969. This rate proved to be inadequate by 11 percent, due to the following factors:

(a) A severe influenza epidemic in November 1968 through January 1969 added, for the entire premium-rate period, an estimated 30 cents per capita per month to disbursements.

(b) Physician fees, utilization of physician services, and the cost and utilization of institutional services covered by the program continued to rise more than estimated, due partially to



continuing inflationary conditions. The rise in cost and utilization of outpatient hospital and clinic services and of home-health agency services was especially pronounced (and has continued).

(c) Administrative costs continued to rise faster than benefit costs, and to exceed those estimated.

A premium rate of \$4 was also promulgated for fiscal year 1970, despite actuarial recommendations that a premium rate of at least \$4.40 would be required. Actually, it now appears that the estimate of the fiscal year 1969 base which was used to estimate the premium rate for fiscal year 1970 was too low, in part because of the influenza epidemic that occurred in the middle of fiscal year 1969. In other words, the per capita cost for fiscal year 1969—instead of being somewhat less than \$8 per month, as was thought to be the case in December 1968—is now estimated to be \$8.73 per month. Similarly, the per capita cost for fiscal year 1970 is now estimated to be about \$9.28 per month (instead of \$8.80), or about 6 percent higher than for fiscal year 1969. This relative increase of 6 percent would, of course, be somewhat higher—actually 8 percent—if the effect of the influenza epidemic in fiscal year 1969, which caused unusually high experience, were eliminated.

*(4) Effect of administrative action to contain rising costs*

In December 1968, the decision was made by the Secretary to hold the standard premium rate for the supplementary medical insurance program at the \$4 level through fiscal year 1970. On the basis of information then available, it was thought that the cost for benefit payments and administrative expenses for fiscal year 1969 would be slightly less than \$8 per month per capita, although it is now clear that, when all bills for services furnished in that period have been paid, the cost is more likely to be about \$8.73 (see appendix I), although it would have been about \$8.58 if there had not been the significant influenza epidemic then. A variety of steps were taken at that time by the Social Security Administration designed, insofar as possible, to hold the benefit cost to as low a point as possible.

Increases in allowed charges were restricted, starting with January 1969, as follows:

(a) Customary charge to be increased only in individually identified highly unusual situations where equity clearly requires such an adjustment.

(b) Until July 1970, prevailing charges to be increased only on the approval of the Social Security Administration.

The administrative steps taken at that time also included new standards of carrier performance (developed during 1968 with the aid of consultant experts and the Health Insurance Benefits Advisory Council). Under these new standards, the definition of prevailing charges was refined (i) to place further restrictions on the proportion of charges that would be covered in full, and (ii) generally to preclude changes in these limits more often than annually after June 1970. In addition, the definition of the customary charge of a physician was refined to preclude upward adjustments unless there is adequate evidence that the new higher fees have been in effect for a substantial period of time, and to relate physician charges for purchased laboratory services to the charges made by laboratories to physicians.

In addition, the following actions were taken to control utilization, and prevent fraud and unethical practices:

- (a) Instructions provided to all carriers on methods of appraising and improving claims review.
- (b) Tabulation and distribution to carriers of data on physicians with highest amounts of reimbursement and analysis of results.
- (c) Issuance of more exacting criteria governing when physical therapy services may be paid for under the program.
- (d) Increased staffing for, and emphasis on, program integrity and on fraud detection and prevention.
- (e) Changes in regulations to permit questionable practices to be referred to medical societies.
- (f) Increased investigation of allegations of fraud against the program, and referral of cases to the Justice Department for consideration of prosecution.

While the administrative actions that were taken did not contain the cost of the protection provided under the program to a level that could be met by a \$4 standard premium rate, they appear to have mitigated the increase in cost that might otherwise have been expected. One indication of the effect of the policies adopted with respect to recognition of increases in physician fees is that, during fiscal year 1969, the program recognized only a 3-percent increase in the general level of physician fees, although nationwide the actual increases in physician fees averaged between 6 and 7 percent. Furthermore, during that fiscal year, there was an increase in the rate of denial of claims.

Efforts to administer the program in a way that will constrain overutilization and fee escalation have continued through the current fiscal year. By December 1969, about 30 percent of the claims<sup>1</sup> submitted were reduced or denied. The resulting savings to the program are estimated, on the basis of data submitted by the carriers, to be at a rate of about \$155 million a year (these savings include both those arising under the previous procedure for determining reasonable charges and those arising under the new procedures described earlier in this section). At the same time, about 6½ percent of claims submitted were being denied as noncovered.

(5) *Estimates of the past accrued experience*

The estimates for the past accrued experience of the supplementary medical insurance program for calendar years 1966-69 appear in table 7.

The trust fund balances shown in the various tables presented in this report do not include the contingency reserve that was authorized to be available until December 31, 1969, and has now expired. The size of this reserve was \$18 times the estimated number of persons who were eligible to participate in the program on July 1, 1966, if they had so elected. Any amount appropriated and drawn would have been repayable without interest from future income of the program.

<sup>1</sup> A claim is a bill submitted for payment which contains one or more charges for services rendered. In the tabulation process, if any one of the charges on a claim is reduced or denied, then that claim is counted as a claim being reduced or denied. Thus, the percentage of the claims being reduced does not represent the percentage of the separate charges being reduced.

TABLE 7.—ESTIMATED INCOME AND DISBURSEMENTS PAYABLE (ACCRUAL BASIS) UNDER SUPPLEMENTARY MEDICAL INSURANCE PROGRAM, CALENDAR YEARS 1966-69

[In millions]

Calendar year	Premiums from participants	Government contributions	Benefit payments <sup>1</sup>	Administrative expenses <sup>1</sup>	Interest on fund	Net of operations in year	Accumulated surplus at end of year
1966.....	\$319	\$319	\$523	<sup>2</sup> \$112	\$2	\$5	\$5
1967.....	644	644	1,310	127	24	-125	-120
1968.....	834	834	1,678	199	20	-189	-309
1969.....	914	914	1,846	206	18	-206	-515
Total 1966-69.....	2,711	2,711	5,357	644	64	-515	-515

<sup>1</sup> Assuming disbursements paid due to the carryover deductible were accrued during the year paid.<sup>2</sup> Administrative expenses shown include those incurred in 1965 and 1966.

As can be seen by examination of table 6, the program netted an estimated surplus of \$5 million on an accrual basis during calendar year 1966, an abnormal period due to the application of the full \$50 deductible in a 6-month period and due to considerable nonrecurring startup expenses. Due to the inadequacy of the \$3 premium rate in the initial premium period, July 1966 through December 1967 (by about 7 percent), the benefit payments and administrative expenses incurred exceeded accrued income during calendar year 1967 by an estimated \$125 million, leaving an estimated deficit of \$120 million on an accrual basis for the initial 1½-year period. The estimated accrued deficit increased during 1968 by \$189 million to reach \$309 million by December 31, 1968, and increased by \$206 million during 1969 to reach an estimated \$515 million as of December 31, 1969. Interest earnings of about \$20 million per year have been earned during the 1967-69 period.

As explained previously, the large positive balance in the trust fund is a result of the natural delay between the date that services are performed and the date on which benefit payments made on the basis of the services are paid. The balance in the fund during 1966-68 was unusually large due to the newness of the program and the lack of familiarity of many enrollees with reimbursement insurance. The interest earned on these unusually large balances will contribute toward meeting the net accrued deficit in the future. Thus, interest income derived from the balances built up by those enrolled during 1966-67 will contribute toward reducing the deficit incurred in that period.

#### (6) Past experience on a cash basis

The income and disbursements of the trust fund on a "cash" basis for calendar years 1966-69 appear in table 8. Cash income exceeded cash disbursements during 1966-67 by a large margin, resulting in a cash balance in the trust fund at the end of 1967 of \$412 million, although the program actually had an estimated net deficit of \$125 million on that date, due to the large liabilities outstanding on account of incurred but unpaid claims (as shown in table 5). Cash disbursements were slightly lower than cash income during calendar year 1968 despite the inadequacy of the \$3 premium rate during the first quarter of the year, and the balance in the trust fund increased to \$421 million at the end of the year. In 1969, however, due to the promulgation of an actuarially inadequate rate, disbursements ex-

ceeded income by a large margin, resulting in a reduction of 50 percent in the trust fund, to \$199 million as of December 31, 1969. Further, interest receipts in succeeding years will be reduced as a result, requiring higher premium rates.

