97th Congress, 2d Session - - - - - - - - House Document No. 97–167

# 1982 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND

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## COMMUNICATION

FROM

## THE BOARD OF TRUSTEES, FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND

TRANSMITTING

THE 1982 ANNUAL REPORT OF THE BOARD, PURSUANT TO SECTION 1841(b) OF THE SOCIAL SECURITY ACT, AS AMENDED

APRIL 5, 1982.—Referred to the Committees on Energy and Commerce and Ways and Means and ordered to be printed

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U.S. GOVERNMENT PRINTING OFFICE

92-532 O WASHINGTON : 1982

LETTER OF TRANSMITTAL

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Board of Trustees of the
Federal Supplementary Medical Insurance Trust Fund
Washington, D.C., April 1, 1982

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

SIR: We have the honor to transmit to you the 1982 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund (the 17th such report), in compliance with the provisions of section 1841(b) of the Social Security Act.

Respectfully,

DONALD T. REGAN,
Secretary of the Treasury,
and Managing Trustee of the Trust Fund

RAYMOND J. DONOVAN,
Secretary of Labor,
and Trustee

RICHARD S. SCHWEIKER,
Secretary of Health and Human Services,
and Trustee

CAROLYNE K. DAVIS, Ph.D.,
Administrator of the Health Care Financing Administration, and Secretary, Board of Trustees

## LETTER OF TRANSMITTAL

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# 1982 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND

## THE BOARD OF TRUSTEES

The Federal Supplementary Medical Insurance Trust Fund, established on July 30, 1965, is held by the Board of Trustees under the authority of section 1841(b) of the Social Security Act, as amended. The board is comprised of three members who serve in an ex officio capacity. The members of the Board are the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health and Human Services. The Secretary of the Treasury is designated by law as the Managing Trustee. The Administrator of the Health Care Financing Administration is Secretary of the Board. The Board of Trustees reports to the Congress once each year in compliance with section 1841(b)(2) of the Social Security Act. This is the 1982 annual report, the seventeenth such report.



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HIGHLIGHTS

(a) Disbursements of the supplementary medical insurance trust fund increased 23.2 percent in fiscal year 1981 over 1980. Most of this increase resulted from higher physician fees recognized by the program and the use of more physician services by program enrollees.

(b) Income to the trust fund increased 21.1 percent in fiscal year 1981 over 1980. This resulted from increased actuarial rates which determine the general revenue contribution and from increased enrollment in the program.

(c) The trust fund decreased $789 million to $3,743 million during 1981.

(d) In December of 1981, the Secretary of Health and Human Services promulgated a standard monthly premium rate of $12.20 and actuarial rates of $24.60 for the aged enrollees and $42.10 for the disabled enrollees for the 12-month period ending June 30, 1983.

(e) An average 24.9 million persons aged 65 and over were enrolled in the program in fiscal year 1981. An additional 2.7 million disabled beneficiaries were enrolled in the same period.

## SOCIAL SECURITY AMENDMENTS SINCE THE 1981 TRUSTEES REPORT

Public Law 97-35, "The Omnibus Budget Reconciliation Act of 1981", which was enacted on August 13, 1981, contains many provisions having an impact on the Federal Supplementary Medical Insurance Trust Fund. They are:

(1) Payments due to Medicare providers to offset Medicaid overpayments may be withheld. The Secretary would then reimburse State Medicaid Agencies from the amount recovered. Effective upon enactment.

(2) The Secretary is given authority to assess civil penalties against Medicare practitioners and providers for fraudulent practices. Authorized actions include imposition of a civil penalty of up to $2,000 for each fraudulently claimed item or service, assessment of up to twice the amount of the fraudulent portion of a claim in lieu of damages, and denial of participation in Medicare to persons filing fraudulent claims. Persons subject to a monetary penalty would be given written notice and an administrative hearing prior to imposition of the penalty. Effective upon enactment.

(3) A provision limiting Medicare SMI reimbursement to the lower of the provider's customary charge or the reasonable cost of covered service, deleted by the 1980 Reconciliation Act, is restored. Retroactively effective from December 1, 1980.

(4) The SMI deductible must be satisfied within each calendar year. Provision for a "carry-over" of medical expenses in meeting the

deductible from the last 3 months of the preceeding year is eliminated. Effective January 1, 1982, for expenses incurred on or after October 1, 1981.

(5) The SMI deductible is increased from $60 to $75 annually, effective January 1, 1982.

(6) The Secretary is required to establish by regulation limitations on costs or charges considered reasonable for outpatient services provided by hospitals, community health centers, or clinics and by the physicians using these facilities.

(7) The Secretary is required to devise a method or methods for prospectively reimbursing each mode of renal dialysis furnished in a facility or home. The method(s) adopted must differentiate between hospital-based and free-standing facilities, and encourage home dialysis. Regulations to carry out this provision must be promulgated by the effective date, October 1, 1981.

(8) Medicare becomes the secondary payer for the first 12 months after an individual, who has private group employer health insurance, is eligible for Medicare benefits solely because of ESRD. Reimbursement is limited to Medicare's share of those covered costs not covered by the private plan. Any Medicare payments

for services during this period would be conditional on reimbursement to the program when payment is made by the plan. Effective October 1, 1981. Tax deductions paid or incurred by an employer for a group health plan are not allowed if the plan differentiates between benefits to ESRD beneficiaries and other individuals covered by the plan. Effective for taxable years beginning on or after January 1, 1982.

(9) Unlimited open enrollment for SMI is repealed. If an individual does not enroll during an initial enrollment period (which begins with the third month before the month in which the individual becomes age 65 and extends for 7 months) he may only enroll in the general enrollment period which occurs January 1 through March 31 of each year. Benefit coverage then becomes effective on July 1. Effective October 1, 1981.

## NATURE OF THE TRUST FUND

The Federal Supplementary Medical Insurance Trust Fund was established on July 30, 1965, as a separate account in the United States Treasury. All the financial operations of the supplementary medical insurance program are handled through this fund.

The major sources of receipts of the trust fund are (1) premiums paid by eligible persons who are voluntarily enrolled in the program and (2) contributions of the Federal Government that are authorized to be appropriated and transferred from the general fund of the Treasury. Eligible persons aged 65 and over have been able to enroll in the program since its inception in July 1966. Since July 1973, disabled persons under age 65, who meet certain eligibility requirements, have also been able to enroll in the program.

The premiums paid by participants are based on the standard monthly premium rate, which is the same for participants aged 65 and over and for disabled participants under age 65. Premiums paid for fiscal years 1967 through 1973 were matched by an equal amount of Government contributions. Beginning July 1973, the amount of Government contributions corresponding to premiums paid by each of the two groups of participants is determined by applying a ratio, prescribed in the law for each group, to the amount of premiums received from that group of participants. The ratio is equal to (1) twice the amount of the monthly actuarial rate applicable to the particular group of participants, minus the amount of the standard monthly premium rate, divided by (2) the amount of the standard monthly premium rate.

Standard monthly premium rates and actuarial rates are promulgated each year by the Secretary of Health and Human Services. The standard monthly premium rates in effect from the beginning of the program, July 1966 through June 1982, and the rate promulgated for July 1982 through June 1983 are shown in table 1. Actuarial rates in effect from July 1973 through June 1982, and the rates promulgated for July 1982 through June 1983 are also shown.

Another source from which receipts of the trust fund are derived is interest received on investments held by the fund. The investment procedures of the fund are described later in this section.

Section 201(i) of the Social Security Act authorizes the Managing Trustee to accept and deposit in the trust fund unconditional money gifts or bequests made for the benefit of the fund or for any activity financed through the 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 and Human Services and by the Department of the Treasury in carrying out the supplementary medical insurance provisions of title XVIII of the Social Security Act are charged to the trust fund. The Secretary of Health and Human Services certifies benefit payments to the Managing Trustee, who makes the payments from the trust fund in accordance therewith.