TABLE 8.—PROGRESS OF SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND (CASH BASIS),  
CALENDAR YEARS 1966-69

[In millions]

Calendar year	Premiums from participants	Government contributions <sup>1</sup>	Benefit payments	Administrative expenses	Interest on fund <sup>2</sup>	Balance in fund at end of year
1966.....	\$322	.....	\$128	<sup>2</sup> \$74	\$2	\$122
1967.....	640	\$933	1,197	110	24	412
1968.....	832	859	1,519	183	20	421
1969.....	914	907	1,865	196	18	199
Total, 1966-69.....	2,708	2,699	4,709	563	64	199

<sup>1</sup> The payments shown as being from the general fund of the Treasury do not include any interest-adjustment items (which are included in the interest column).

<sup>2</sup> Administrative expenses shown include those incurred in 1965 and 1966.

#### (7) *Summary of actuarial status of program*

The actuarial status of the program and the financial status of the trust fund depend on the determination and measurement of the accrued income and benefit payments and administrative expenses accrued under the program. Due to the small inadequacy of the initial \$3 rate, there was an estimated net deficit in the operations of the program from July 1966 through December 1967 of about 7 percent, and hence in the estimated accrued balance at the end of this period. However, due to the normal delay between the time that services were furnished and the time at which benefits were claimed on the basis of these services, there was an adequate cash balance in the trust fund, and this balance was adequate through fiscal year 1969.

The premium rate of \$5.30 that is set for the period July 1970 through June 1971 will probably be sufficient to meet the benefit costs and applicable administrative expenses during that period. Accordingly, the estimated net deficit will be slightly reduced during the period (but will nonetheless be of a large size).

Due to the promulgation of an actuarially inadequate rate for fiscal year 1970, however, the balance in the trust fund has been decreasing at a rapid rate during fiscal year 1970. Provided that experience is not very unfavorable, however, the trust fund should prove adequate to cover the deficit in current operations through June 1970, when a premium rate of \$5.30, which is estimated to be actuarially adequate, will take effect.

#### CONCLUSION

The actual future course of the supplementary medical insurance program in the period immediately ahead depends on assumptions concerning inflation, as well as rates of utilization of medical services. The future experience is subject to important variations, depending on administrative policy and the way that policy is carried out.

Actuarial estimates for the supplementary medical insurance program have been developed on the basis of various alternative assumptions concerning these factors. On the one hand, if inflation continues

and the program recognizes most of the resulting increase in physicians' fees (with a 1-year delay), the estimate showing an accrued cost of \$10.20 per month per capita will probably turn out to be correct. This estimate is based on the assumption that physicians' fees will rise and that benefit payments as compared to physicians' charges will continue at approximately the same ratio in fiscal year 1971 as in the past.

It is important to note that the rate of reduction in charges before reimbursement has been increasing. For the period July 1966 through June 1967, the reductions averaged 2.6 percent, and they gradually rose to 3.1 percent for July 1967 through June 1968, and to 5.2 percent for July 1968 through June 1969. The estimates underlying the promulgated \$5.30 rate, which includes a small margin for contingencies, also assume that improved carrier administration of the program will result in some further increases in the rate of reduction of charges, and also that there will be some further reductions in the program recognition of services of doubtful validity which would compensate for the normal expected growth in the utilization of services.

## APPENDICES

### APPENDIX I. STATEMENT OF ACTUARIAL ASSUMPTIONS AND BASES EMPLOYED IN ARRIVING AT THE AMOUNT OF THE STANDARD PREMIUM RATE FOR THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM BEGINNING JULY 1970\*

There follows a statement of actuarial assumptions and bases employed in arriving at the amount of the standard premium rate for the supplementary medical insurance program for the period July 1970 through June 1971. The standard premium rate is that rate which is payable by those who enroll in their initial enrollment period and by those who enroll in a general enrollment period that terminates less than 12 months after the close of their initial enrollment period.

The actuarial determination has been made on the basis of the actual operating experience under the program. Virtually complete operating-experience figures for the 6 months of 1966 and for 1967 are now available, but because of the timelag in the submission of bills for this program, figures for 1968 are not quite complete, and only partial data for 1969 are available.

#### ANALYSIS OF DATA ON A CASH BASIS

Current figures for cash expenditures under the program are available on a complete, accurate basis, but these figures taken alone are misleading because they do not take into account the liabilities arising from the natural delay in benefit payments, which are not made until well after the date that services were received. Such delay is due to the tendency of enrollees to accumulate a number of bills before submitting a claim, the inherent delays by physicians, other suppliers of services, and enrollees in making requests for payment, and the time required by the carriers and intermediaries to adjudicate and pay claims. The data on a "cash" basis are presented first, since they are the base from which the incurred figures needed for the premium-rate determination are developed.

The balances in the supplementary medical insurance trust fund at the end of various selected typical past months are as follows (in millions):

Month:	<i>Balance</i>
January 1967 <sup>1</sup> -----	\$467
March 1967-----	570
December 1967-----	412
July 1968-----	403
December 1968-----	421
June 1969-----	378
October 1969-----	242

<sup>1</sup> Balances for months in 1966 were unduly low, because no federal matching payments were made until January 1967.

As compared with the balance of \$242 million in the supplementary medical insurance trust fund at the end of October 1969, there were at that time substantial outstanding liabilities incurred for services rendered during the previous months of operation of the program, most of which had not yet been submitted for claims payment—an estimated \$800 million approximately. It is expected that the trust-fund balance will continue to decrease during the remainder of fiscal year 1970, because the actuarially inadequate premium rate of \$4 per month which was promulgated in December 1968 will still be in effect throughout this period. It is estimated that the trust fund balance will reach approximately \$100 million on June 30, 1970.

\*This statement was published in the Federal Register for December 31, 1969 (34 F.R. 249).

On the basis of claims and administrative expenses paid (cash basis), the average monthly per capita expenditures of the program for the 21 months in the first premium period, July 1966 through March 1968, amounted to \$5.12. Similarly, the average monthly per capita expenditures on a cash basis in the second premium period, April 1968 through June 1969, amounted to \$8.05. Finally, the average monthly per capita expenditures (cash basis) for the first 5 months of the third premium period, July 1969 through June 1970, amounted to \$8.84.

#### ANALYSIS OF DATA ON AN INCURRED BASIS

The figures on a cash basis need to be adjusted for the estimated increase in liability that took place during the period for benefits that will be paid for services rendered during the period, but that had not been paid at the end of the period (and the accompanying administrative expenses). In other words, the premium rate must be set on an accrual or incurred basis, rather than a cash basis.

Estimates on an incurred basis for the 21 months involved in the first premium period (July 1966 through March 1968) indicate that benefits and administrative expenses per capita exceeded income from premiums and matching government contributions by \$.65 per month (i.e., 32½ cents each), or by 11 percent relatively. These estimates are based on virtually complete experience data. If account is taken of the interest earnings of the trust fund, this deficit is reduced to \$.57 per month, or 9½ percent relatively. If the comparison is made for the 18-month period, July 1966 through December 1967, for which the combined rate of \$6 originally applied (having been extended 3 months by legislation in 1967), the differential under-estimate would have been 6 percent (taking into account the effect of the interest earnings of the trust fund).

Estimates on an incurred basis for the 15 months involved in the second premium period (April 1968 through June 1969), indicate that the total per capita cost exceeded income from premiums and matching government contributions by \$.65 per month, or by 8 percent of the combined rate of \$8. These estimates are based on moderately complete experience data. If account is taken of the interest earnings of the trust fund, this deficit is reduced to \$.55 per month, or 7 percent relatively.

Similar figures on an incurred basis for the third premium period (July 1969 through June 1970) necessarily must be based largely on estimates of the experience which will develop. Estimates for this period (which are described in more detail later, especially as to assumptions and methodology) indicate that the total per capita cost will exceed income from premiums and matching government contributions by about \$1.28 per month, or by 16 percent relatively. If account is taken of the interest earnings of the trust fund, this estimated deficit is reduced to \$1.22 per month, or 15 percent relatively.

It should be noted that this large deficit for the third premium period would not have occurred if the actuarially-determined and recommended premium rate of \$4.40 had been promulgated, instead of the rate of \$4 which was promulgated. If there had not been the administrative action to defer recognition of increases in physicians' fees for reimbursement purposes, a \$4.40 rate would have resulted in an estimated deficit (after allowing for the higher interest receipts) of about \$0.48 to \$0.53 per capita per month, or about 6 percent relatively. Such estimated deficit takes into account the element that the costs of the program were apparently reduced by \$0.10 to \$0.15 per capita per month by such administrative action. It is possible—although not susceptible of proof—that the promulgation of the higher rate (\$4.40) in itself would have led to higher program costs than were actually experienced, because of the psychological effect of having the Government predict a rise in physicians' fees.

In any event, it cannot be emphasized too strongly that the base for the estimate of the premium rate now to be promulgated for the fourth premium period (July 1970 through June 1971) is a presently-experienced cost requiring a standard premium rate of at least \$4.60 and possibly \$4.70 per month, and not the \$4 which is currently being collected.

#### BASIC ESTIMATE OF FUTURE EXPERIENCE ON AN INCURRED BASIS

In estimating the cost of the program for July 1970 through June 1971 it is necessary to provide for the long-term trend toward greater utilization of medical services (including the effects of the discovery and more frequent use of new, highly expensive medical techniques) and the long-term upward trend of the general earnings level and the general price level, which will be reflected in higher physicians' fees, higher costs for other covered services, and higher administrative

expenses. In the estimates in this section, the minimum reasonable assumptions as to future increases have been made. Certain other estimates based on somewhat higher cost assumptions are discussed in a later section.

For the purpose of estimating the necessary premium rate for July 1970 through June 1971 it was assumed that, in comparing calendar year 1969 with 1968, the combined effect of increases in physicians' fees and costs of other covered medical services and of increases in utilization would be an increase of 5½ percent. The corresponding figure for calendar year 1970 as compared with 1969 is 7½ percent, while the rate used for 1971 as compared with 1970 is 8½ percent. The breakdown of these aggregate increases into the three components is as follows:

Calendar year	[In percent]		
	Assumed increase over previous year		
	Physicians' fees <sup>1</sup>	Costs of other covered services <sup>2</sup>	Utilization of services
1969.....	2	15	3
1970.....	4	14	3
1971.....	6	13	2

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

<sup>2</sup> Including effect of increased utilization of such services which is in excess of assumed general increase in utilization.

It should be observed that the relatively low rate of increase for 1969 over 1968 reflects the deferment of recognition of increases in physicians' fees for reimbursement purposes that was put into effect by regulations at the end of 1968.

The rates of increase for calendar years 1970 and 1971 are based on the assumption that such deferment will be moved forward successively by 1 year—i.e., that the deferment applicable from July 1970 through June 1971 will be based on the situation as to physician fees during 1969. It should also be noted that these assumed rates of increase take into account the fact that the costs of covered non-physician services, such as hospital outpatient care and home health services, which represent only about 10 percent of the total cost of the program, have been increasing more rapidly than physicians' fees and have not been subject to a deferment of recognition of cost changes.

Administrative expenses are assumed to represent about 11½ percent of the benefit payments; this figure is based on the actual operating results in 1969 and budget estimates for future years (all on an incurred basis). The average interest rate on the invested assets of the trust fund is assumed to be 6½ percent (the rate applicable to the entire portfolio as of September 30, 1969). This rate might be somewhat higher during the next premium period, but since the balance in the trust fund will not be very large, the effect of the interest-rate assumption is not significant; for example, if a 7-percent interest rate were assumed, the per capita cost would be reduced by less than one-half cent per month.

It is estimated that the incurred monthly per capita *total* cost, on a calendar-year basis, would have been \$8.28 for 1968 if the provisions of the 1967 amendments had been in effect for the entire year (instead of only part of it) and if there had not been the influenza epidemic in late 1968 and early 1969. This consists of \$7.46 for benefits and \$.82 for administrative expenses. This approach has been taken in order to obtain a proper base on which to build estimates of future costs; the possibility of epidemics occurring is later taken into account by adding a contingency margin to the estimated costs for "normal" conditions.

On the basis of the foregoing assumptions, it is estimated that the monthly per capita *benefit* cost on a calendar-year basis will be \$7.95 for 1969 (again exclusive of the additional cost arising from the influenza epidemic in late 1968 and early 1969). The corresponding benefit-cost figures estimated for 1970 and 1971 are \$8.65 and \$9.50, respectively. To these must be added the monthly per capita costs for administrative expenses, which are estimated at \$.93 for 1969, \$1.03 for 1970, and \$1.13 for 1971. Thus, the monthly per capita *total* cost on an incurred basis is estimated at \$8.88 for 1969 (exclusive of the additional cost with respect to the influenza epidemic), \$9.68 for 1970, and \$10.63 for 1971.

The monthly per capita *total* cost for fiscal year 1969 averages out at \$8.58; this is increased to \$8.73 if the actual effect of the influenza epidemic is taken into account. The corresponding estimated costs for fiscal years 1970 and 1971 (assuming no influenza epidemic) are \$9.28 and \$10.16. Thus, as indicated previously, the standard premium rate for fiscal year 1970, promulgated at \$4 per month in



December 1968, should have been at least \$4.60, and quite possibly should have been \$4.70. The figure of \$10.16 for fiscal year 1971 (half of which is \$5.08) indicates that, allowing even a small margin for contingencies (as required by law), the standard premium rate for the period July 1970 through June 1971 would need to be \$5.20 per month at the very least. However, as indicated in the analysis which follows, the estimates presented up to this point (which are on a reasonable-minimum cost basis), the only safe course of procedure—considering the currently depleted state of the trust fund—is to set a rate of \$5.30 per month.

#### OTHER ESTIMATES OF FUTURE EXPERIENCE

A similar analysis of the possible experience in 1969–1971 was made with more detailed and refined methodology and with somewhat higher assumptions as to future increases in medical costs and utilization, all under the assumption that the deferment of recognition of increases in physician fees for reimbursement purposes would be continued on the present lag basis moved up 1 year. This indicated monthly per capita total costs of \$8.94 for fiscal year 1969 (including \$.38 for the additional costs due to the influenza epidemic), \$9.44 for fiscal year 1970, and \$10.46 for fiscal year 1971. The last figure indicates that, according to this estimate, a standard premium rate of \$5.30 per month should be promulgated for fiscal year 1971, if some reasonable margin for contingencies is to be included.

The level of benefit expenditures indicated by the foregoing estimate was confirmed by an independent calculation of the accrued benefits in 1969, starting with the cash expenditure in calendar year 1969 and adjusting for the benefits incurred but unpaid (due to the aforementioned lag) at the beginning and at the end of 1969, for the effect of the influenza epidemic, and for the liability of the program for certain payments for inpatient radiology and pathology services paid from the hospital insurance trust fund.

Still another type of analysis was made by using as a starting point the actual cash expenditures in fiscal year 1969. These data were adjusted downward for the nonrecurrent nature of the influenza epidemic and upward for certain payments attributable to the supplementary medical insurance program for inpatient radiology and pathology services but, during that time, paid from the hospital insurance trust fund. These calculations yielded a cash-basis per capita cost of \$8.26 per month for fiscal year 1969. This figure was then projected to fiscal year 1970, yielding \$8.86. Then, the latter figure was converted from a cash basis to an incurred basis, yielding \$9.26. Finally, the latter figure was projected for 1 year, to fiscal year 1971, and the result was \$10.26, so that on this basis the standard premium rate should be \$5.20 with a small allowance for contingencies, and at least \$5.30 with a sufficient allowance.