Table 1.—STANDARD MONTHLY PREMIUM RATES AND ACTUARIAL RATES

| | Standard monthly premium rate | Monthly actuarial rate | |
|---|---|---|---|
| | | Participants aged 65 and over | Disabled participants under age 65 |
| July 1966 - March 1968 | $ 3.00 | -- | -- |
| April 1968 - June 1970 | 4.00 | -- | -- |
| 12-month period ending June 30 of -- | | | |
| 1971 | 5.30 | -- | -- |
| 1972 | 5.60 | -- | -- |
| 1973 | 5.80 | -- | -- |
| 1974* | 6.30 | $6.30 | $14.50 |
| 1975 | 6.70 | 6.70 | 18.00 |
| 1976 | 6.70 | 7.50 | 18.50 |
| 1977 | 7.20 | 10.70 | 19.00 |
| 1978 | 7.70 | 12.30 | 25.00 |
| 1979 | 8.20 | 13.40 | 25.00 |
| 1980 | 8.70 | 13.40 | 25.00 |
| 1981 | 9.60 | 16.30 | 25.50 |
| 1982 | 11.00 | 22.60 | 36.60 |
| 1983 | 12.20 | 24.60 | 42.10 |

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

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

The Social Security Amendments of 1967 and 1972 authorize the Secretary of Health and Human Services to develop and conduct a broad range of experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services, while maintaining the quality of such services, under the hospital insurance and supplementary medical insurance programs. A sizeable portion of such costs of such experiments and demonstration projects are paid out of the hospital insurance and supplementary medical insurance trust funds, with the remainder funded through general revenues.

Congress has authorized expenditures from the trust funds for construction, rental, and lease or purchase contracts of office buildings and related facilities for use in connection with the supplementary medical insurance program. Both the capital costs of construction financed directly from the trust fund and the rental, lease, or purchase contract costs of acquiring facilities are included in trust fund expenditures. In 1972-75, construction of several large facilities was authorized under purchase contract authority, wherein initial capital costs were borne by the private sector. Under this

method of facilities acquisition, trust fund expenditures for use and ultimate Government ownership of a facility are made over periods of from 10 to 30 years. Whatever the manner of acquisition, the net worth of facilities and other fixed capital assets is not carried in the statement of the assets of the trust fund presented in this report. This is because the value of fixed capital assets does not represent funds available for benefit or administrative expenditures and, therefore, is not viewed as being a consideration in assessing the actuarial status of the funds.

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

The Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the trust fund. The law requires that such special public-debt obligations shall bear interest at a rate based on the average market yield (computed 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.

## SUMMARY OF THE OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1981

A statement of the income and disbursements of the Federal Supplementary Medical Insurance Trust Fund in fiscal year 1981 and of the assets of the fund at the beginning and end of the fiscal year is presented in table 2. Comparable amounts for fiscal year 1980 are also shown in the table.

The total assets of the trust fund amounted to $4,532 million on September 30, 1980. During fiscal year 1981, total receipts amounted to $12,439 million, and total disbursements were $13,228 million. Total assets thus decreased $789 million during the year to a total of $3,743 million on September 30, 1981.

Of the total receipts, $2,988 million represented premium payments by (or on behalf of) participants aged 65 and over, and $332 million represented premium payments by (or on behalf of) disabled participants under age 65. Total premium payments amounted to $3,320 million, an increase of 13.4 percent over the amount of $2,928 million for the preceding year. This increase in premiums from participants resulted primarily from (1) the growth in the number of persons enrolled in the supplementary medical insurance program and (2) the increase from $8.70 to $9.60 per month in the standard premium rate that became effective on July 1, 1980, and the increase from $9.60 to $11.00 per month in the standard premium rate that became effective on July 1, 1981.

Contributions received from the general fund of the treasury amounted to $8,747 million. This amount consisted of $7,191 million representing contributions relating to premiums paid by participants aged 65 and over, and $1,556 million representing contributions relating to the premiums paid by disabled participants under age 65.

Table 2.—STATEMENT OF OPERATIONS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND DURING FISCAL YEARS 1980 and 1981
(In thousands)

| | Fiscal year 1980 | Fiscal year 1981 |
|---|---|---|
| Total assets of the trust fund, beginning of period | $4,993,913 | $4,531,591 |
| Receipts: | | |
| Premiums from participants: | | |
| Participants aged 65 and over | 2,636,849 | 2,987,735 |
| Disabled participants under age 65 | 290,862 | 331,873 |
| Total premiums | 2,927,711 | 3,319,607 |
| Transfers from general fund of the Treasury: | | |
| Government contributions: | | |
| For premiums received from participants aged 65 and over | 5,601,297 | 7,191,421 |
| For premiums received from disabled participants under age 65 | 1,321,754 | 1,556,009 |
| Total Government contributions | 6,923,051 | 8,747,430 |
| Interest on delayed transfers of Government contributions | 8,663 | 0 |
| Total transfers from general fund of the Treasury | 6,931,713 | 8,747,430 |
| Interest: | | |
| Interest on investments | 416,805 | 409,386 |
| Interest on amounts of interfund transfers 1/ | -1,295 | -37,072 |
| Total interest | 415,510 | 372,314 |
| Total receipts | 10,274,935 | 12,439,351 |
| Disbursements: | | |
| Benefit payments: | | |
| Paid directly from the trust fund for costs of health services. | 10,136,707 | 12,337,137 |
| Transfers to the hospital insurance trust fund for reimbursement of interest loss related to transfer payments made in conjunction with the costs of radiology and pathology services 2/ | 6,000 | 6,000 |
| Total benefit payments | 10,142,707 | 12,343,137 |
| Costs of experiments and demonstration projects 2/ | 1,223 | 1,776 |
| Administrative expenses: | | |
| Department of Health and Human Services 3/ | 577,968 | 662,493 |
| Treasury Department | 47 | 367 |
| Railroad Retirement Board | 0 | 0 |
| Office of Personnel Management | 0 | 0 |
| Construction of facilities | 2,206 | 608 |
| Interfund transfers due to reimbursement of: | | |
| Social Security Administration expenses 4/ | 13,190 | 4,726 |
| Health Care Financing Administration expenses 4/ | 0 | 215,154 |
| Gross administrative expenses | 593,412 | 883,348 |
| Less receipts from sale of surplus supplies, materials, etc. | 85 | 8 |
| Net administrative expenses | 593,327 | 883,340 |
| Total disbursements | 10,737,257 | 13,228,253 |
| Net addition to the trust fund | -462,322 | -788,902 |
| Total assets of the trust fund, end of period | 4,531,591 | 3,742,690 |

1/ A positive figure represents a transfer of interest to the supplementary medical insurance trust fund from the other trust funds. A negative figure represents a transfer of interest from the supplementary medical insurance trust fund to the other trust funds.

2/ For explanation, see text.

3/ Includes administrative expenses of the carriers and intermediaries.

4/ A positive figure represents a transfer from the supplementary medical insurance trust fund to the other trust funds. A negative figure represents a transfer to the supplementary medical insurance trust fund from the other trust funds.

NOTE: Totals do not necessarily equal the sum of rounded components.

The remaining $372 million of receipts consisted almost entirely of interest on the investments of the trust fund.

Of the $13,228 million in total disbursements, $12,337 million represented benefits paid directly from the trust fund for health services covered under Title XVIII of the Social Security Act. In addition, transfers were made to the hospital insurance trust fund consisting of $6 million to adjust for the loss of interest caused by the delay in transferring payments for the costs of radiology and pathology services that were paid initially from the hospital insurance trust fund but that were liabilities of the supplementary medical insurance trust fund. Total benefit payments from the trust fund in fiscal year 1981, therefore, amounted to $12,343 million, an increase of 21.7 percent over the corresponding amount of $10,143 million paid in the preceding year. An additional $2 million in disbursements constituted payment for costs of experiments and demonstration projects in providing health care services.