#### EFFECT OF INTEREST EARNINGS OF TRUST FUND

The interest earnings of the trust fund are available toward the margin for contingencies. If they are not needed to pay benefits and administrative expenses in the current period, they will reduce the unfunded liability for the past deficiency in the premium rate. Interest earnings for fiscal year 1971 are estimated to be the equivalent of only about 5 cents per capita (i.e.,  $2\frac{1}{2}$  cents as compared with the enrollee premium) in available income, thus providing income toward a contingency margin of only small magnitude.

#### SUMMARY AND RECOMMENDATION

Based on all available evidence and analyses, the standard premium rate for fiscal year 1971 should be promulgated at \$5.30 per month. This is based on the assumptions that there will continue to be a deferment of recognition of increases in physicians' fees for reimbursement purposes and that this deferment will not be advanced more than 1 year (so that, in the new premium period, July 1970 through June 1971 generally speaking no recognition will be given of changes in fees after December 1969).

Although a rate of \$5.30 is desirable to provide a sufficient margin for contingencies (as required by law), it should be noted that, even if this margin is not actually used for any contingencies arising in the premium period, it would nevertheless fill the very useful purpose of building up the trust-fund balance to a more desirable level, one which is more in keeping with the concept that the program should be operated on an incurred-cost basis.

It is particularly important to provide a reasonable and adequate contingency margin in the premium rate now being promulgated, since the balance in the trust fund at the beginning of the new premium period will be considerably less than 1 month's benefit outgo. A rate as low as \$5.20 (the next lowest possible rate under the law, which requires rounding to \$0.10 units) would make very little allowance for possible adverse experience, such as might result from another influenza epidemic or for higher rates of increase in utilization or physicians' fees than the minimum-reasonable rates assumed. If the trust-fund balance at the beginning of the new premium period were to be larger—as would have been the case if the premium rate had not been maintained at \$4 by the promulgation made in December 1968, but rather had been increased to the actuarial recommendation of at least \$4.40—it might now have been possible to promulgate a rate of \$5.20. Such a rate, under these circumstances, would have been able to depend upon the interest earnings of the trust fund serving as a major part of the protection against unforeseen contingencies.

The explanation of the \$1.30 increase in the monthly standard premium rate for the new premium period can be summarized in the following manner:

(a) The cost of the protection under the program as in effect in the current premium period is estimated to exceed income from premiums and matching government contributions by about 16 percent—an increase of about 64 cents.

(b) The utilization of medical services is assumed to be higher in the new premium period than in the current period, and so the program cost is higher—an increase of about 12 cents.

(c) The level of physicians' fees recognized by the program and of the costs and charges for other covered services is assumed to be higher in the new premium period than in the current period, and so the program cost is higher—an increase of about 26 cents.

(d) The \$50 deductible represents a smaller proportion of the total covered reimbursable charges when these increase as a result of either higher charges or costs of providers of services or higher utilization—an increase of 6 cents.

(e) The promulgated rate includes a minimal allowance of about 4 percent so as to provide a margin for contingencies, especially since the foregoing cost figures are based on reasonable-minimum cost projections and do not allow for any possible adverse morbidity experience (such as the influenza epidemic of 1968-1969), and to provide for an adequate contingency reserve to be present in case of adverse experience, since the trust-fund balance at the beginning of the premium period will be very low—an increase of 22 cents.

## APPENDIX II. 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 Public Law 90-248, approved January 2, 1968, is as follows:

### I. COVERAGE PROVISIONS (FOR CONTRIBUTION AND BENEFIT PURPOSES)

(a) Persons aged 65 and over on December 31, 1965—voluntary individual election of coverage during period through May 31, 1966, by any individual eligible for hospital insurance benefits or by any other citizen or any other alien lawfully admitted for permanent residence who has at least 5 consecutive years of residence immediately preceding enrollment (except with respect to persons convicted of certain specified offenses such as treason, espionage, etc.), effective July 1, 1966.

(b) Persons attaining age 65 after 1965—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 failing to enroll in an initial period can enroll in any general enrollment period (January to March of each year), that begins within 3 years after the close of his initial enrollment period, to be effective the next July.

(d) Termination of enrollment—either by failure to pay premiums (for premiums not deducted from benefits) or by election to do so at any time (to be effective at the end of the following calendar quarter). An individual who terminates coverage may reenroll if he does so in a general enrollment period that begins within 3 years after such termination, with reenrollment permitted only once.

### II. BENEFITS PROVIDED

(a) Types of benefits—physician and surgeon services (including anesthesiologist, pathologist, radiologist, and physical medicine in hospital), hospital outpatient services (prior to April 1, 1968, such services that were of a diagnostic nature and were furnished by a particular hospital in an amount in excess of \$20 during a 20-day period were excluded from this program because they were included in the hospital insurance program; currently, all these outpatient services are consolidated in the supplementary medical insurance program), home health services (as in the hospital insurance program, but without requirement that they be furnished after hospitalization), and certain other medical services, such as limited ambulance services, prosthetic devices, rental of hospital equipment used at home (or purchase thereof if not more expensive, after December 31, 1967), and surgical dressings.

(b) Amount of reimbursement—plan pays:

(i) in the case of the professional component of inpatient radiology and pathology, 100 percent of reasonable charges, and

(ii) for all other services, 80 percent of reasonable charge (or, in the case of institutional services, 80 percent of reasonable cost) after the participant has paid a calendar-year deductible of \$50; special limits on out-of-hospital mental-care costs (50 percent coinsurance and \$250 maximum 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. 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 cannot 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, whether or not receipted (prior to January 2, 1968, payment was made to participant only upon presentation of a receipted bill).

(d) Services not covered—self-administered drugs (only covered under hospital insurance, and then only when the individual is receiving covered hospital or extended care facility services and only when ordinarily furnished in and by such hospital or facility), private duty nursing, dental services, routine physical and eye examinations, elective cosmetic surgery, 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), eyeglasses and hearing aids, and cases eligible under workmen's compensation.

(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.

### III. FINANCING

(a) Participant premiums—flat monthly premium at a standard rate determined by Secretary of Health, Education, and Welfare. A rate of \$4 has been promulgated for fiscal year 1970, and a rate of \$5.30 has been promulgated for fiscal year 1971. The rate applicable to each succeeding fiscal year will be promulgated by the Secretary before the preceding January 1. Such rate for any period is intended to be adequate, along with other income of the system, to support the cost of the benefits and administration for services received by enrollees during the period on an accrual basis, plus a margin for contingencies. A higher rate than the standard one is to be paid by those enrolling late or reenrolling after terminating enrollment (a surcharge of 10 percent of the premium rate for each full year during which an individual enrolling late could have participated but did not).

(b) Government contributions—amount equal to total premiums paid by or on the behalf of participants.

(c) 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, for persons affected by earnings test and for persons not eligible for such benefits, 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, public assistance recipients who receive money payments and 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.

(d) Supplementary medical insurance trust fund—established on same basis as old-age and survivors insurance, disability insurance, and hospital insurance trust funds, with separate boards of trustees (same membership) and with same investment procedures. Premiums paid or deducted from benefits on the behalf of enrollees are transferred to this trust fund. In addition, matching funds are appropriated from the general fund of the Treasury and are transferred to the trust fund simultaneously with the premiums (with proper interest adjustment if any difference in timing occurs).

### APPENDIX III. 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) amounts deposited in or transferred to it with respect to the premiums paid by persons aged 65 or over who elect to participate in the program and (2) the matching contributions of the Federal Government that are authorized to be appropriated and transferred to it from the general fund of the Treasury.

Under a decision of the Comptroller General of the United States (B-4906) dated October 11, 1951, receipts derived from the sale of surplus supplies and materials are credited to and form a part of the trust fund, where the initial outlays therefor were paid from the trust fund.

Under section 1106(b) of the Social Security Act, as amended, the Secretary of Health, Education, and Welfare is authorized to charge outside persons, agencies, and organizations for providing certain services not directly related to the old-age, survivors, and disability insurance program. The Social Security Administration has accumulated a unique body of information in the course of the administration of the program. Situations arise when it is in the public interest to use this information to perform certain services for outside parties, such as the preparation of statistical tabulations for research purposes, when such services can be performed without violating the confidentiality of the records or interfering unduly with the administration of the program. Such services could not properly be provided at the expense of the trust fund. Receipts derived from performance of these services are equal to the cost of providing them; in some instances, the receipts are credited to the trust fund to counterbalance administrative expenses already paid from the trust fund (in which case such amount is netted out of the figures on administrative expenses in the financial statements of the trust fund), while in other instances such receipts are not credited to the trust fund, and the applicable administrative expenses are met directly from them. Accordingly, such administrative expenses, and the offsetting receipts, do not have any effect on the financial statements of the trust fund.

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, as amended, 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.

Section 1833 of the Social Security Act provides that pathology and radiology services rendered by physicians after March 1968 to hospital inpatients are not subject to the deductible and coinsurance provisions of the supplementary medical insurance program. Hospitals, at their option, are permitted to combine their billing for both hospital 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 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 as part of the administrative expenses in the financial statements of operations of the trust funds as set forth in previous sections of this report. The net worth of the resulting facilities—just as the net worth of all other capital 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 end 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 4 years from the end of such calendar month. Where such average market yield is a multiple of one-eighth of 1 percent, this is taken as the rate of interest on such special obligations; otherwise, such rate is the multiple of one-eighth of 1 percent nearest such market yield.

Interest on public issues held by the trust fund is received by the fund at the time the interest is paid on the particular issues held. Interest on special public-debt obligations issued specifically for purchase by the trust fund is payable semi-annually or at redemption, if earlier.

Marketable public issues acquired by the fund may be sold at any time by the managing trustee at their market price. Special public-debt obligations issued for purchase by the trust fund may be redeemed at par plus accrued interest. Interest receipts and proceeds from the sale or redemption of obligations held in the trust fund are available for investment in the same manner as other receipts of the fund. Interest earned by the invested assets of the trust fund will provide income to meet a portion of future benefit disbursements. The role of interest in meeting future benefit payments is indicated in tables 7 and 8 of the main text.

In addition to serving as a source of income, the assets of the trust fund assure the continued payment of benefits without sharp changes in premium rates during periods of short-run adverse fluctuations in total income and expenditures.

#### APPENDIX IV. ASSUMPTIONS, METHODOLOGY, AND DETAILS OF COST ESTIMATES

The basic assumptions and methodology used to prepare the actuarial cost estimates are described in this appendix, accompanied by more detailed data from these estimates.

##### (1) BASIS OF FINANCING OF SUPPLEMENTARY MEDICAL INSURANCE PROGRAM

The premium rate for any period is required by law to be set at such an amount that income from premiums and government matching contributions accrued in the period is estimated to be sufficient to cover the benefit payments and processing costs related to all services furnished during that period. In this way, those enrolled in the program during any period for which a particular premium rate is applicable will, as a group, pay for half the cost of the services that they as a group receive during that period.

Further, the financing of the program is set only for short periods into the future, so that no long-range projections of the experience of the program are prepared. (The premium rate for each fiscal-year period is promulgated before the January 1 that precedes the beginning of such year.) Under normal circumstances, the cash income should exceed the cash disbursements in the period for which the experience is projected, since the natural lag in the payment of benefits results in a cash surplus. Such surplus provides some margin to insure enough assets on hand at any time to pay benefits should the premium prove inadequate by a moderate amount.

A contingency reserve of approximately \$342 million was authorized, to be available until December 31, 1969, as further assurance that there would be enough assets available to the program to be able to pay benefits if the premium rate proved inadequate; however, no funds were drawn and the contingency reserve has now expired.

The actual cost of the program depends on a number of economic and medical variables. Because the program is intended by law to be self-supporting, if there were not the lag in payments, which produces a cash surplus in the trust fund, or if there were no surplus accumulated from past premium periods, the premium rate would have to contain a substantial margin to insure payment of all benefits under all circumstances. An additional element of uncertainty is introduced by the absence of firm data concerning the present cost of the program (as discussed subsequently). A substantial margin for contingencies would result in the enrollees for a particular premium-rate period paying more than half of the cost of the benefits and administrative expenses resulting from services performed for them.

Under normal circumstances, the natural lag between dates of services and dates of payment results in a cash surplus sufficiently large that the margin for contingencies over a "best estimate" of the accrued claims and administrative expenses need be only large enough to build up some surplus for influenza epidemics and the like, which can be expected to occur every few years.

Due to the promulgation of a substantially inadequate premium rate by the Secretary of Health, Education, and Welfare in December 1968, however, the cash surplus in the trust fund has become so low that it has become necessary to include a moderate contingency margin in the premium rate, rather than the relatively small amounts that have been included for contingencies in the past.

Thus, the actuarial status of the supplementary medical insurance system and the solvency of its trust fund can be assessed only on an accrual basis—that is, on the basis of all obligations for future payment of benefits, in addition to those already paid. The liability of the system that is outstanding at any time for benefits that will be paid as a result of services already performed is referred to as "benefits incurred but unpaid." This liability results from the delays in the program as between the date on which services are performed and the date benefits based on these services are paid from the trust fund. These delays are due to the tendency of enrollees to accumulate a number of bills before submitting

a claim, the time required by physicians and enrollees to complete the claim forms and submit them to the carriers, and the time required by the carriers to adjudicate and process the claims.

Further, the \$50 deductible applicable to each calendar year tends to shift the benefits incurred toward the end of the calendar year, and encourages enrollees to wait until they have all bills relating to a calendar year before submitting a claim. Thus, the liability outstanding at the end of a calendar year for benefits incurred but unpaid tends to be especially large.

Since nearly all administrative costs of the program are initiated when a claim is filed, there is also outstanding at any time the liability of processing costs related to the benefits incurred but unpaid. To obtain the operating results of the system for any period, all cash income and disbursements must be adjusted by the increase in the corresponding asset or liability item during the period.

Another fundamental difference that may affect the financing methods is the voluntary enrollment provisions of the supplementary medical insurance program. As long as a large proportion (i.e., over 75 percent) of those eligible to participate do so, the level of average services per capita received by the group will not be significantly affected by the inclusion of a somewhat greater proportion of those in poor health than in the population aged 65 and over. Thus, both income and disbursements vary directly in proportion to the enrollment. Accordingly, the financial basis of the program depends solely on the relationship of the premium rate to the benefit payments and administrative expenses accrued per capita, and not on independent estimates of total income and disbursements (in contrast to the situation under the old-age, survivors, and disability insurance and the hospital insurance programs, under which income is not directly proportioned to disbursements).

Except for a very small group who may receive 3 months of free coverage because of the grace period, before being disenrolled for nonpayment of premiums, the premiums are collected and the Government matching contributions are transferred for each enrollee for each month of enrollment. Thus, the premiums accrued for any period are very close to the product of the premium rate and the average enrollment in that period. Consequently, the premium rate can be based on the estimated benefit payments and administrative expenses expected to be accrued in the period divided by the average enrollment anticipated in that period. Such amounts are referred to as benefit payments and administrative expenses per capita.

## (2) INFORMATION AVAILABLE ON WHICH TO BASE ESTIMATES OF ACCRUED EXPERIENCE

The only fully reliable basis for an accurate assessment of the accrued experience of the program is the actual experience data developed from accounting information from the program (i.e., from the records of payments actually made). Accurate data from the program are available on a cash basis. However, due to the delays mentioned above (which are increased by the newness of the program and the unfamiliarity of many enrollees with reimbursement insurance), experience data from the program are complete only for 1966 and 1967.