The remaining $883 million of disbursements was for net administrative expenses. Administrative expenses are allocated and charged directly to each of the four trust funds--old-age and survivors insurance, disability insurance, hospital insurance, and supplementary medical insurance--on the basis of provisional estimates. Similarly, the expenses of administering other programs of the Health Care Financing Administration are also allocated and charged directly to the general fund of the Treasury on a provisional basis. Periodically, as actual experience develops and is analyzed, adjustments to the allocations of administrative expenses and costs of construction for prior periods are affected by interfund transfers, including transfers between the hospital insurance and supplementary medical insurance trust funds and the program management general fund account, with appropriate interest allowances.

In table 3, the experience with respect to actual amounts of participants' premiums, Government contributions, and benefit payments in fiscal year 1981 is compared with the estimates for fiscal year 1981 which appeared in the 1980 and 1981 annual reports. The actual experience was relatively close to the estimates for premiums, Governments contributions, and benefit payments.

The assets of the trust fund at the end of fiscal year 1980 totaled $4,532 million, consisting of $4,558 million in the form of obligations of the U.S. Government and, as an offset, an extension of credit of $26 million against securities to be redeemed. The assets of the trust fund at the end of fiscal year 1981 totaled $3,743 million, consisting of $3,821 million in the form of obligations of the U.S. Government and, as an offset, an extension of credit of $79 million against securities to be redeemed. Table 4 shows a comparison of the total assets of the fund and their distribution at the end of fiscal year 1980 and at the end of fiscal year 1981. A comparison of assets of the trust fund with liabilities for incurred but unpaid benefits (and related administrative expenses) is shown in a later section.

The net decrease in the par value of the investments held by the fund during fiscal year 1980 amounted to $416 million. New securities at a total par value of $10,474 million were acquired during the fiscal year through the investment of receipts and reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the year was $10,890 million. Included in these amounts is $10,190 million in certificates of indebtedness that were acquired, and $10,264 million in certificates of indebtedness that were redeemed, within the fiscal year.

Table 3.--COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND, FISCAL YEAR 1981
(Dollar amounts in millions)

| Item | Actual amount | Comparison of actual experience with estimates for fiscal year 1981 published in-- | | | |
|---|---|---|---|---|---|
| | | 1981 report | | 1980 report | |
| | | Estimated amount | Actual as percentage of estimate | Estimated amount | Actual as percentage of estimate |
| Premiums from participants | $3,320 | $3,310 | 100 | $3,321 | 100 |
| Government contributions | 8,747 | 8,737 | 100 | 8,737 | 100 |
| Benefit payments | 12,345 | 12,300 | 100 | 11,609 | 106 |