In general, the estimates are based on data from payment records for services performed in 1966-68 that were processed to the 0.1 percent actuarial sample before October 1969 (but not as yet reconciled with actual disbursements from the trust fund, to ensure reliability) and the cash expenditures of the trust fund for benefits and administrative expenses. The actuarial sample consists of payment records for all benefit payments made with respect to members of a 0.1 percent random sample of enrollees and of copies of all bills and supporting documentation submitted with respect to such persons.

The many adjustments and assumptions required make these estimates subject to some variation from the actual experience in 1968 (as much as 5 percent), and to more variation in later years, since any errors in estimating the experience that has occurred during previous years are necessarily incorporated into estimates for later years.



Further difficulties were encountered in estimating the effect of the benefit changes made by the 1967 amendments, because no information was available from the program as to the proportion of diagnostic services rendered in the outpatient department of hospitals and affiliated clinics or for the professional component of inpatient radiology and pathology services. No payment records are prepared for initial submissions of less than the deductible by enrollees who later submit enough additional expenses to qualify for reimbursements. Thus, any itemization of medical expenses leading to benefit payments as shown in payment-record data by type of service is defective. (Such information is available in the 0.1 percent actuarial sample to the limited extent that the 5 percent statistical sample as to such services eliminated by the deductible has been received from the carriers.)

### (3) ASSUMPTIONS RELATING TO DEDUCTIBLE CARRIED OVER

The provision that the deductible in any year will be reduced by any reasonable charges for services received during the last quarter of the preceding year which were used to meet the deductible in that year produces higher benefit payments and administrative expenses than would have been paid without this provision. The question arises as to whether these additional costs are accrued in the year from which such deductible was carried over or in the year to which it is applied.

Since these additional costs resulting from the deductible carried over result from services performed in the prior year, it can be argued that the additional costs were accrued in that year. On the other hand, if the program were discontinued (e.g. superseded by some other program), or if an enrollee disenrolls at the end of a calendar year, there is no liability outstanding for such additional costs; this indicates that the liability for paying these additional costs arises from continuing the program and from the individual's continuing his enrollment. Also, in the case of any individual enrollee, there is no liability unless he receives enough services in the succeeding year to be eligible for benefits. Further, the additional costs are paid on the basis of services actually performed in the succeeding year, and the assignment of benefit payments and administrative expenses to the year prior to that in which the services were performed appears inconsistent with the principle that all costs are accrued in the year in which the services giving rise to such costs were performed.

For calendar years beginning with 1968, the assumptions with regard to the deductible carried over will have negligible effect, since the additional costs paid as a result of deductibles carried over from the preceding year will approximately equal the deductibles carried over to the succeeding year. In 1966-67, however, due to the application of the full \$50 deductible in a 6-month period for 1966, there was an unusually large amount of additional benefits paid in 1967 as a result of deductibles carried over from 1966. As a result, comparisons between the experience in 1967 and that of later years are difficult. Further, the experience in 1966 is artificially favorable, not only because of the application of the full deductible in a short period, but also because there were no deductibles carried over from a prior period. Beginning with 1968, however, these problems disappear.

If the program were terminated at the end of a calendar year, the trust fund would be liable for all benefit payments and administrative expenses for services performed prior to termination, but not for the deductibles that would have been carried over if the program had continued.

The calculations discussed in appendix I and in the main text assume that the additional costs resulting from the deductibles carried over are accrued in the year from which the deductible is carried over.

### (4) PRINCIPAL ASSUMPTIONS REQUIRED IN ESTIMATES

The principal factors which have a major impact on costs, concerning which it has been necessary to make assumptions without fully adequate information, are as follows:

#### (a) *Rate of increase in average fees charged by physicians*

Nearly all benefits under the program are for professional services, primarily for those of physicians. The increases in the unit prices of these services have, in the past, been highly correlated with the increases in earnings from all employment in the United States. The annual increases in physicians' fees, as measured by the Consumer Price Index for physician fees, and the annual increases in average earnings, as measured by the average increases in the average earnings in employment under the Social Security program, appear in table A, together with the increases in the average wages in manufacturing and in the Consumer Price Index of Services (less rents).

TABLE A.—AVERAGE ANNUAL RATES OF INCREASE IN PHYSICIANS' FEES, IN AVERAGE WAGES, AND IN THE CONSUMER PRICE INDEX OF SERVICES, 1960-69

[In percent]

Year	Physicians' fees <sup>1</sup>	Average earnings in employment covered by social security	Wages in manufacturing (less overtime)	Consumer price index of services (less rent)
1960	1.8	4.3	3.8	3.7
1961	2.6	3.1	2.3	2.4
1962	3.1	4.2	2.7	1.9
1963	2.2	2.4	2.6	2.1
1964	2.3	3.1	3.0	2.2
1965	3.3	1.6	2.5	2.6
1966	5.9	4.4	3.6	4.2
1967	7.3	6.3	5.0	4.9
1968	5.5	7.0	5.9	5.7
1969	7.3	6.0	5.2	7.6
Average 1960-69	4.1	4.2	3.1	3.7

<sup>1</sup> As measured by Consumer Price Index of physician fees.

Physicians' fees had been increasing by an average of 2.6 percent per year during 1960-65 or at a rate slightly lower than that for all earnings (3.1 percent). During 1966-69, however, physicians' fees increased at a rate of 6.5 percent per year, somewhat higher than the average rate of increase for all earnings (5.9 percent). Over the last decade, however, physicians' fees increased 4.1 percent per year, and the average earnings in employment covered by the social security program increased 4.2 percent per year. Thus, it appears reasonable to assume that physicians' fees will continue to increase at the annual rate projected for the average earnings of persons covered by social security.

The average fees charged by physicians are assumed to increase by 6 percent in calendar years 1970 and 1971—in line with the anticipated increases of earnings in employment covered by the social security program. However, the program is assumed to recognize increases of 4 percent in calendar year 1970 and of 6 percent in calendar year 1971.

(b) *Rate of increase in costs of covered nonphysician services*

The cost of outpatient hospital and clinic services and of home health agency services has been increasing in excess of 10 percent per year, with the result that these services are accounting for an increasing proportion of the cost of the program. It is assumed that these costs will increase at a rate of 10 percent per year.

(c) *Rate of increase in utilization of services*

There is a long-term trend in the United States of increasing use of physician services per capita that amounts to somewhat less than 1 percent per year. The increase in use of physician services by enrollees who were not insured for these services prior to coverage under the program is much higher. The estimates assume an increase in utilization of 2 percent per year for calendar year 1968 and 1969 and of 1½ percent per year thereafter.

(5) ESTIMATES OF ACCRUED COSTS, LIABILITIES OUTSTANDING AT THE END OF EACH CALENDAR YEAR, AND FUTURE CASH FLOW UNDER THE PROGRAM

During 1969, approximately 95 percent of all persons aged 65 or over in the country were enrolled in the program. This percentage of participation was assumed to continue in the future (for reasons given earlier, a large variation in the number enrolled would not affect the financial soundness of the program). The premiums, government matching contributions, and benefit payments accrued were obtained by multiplying the corresponding rate per capita by the projected enrollment. Interest earnings were calculated from the anticipated experience of the trust fund on a cash basis (projected as explained below).

Premiums collected in cash for years beyond 1969 are assumed to equal those accrued. Government matching contributions transferred are expected to be equal to those accrued.

Administrative expenses for fiscal years 1970 and 1971, on a cash basis, were obtained from the Budget Document of the United States for fiscal year 1971. The liability outstanding at the end of each period for the administrative expenses for processing benefit payments incurred but unpaid was assumed to be 11.5 percent of such benefit payments, which proportion is based on the budget figures.

An interest rate of 6 percent was used in developing the progress of the trust fund. As of December 31, 1969, the average yield of the total investments of the trust fund was 6.59 percent.

## APPENDIX V. LEGISLATIVE HISTORY AFFECTING THE TRUST FUND

*Board of Trustees.*—Beginning with July 30, 1965, when the Federal supplementary medical insurance trust fund was established, the three members of the Board of Trustees, who serve in an ex officio capacity, have been the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health, Education, and Welfare. Since the establishment of the fund, the Secretary of the Treasury has been managing trustee. The Commissioner of Social Security has been secretary of the Board of Trustees. The Board of Trustees meets not less frequently than once each calendar year.

*Premium rates.*—The Social Security Amendments of 1965, which established the supplementary medical insurance program, fixed the premium rate for individuals enrolling under the program at \$3 per month for the 18-month period, July 1966 to December 1967. The 1965 amendments also provided that between July 1 and October 1, 1967 (and every 2 years thereafter), the Secretary of Health, Education, and Welfare could adjust the standard premium rate so that income to the program would be in balance with outgo for benefit payments and administrative expenses (with inclusion of an appropriate contingency margin in the premium rate). Because the 1967 amendments were then pending and their final form indeterminate, on September 30, 1967, Public Law 90-97 was enacted to permit the promulgation to be deferred until December 31, 1967, with the adjusted premium rate to become effective for April 1968. The rate so promulgated was \$4. The 1967 amendments provide that the premium rate is to be determined annually, during December of each year, and is to apply initially for April 1968 through June 1969, and beginning with July 1969 for 12-month periods. The standard premium rate applies to persons who enroll in their initial enrollment period. The premium rate for persons who enroll later than the first period when enrollment was open to them or who re-enroll after their enrollment was terminated is the standard premium rate increased by 10 percent for each full year during which they could have been but were not enrolled.

*Government contributions.*—The 1965 amendments provide for payments from general funds of the Treasury to be made in amounts equal to the aggregate premiums paid by enrollees. The 1967 amendments provide for payment of interest, after June 30, 1967, when the Government contribution is not made promptly.

*Contingency reserve.*—An appropriation from general funds of the Treasury is authorized by the 1965 amendments, to provide an operating fund at the beginning of the program—i.e., a contingency reserve. The amount of the authorization is \$18 times the estimated number of individuals who would be covered by the program on July 1, 1966, if all persons eligible to so elect had done so. This authorization, which would have expired at the end of 1967, was extended to the end of 1969 by the 1967 amendments. Any amounts actually used by the supplementary medical insurance trust fund are repayable (without interest) to the Treasury.

*Investments.*—Since the inception of the program, provision has been made for the investment of funds which are not required to meet current disbursements. As provided in the Social Security Act, the funds may be invested only in interest-bearing obligations of the U.S. Government or in obligations guaranteed as to both principal and interest by the United States; or the funds may be invested in certain federally-sponsored agency obligations that are designed 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. These obligations 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 public-debt obligations for purchase by the trust funds.

Special issues acquired after enactment bear interest at a rate equal to the average market yield (computed on the basis of market quotations as of the end of the calendar month next preceding their issue) on all marketable interest-bearing obligations of the United States forming a part of the public debt which are not due or callable for 4 or more years from the time the special obligations are issued, such average market yield being rounded to the nearest one-eighth of 1 percent.

APPENDIX VI. STATUTORY PROVISIONS, AS OF DECEMBER 31, 1969,  
CREATING THE TRUST FUND, DEFINING THE DUTIES OF THE BOARD  
OF TRUSTEES, AND PROVIDING FOR ADVISORY COUNCILS ON SOCIAL  
SECURITY

(Secs. 706, 1840, 1841, and 1844 of the Social Security Act as amended)

*Federal supplementary medical insurance trust fund.*—Section 1841. (a) There is hereby created on the books of the Treasury of the United States a trust fund to be known as the "Federal supplementary medical insurance trust fund" (hereinafter in this section referred to as the "trust fund"). The trust fund shall consist of such amounts as may be deposited in, or appropriated to, such fund as provided in this part.

(b) With respect to the trust fund, there is hereby created a body to be known as the Board of Trustees of the trust fund (hereinafter in this section referred to as the "Board of Trustees") composed of the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health, Education, and Welfare, all ex officio. The Secretary of the Treasury shall be the managing trustee of the Board of Trustees (hereinafter in this section referred to as the "managing trustee"). The Commissioner of social security shall serve as the secretary of the Board of Trustees. The Board of Trustees shall meet not less frequently than once each calendar year. It shall be the duty of the Board of Trustees to—

(1) Hold the trust fund;

(2) Report to the Congress not later than the first day of April of each year on the operation and status of the trust fund during the preceding fiscal year and on its expected operation and status during the current fiscal year and the next 2 fiscal years;

(3) Report immediately to the Congress whenever the Board is of the opinion that the amount of the trust fund is unduly small; and

(4) Review the general policies followed in managing the trust fund, and recommend changes in such policies, including necessary changes in the provisions of law which govern the way in which the trust fund is to be managed.

The report provided for in paragraph (2) shall include a statement of the assets of, and the disbursements made from, the trust fund during the preceding fiscal year, an estimate of the expected income to, and disbursements to be made from, the trust fund during the current fiscal year and each of the next 2 fiscal years, and a statement of the actuarial status of the trust fund. Such report shall be printed as a House document of the session of the Congress to which the report is made.

(c) It shall be the duty of the managing trustee to invest such portion of the trust fund as is not, in his judgment, required to meet current withdrawals. Such investments may be made only in interest-bearing obligations of the United States or in obligations guaranteed as to both principal and interest by the United States. For such purpose such obligations may be acquired (1) on original issue at the issue price, or (2) by purchase of outstanding obligations at the market price. The purposes for which obligations of the United States may be issued under the Second Liberty Bond Act, as amended, are hereby extended to authorize the issuance at par of public-debt obligations for purchase by the trust fund. Such obligations issued for purchase by the trust fund shall have maturities fixed with due regard for the needs of the trust fund and shall bear interest at a rate equal to the average market yield (computed by the managing trustee on the basis of market quotations as of the end of the calendar month next preceding the date of such issue) on all marketable interest-bearing obligations of the United States then forming a part of the public debt which are not due or callable until after the expiration of 4 years from the end of such calendar month; except that where such average market yield is not a multiple of one-eighth of 1 per centum, the rate of interest on such obligations shall be the multiple of one-eighth of 1 per centum nearest such market yield. The managing trustee may purchase other interest-bearing obligations of the United States or obligations guaranteed as to both principal and interest by the United States, on original issue or at the market price, only where he determines that the purchase of such other obligations is in the public interest.

(d) Any obligations acquired by the trust fund (except public-debt obligations issued exclusively to the trust fund) may be sold by the managing trustee at the market price, and such public-debt obligations may be redeemed at par plus accrued interest.

(e) The interest on, and the proceeds from the sale or redemption of, any obligations held in the trust fund shall be credited to and form a part of the trust fund.

(f) There shall be transferred periodically (but not less often than once each fiscal year) to the trust fund from the Federal old-age and survivors insurance trust fund and from the Federal disability insurance trust fund amounts equivalent to the amounts not previously so transferred which the Secretary of Health, Education, and Welfare shall have certified as overpayments (other than amounts so certified to the Railroad Retirement Board) pursuant to section 1870(b) of this act. There shall be transferred periodically (but not less often than once each fiscal year) to the trust fund from the railroad retirement account amounts equivalent to the amounts not previously so transferred which the Secretary of Health, Education, and Welfare shall have certified as overpayments to the Railroad Retirement Board pursuant to section 1870(b) of this act.

(g) The managing trustee shall pay from time to time from the trust fund such amounts as the Secretary of Health, Education, and Welfare certifies are necessary to make the payments provided for by this part, and the payments with respect to administrative expenses in accordance with section 201(g)(1).

(h) The managing trustee shall pay from time to time from the trust fund such amounts as the Secretary of Health, Education, and Welfare certifies are necessary to pay the costs incurred by the Civil Service Commission in making deductions pursuant to section 1840(e). During each fiscal year, or after the close of such fiscal year, the Civil Service Commission shall certify to the Secretary the amount of the costs it incurred in making such deductions, and such certified amount shall be the basis for the amount of such costs certified by the Secretary to the managing trustee.