TABLE 4.—ASSETS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND, AT THE END OF FISCAL YEARS 1980 AND 1981 1/

| | September 30, 1980 | September 30, 1981 |
|---|---|---|
| Investments in public-debt obligations sold only to this fund (special issues): | | |
| Certificates of indebtedness: | | |
| 11 1/8-percent, 1981 | $198,647,000.00 | |
| 14 7/8-percent, 1982 | | $192,839,000.00 |
| Bonds: | | |
| 7 1/8-percent, 1982 | 53,210,000.00 | |
| 7 1/8-percent, 1983 | 56,245,000.00 | |
| 7 1/8-percent, 1984 | 56,245,000.00 | |
| 7 1/8-percent, 1985 | 56,245,000.00 | 56,245,000.00 |
| 7 1/8-percent, 1986 | 56,245,000.00 | 56,245,000.00 |
| 7 1/8-percent, 1987 | 56,245,000.00 | 56,245,000.00 |
| 7 1/8-percent, 1988 | 56,245,000.00 | 56,245,000.00 |
| 7 1/8-percent, 1989 | 56,245,000.00 | 56,245,000.00 |
| 7 1/8-percent, 1990 | 56,246,000.00 | 56,246,000.00 |
| 7 1/8-percent, 1991 | 56,246,000.00 | 56,246,000.00 |
| 7 1/8-percent, 1992 | 137,816,000.00 | 137,816,000.00 |
| 7 3/8-percnet, 1982 | 11,547,000.00 | |
| 7 3/8-percent, 1983 | 11,546,000.00 | |
| 7 3/8-percent, 1984 | 11,546,000.00 | |
| 7 3/8-percent, 1985 | 11,546,000.00 | 11,546,000.00 |
| 7 3/8-percent, 1986 | 11,547,000.00 | 11,547,000.00 |
| 7 3/8-percent, 1987 | 11,547,000.00 | 11,547,000.00 |
| 7 3/8-percent, 1988 | 11,547,000.00 | 11,547,000.00 |
| 7 3/8 percent, 1989 | 11,547,000.00 | 11,547,000.00 |
| 7 3/8-percent, 1990 | 73,510,000.00 | 73,510,000.00 |
| 7 1/2-percent, 1982 | 8,060,000.00 | |
| 7 1/2-percent, 1983 | 8,061,000.00 | |
| 7 1/2-percent, 1984 | 8,061,000.00 | |
| 7 1/2-percent, 1985 | 8,061,000.00 | 8,061,000.00 |
| 7 1/2-percent, 1986 | 8,061,000.00 | 8,061,000.00 |
| 7 1/2-percent, 1987 | 8,061,000.00 | 8,061,000.00 |
| 7 1/2-percent, 1988 | 8,061,000.00 | 8,061,000.00 |
| 7 1/2-percent, 1989 | 8,061,000.00 | 8,061,000.00 |
| 7 1/2-percent, 1990 | 8,060,000.00 | 8,060,000.00 |
| 7 1/2-percent, 1991 | 81,570,000.00 | 81,570,000.00 |
| 7 5/8-percent, 1982 | 61,964,000.00 | |
| 7 5/8-percent, 1983 | 61,964,000.00 | |
| 7 5/8-percent, 1984 | 61,964,000.00 | 57,403,000.00 |
| 7 5/8-percent, 1985 | 61,964,000.00 | 61,964,000.00 |
| 7 5/8-percent, 1986 | 61,963,000.00 | 61,963,000.00 |
| 7 5/8-percent, 1987 | 61,963,000.00 | 61,963,000.00 |
| 7 5/8-percent, 1988 | 61,963,000.00 | 61,963,000.00 |
| 7 5/8-percent, 1989 | 61,963,000.00 | 61,963,000.00 |
| 8 1/4-percent, 1982 | 115,978,000.00 | |
| 8 1/4-percent, 1983 | 115,978,000.00 | |
| 8 1/4-percent, 1984 | 115,978,000.00 | 115,978,000.00 |
| 8 1/4-percent, 1985 | 115,978,000.00 | 115,978,000.00 |
| 8 1/4-percent, 1986 | 115,978,000.00 | 115,978,000.00 |
| 8 1/4-percent, 1987 | 115,978,000.00 | 115,978,000.00 |
| 8 1/4-percent, 1988 | 115,978,000.00 | 115,978,000.00 |
| 8 1/4-percent, 1989 | 115,978,000.00 | 115,978,000.00 |
| 8 1/4-percent, 1990 | 115,978,000.00 | 115,978,000.00 |
| 8 1/4-percent, 1991 | 115,978,000.00 | 115,978,000.00 |
| 8 1/4-percent, 1992 | 115,978,000.00 | 115,978,000.00 |
| 8 1/4-percent, 1993 | 253,794,000.00 | 253,794,000.00 |
| 8 3/4-percent, 1982 | 72,935,000.00 | |
| 8 3/4-percent, 1983 | 72,935,000.00 | |
| 8 3/4-percent, 1984 | 72,935,000.00 | 72,935,000.00 |
| 8 3/4-percent, 1985 | 72,935,000.00 | 72,935,000.00 |
| 8 3/4-percent, 1986 | 72,934,000.00 | 72,934,000.00 |
| 8 3/4-percent, 1987 | 72,934,000.00 | 72,934,000.00 |
| 8 3/4-percent, 1988 | 72,934,000.00 | 72,934,000.00 |
| 8 3/4-percent, 1989 | 72,934,000.00 | 72,934,000.00 |
| 8 3/4-percent, 1990 | 72,934,000.00 | 72,934,000.00 |
| 8 3/4-percent, 1991 | 72,934,000.00 | 72,934,000.00 |
| 8 3/4-percent, 1992 | 72,934,000.00 | 72,934,000.00 |
| 8 3/4-percent, 1993 | 72,934,000.00 | 72,934,000.00 |
| 8 3/4-percent, 1994 | 326,728,000.00 | 326,728,000.00 |
| 9 3/4-percent, 1995 | 115,003,000.00 | 115,003,000.00 |
| Total investments in public-debt obligations... | 4,558,083,000.00 | 3,821,439,000.00 |
| Undisbursed balance | -26,491,686.18 2/ | -78,749,328.42 2/ |
| Total assets | 4,531,591,313.82 | 3,742,689,671.58 |