*Payment of premiums.*—Section 1840. (a) (1) In the case of an individual who is entitled to monthly benefits under section 202, his monthly premiums under this part shall (except as provided in subsec. (d)) be collected by deducting the amount thereof from the amount of such monthly benefits. Such deductions shall be made in such manner and at such times as the Secretary shall by regulation prescribe.

(2) The Secretary of the Treasury shall, from time to time, transfer from the Federal old-age and survivors insurance trust fund or the Federal disability insurance trust fund to the Federal supplementary medical insurance trust fund the aggregate amount deducted under paragraph (1) for the period to which such transfer relates from benefits under section 202 which are payable from such trust fund. Such transfer shall be made on the basis of a certification by the Secretary of Health, Education, and Welfare and shall be appropriately adjusted to the extent that prior transfers were too great or too small.

(b)(1) In the case of an individual who is entitled to receive for a month an annuity or pension under the Railroad Retirement Act of 1937, his monthly premiums under this part shall (except as provided in subsec. (d)) be collected by deducting the amount thereof from such annuity or pension. Such deduction shall be made in such manner and at such times as the Secretary shall by regulations prescribe. Such regulations shall be prescribed only after consultation with the Railroad Retirement Board.

(2) The Secretary of the Treasury shall, from time to time, transfer from the railroad retirement account to the Federal supplementary medical insurance trust fund the aggregate amount deducted under paragraph (1) for the period to which such transfer relates. Such transfers shall be made on the basis of a certification by the Railroad Retirement Board and shall be appropriately adjusted to the extent that prior transfers were too great or too small.

(c) In the case of an individual who is entitled both to monthly benefits under section 202 and to an annuity or pension under the Railroad Retirement Act of 1937 at the time he enrolls under this part, subsection (a) shall apply so long as he continues to be entitled both to such benefits and such annuity or pension. In the case of an individual who becomes entitled both to such benefits and such an annuity or pension after he enrolls under this part, subsection (a) shall apply if the first month for which he was entitled to such benefits was the same as or earlier than the first month for which he was entitled to such annuity or pension, and otherwise subsection (b) shall apply.

(d) If an individual to whom subsection (a) or (b) applies estimates that the amount which will be available for deduction under such subsection for any premium payment period will be less than the amount of the monthly premiums for such periods, he may (under regulations) pay to the Secretary such portion of the monthly premiums for such period as he desires.

(e) (1) In the case of an individual receiving an annuity under subchapter III of chapter 83 of title 5, United States Code, or any other law administered by the Civil Service Commission providing retirement or survivorship protection, to whom neither subsection (a) nor subsection (b) applies, his monthly premiums under this part (and the monthly premiums of the spouse of such individual under this part if neither subsection (a) nor subsection (b) applies to such spouse and if such individual agrees) shall, upon notice from the Secretary of Health, Education, and Welfare to the Civil Service Commission, be collected by deducting the amount thereof from each installment of such annuity. Such deduction shall be made in such manner and at such times as the Civil Service Commission may determine. The Civil Service Commission shall furnish such information as the Secretary of Health, Education, and Welfare may reasonably request in order to carry out his functions under this part with respect to individuals to whom this subsection applies.

(2) The Secretary of the Treasury shall, from time to time, but not less often than quarterly, transfer from the civil service retirement and disability fund, or the account (if any) applicable in the case of such other law administered by the Civil Service Commission, to the Federal supplementary medical insurance trust fund the aggregate amount deducted under paragraph (1) for the period to which such transfer relates. Such transfer shall be made on the basis of a certification by the Civil Service Commission and shall be appropriately adjusted to the extent that prior transfers were too great or too small.

(f) In the case of an individual who participates in the insurance program established by this part but with respect to whom none of the preceding provisions of this section applies, or with respect to whom subsection (d) applies, the premiums shall be paid to the Secretary at such times, and in such manner, as the Secretary shall by regulations prescribe.

(g) Amounts paid to the Secretary under subsection (d) or (f) shall be deposited in the Treasury to the credit of the Federal supplementary medical insurance trust fund.

(h) In the case of an individual who participates in the insurance program established by this part, premiums shall be payable for the period commencing with the first month of his coverage period and ending with the month in which he dies or, if earlier, in which his coverage under such program terminates.

*Appropriations to cover Government contributions and contingency reserve.*—Section 1844. (a) There are authorized to be appropriated from time to time, out of any moneys in the Treasury not otherwise appropriated, to the Federal supplementary medical insurance trust fund—

(1) A Government contribution equal to the aggregate premiums payable under this part and deposited in the trust fund, and

(2) Such sums as the Secretary deems necessary to place the trust fund, at the end of any fiscal year occurring after June 30, 1967, in the same position in which it would have been at the end of such fiscal year if (A) a Government contribution representing the excess of the premiums deposited in the trust fund during the fiscal year ending June 30, 1967, over the Government contribution actually appropriated to the trust fund during such fiscal year had been appropriated to it on June 30, 1967, and (B) the Government contribution for premiums deposited in the trust fund after June 30, 1967, had been appropriated to it when such premiums were deposited.

(b) In order to assure prompt payment of benefits provided under this part and the administrative expenses thereunder during the early months of the program established by this part, and to provide a contingency reserve, there is also authorized to be appropriated, out of any moneys in the Treasury not otherwise appropriated, to remain available through the calendar year 1969 for repayable advances (without interest) to the trust fund, an amount equal to \$18 multiplied by the number of individuals (as estimated by the Secretary) who could be covered in July 1966 by the insurance program established by this part if they had theretofore enrolled under this part.

*Advisory Council on Social Security.*—Section 706 (a). During 1969 (but not before February 1, 1969) and every fourth year thereafter (but not before February 1 of such fourth year), the Secretary shall appoint an Advisory Council on Social Security for the purpose of reviewing the status of the Federal old-age and sur-

vivors insurance trust fund, the Federal disability insurance trust fund, the Federal hospital insurance trust fund, and the Federal supplementary medical insurance trust fund in relation to the long-term commitments of the old-age, survivors, and disability insurance program and the programs under parts A and B of title XVIII, and of reviewing the scope of coverage and the adequacy of benefits under, and all other aspects of, these programs, including their impact on the public assistance programs under this act.

(b) Each such council shall consist of a chairman and 12 other persons, appointed by the Secretary without regard to the provisions of title 5, United States Code, governing appointments in the competitive service. The appointed members shall, to the extent possible, represent organizations of employers and employees in equal numbers, and represent self-employed persons and the public.

(c)(1) Any council appointed hereunder is authorized to engage such technical assistance, including actuarial services, as may be required to carry out its functions, and the Secretary shall, in addition, make available to such council such secretarial, clerical, and other assistance and such actuarial and other pertinent data prepared by the Department of Health, Education, and Welfare, as it may require to carry out such functions.

(2) Appointed members of any such council, while serving on business of the council (inclusive of traveltime), shall receive compensation at rates fixed by the Secretary, but not exceeding \$100 per day and, while so serving away from their homes or regular places of business, they may be allowed travel expenses, including per diem in lieu of subsistence, as authorized by section 5703 of title 5, United States Code, for persons in the Government employed intermittently.

(d) Each such council shall submit reports (including any interim reports such council may have issued) of its findings and recommendations to the Secretary not later than January 1 of the second year after the year in which it is appointed, and such reports and recommendations shall thereupon be transmitted to the Congress and to the Board of Trustees of each of the trust funds. The reports required by this subsection shall include—

(1) A separate report with respect to the old-age, survivors, and disability insurance program under title II and of the taxes imposed under sections 1401(a), 3101(a), and 3111(a) of the Internal Revenue Code of 1954,

(2) A separate report with respect to the hospital insurance program under part A of title XVIII and of the taxes imposed by sections 1401(b), 3101(b), and 3111(b) of the Internal Revenue Code of 1954, and

(3) A separate report with respect to the supplementary medical insurance program established by part B of title XVIII and of the financing thereof.

After the date of the transmittal to the Congress of the reports required by this subsection, the council shall cease to exist.