1/ The assets are carried at par value, which is the same as book value.
2/ The negative figure represented an extension of credit which was covered by the redemption of securities on the first day of the following month.

The net decrease in the par value of the investments held by the fund during fiscal year 1981 amounted to $737 million. New securities at a total par value of $12,497 million were acquired during the fiscal year through the investment of receipts and reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the year was $13,234 million. Included in these amounts is $12,395 million in certificates of indebtedness that were acquired, and $12,401 million in certificates of indebtedness that were redeemed, within the fiscal year.

The effective annual rate of interest earned by the assets of the supplementary medical insurance trust fund during the 12 months ending on June 30, 1981, was 8.7 percent. (This period is used because interest on special issues is paid semiannually on June 30 and December 31.) The interest rate on special issues purchased by the trust fund in June 1981 was 13 percent, payable semiannually.

## EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING THE PERIOD OCTOBER 1, 1981 TO DECEMBER 31, 1984

Financing for the supplementary medical insurance program is established annually on the basis of standard monthly premium rates (paid by or on behalf of the participants) and actuarial rates (on which general revenue contributions are based) which are applicable to a period of July 1 through the following June 30. In recent years, allowable fee limits for physician services have also been established to apply to the same July 1 to June 30 period.

Standard premium rates and actuarial rates have been promulgated for periods through June 30, 1983. It has been assumed in this report that financing after that time will be established to cover the incurred expenses of the program.

The projections shown in the following tables are based on two sets of economic assumptions labeled alternative A and alternative B. These alternatives reflect two different levels of expectation of future performance of the economy. Appendix A presents an explanation of the effects of alternative A and alternative B on the projections in this report.

Under both projections it is assumed that allowable fees for physician services will increase an average of 11.0 percent for the 12-month period ending June 30, 1982 and will increase an average of 10.0 percent for the 12-month period ending June 30, 1983. The costs per enrollee for institutional and other services under SMI are projected to increase an average of 17 percent for the

12-month period ending June 30, 1982 over the previous 12 months and an additional 19 percent for the 12-month period ending June 30, 1983. These values reflect the implementation effects of Public Laws 96-499 and 97-35 on cost per enrollee increases.

Table 5 shows the projected operations of the trust fund on a fiscal year basis through fiscal year 1984. Table 6 shows the corresponding development on a calendar year basis. The trust fund decreased substantially in fiscal year 1981 because the financing for this period was less than required and the administrative costs increased above what was expected due to adjustments for prior years. At the time the actuarial rates were promulgated for the 12-month period ending June 30, 1981, it appeared that the assets were more than sufficient to cover the incurred costs of the program and provide an appropriate contingency. Therefore the actuarial rates for this period were set to reduce the assets to a more appropriate level. However, the current estimate for expenditures exceeds the estimate made at the time of the promulgation. The combination of these two factors reduced the assets, at the end of the 12-month period ending June 30, 1981, to a level which while adequate to cover program payments, was not sufficient to cover outstanding liabilities. The actuarial rates for the 12-month period ending June 30, 1982 were promulgated with specific margins to amortize this unfunded liability and to build assets to a desirable level. Finally, the actuarial rates for the 12-month period ending June 30, 1983 were promulgated with specific margins to maintain this desirable level. As a result the fund is projected to increase substantially to $5.7 billion under both alternatives by the end of fiscal year 1982 and to increase slightly to $6.6 billion by the end of fiscal year 1983.

Table 5.—ESTIMATED PROGRESS OF SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND (CASH BASIS)
FISCAL YEARS 1982-1984 AND ACTUAL DATA FOR 1967-1981
(In millions)

| Fiscal year | Income | | | | Disbursements | | | Balance in fund at end of year 2/ |
|---|---|---|---|---|---|---|---|---|
| | Premiums from participants | Government contributions 1/ | Interest on fund | Total income | Benefit payments | Administrative expenses | Total disbursements | |
| **Historical:** | | | | | | | | |
| 1967 | $ 647 | $ 623 | $ 15 | $1,285 | $ 664 | $ 135 3/ | $ 799 | $ 486 |
| 1968 | 698 | 634 | 21 | 1,353 | 1,390 | 142 | 1,532 | 307 |
| 1969 | 903 | 984 | 24 | 1,911 | 1,645 | 195 | 1,840 | 378 |
| 1970 | 936 | 928 | 12 | 1,876 | 1,979 | 217 | 2,196 | 57 |
| 1971 | 1,253 | 1,245 | 18 | 2,516 | 2,035 | 248 | 2,283 | 290 |
| 1972 | 1,340 | 1,365 | 29 | 2,734 | 2,255 | 289 | 2,544 | 481 |
| 1973 | 1,427 | 1,430 | 45 | 2,902 | 2,391 | 246 | 2,637 | 746 |
| 1974 | 1,704 | 2,029 | 76 | 3,809 | 2,874 | 409 | 3,283 | 1,272 |
| 1975 | 1,887 | 2,330 | 105 | 4,322 | 3,765 | 405 | 4,170 | 1,424 |
| 1976 | 1,951 | 2,939 | 104 | 4,994 | 4,672 | 528 | 5,200 | 1,219 |
| Interim 4/ | 539 | 878 | 4 | 1,421 | 1,269 | 132 | 1,401 | 1,239 |
| 1977 | 2,193 | 5,053 | 137 | 7,383 | 5,867 | 475 | 6,342 | 2,279 |
| 1978 | 2,431 | 6,386 | 228 | 9,045 | 6,852 | 504 | 7,356 | 3,968 |
| 1979 | 2,635 | 6,841 | 363 | 9,839 | 8,259 | 555 | 8,814 | 4,994 |
| 1980 | 2,928 | 6,932 | 415 | 10,275 | 10,144 | 593 | 10,737 | 4,532 |
| 1981 | 3,320 | 8,747 | 372 | 12,439 | 12,345 | 883 | 13,228 | 3,743 |
| **Projected:** | | | | | | | | |
| **Alternative A:** | | | | | | | | |
| 1982 | 3,825 | 13,323 | 408 | 17,556 | 14,903 | 733 | 15,636 | 5,663 |
| 1983 | 4,284 | 14,480 | 584 | 19,348 | 17,584 | 804 | 18,388 | 6,623 |
| 1984 | 4,690 | 17,090 | 678 | 22,458 | 20,526 | 873 | 21,399 | 7,681 |
| **Alternative B:** | | | | | | | | |
| 1982 | 3,825 | 13,323 | 411 | 17,559 | 14,903 | 733 | 15,636 | 5,666 |
| 1983 | 4,284 | 14,480 | 565 | 19,329 | 17,595 | 804 | 18,399 | 6,596 |
| 1984 | 4,699 | 17,173 | 653 | 22,525 | 20,604 | 889 | 21,493 | 7,629 |

1/ The payments shown as being from the general fund of the Treasury include certain interest-adjustment items.
2/ The financial status of the program depends on both the total net assets and the liabilities of the program. (See Table 8)
3/ Administrative expenses shown include those paid in fiscal years 1966 and 1967.
4/ Interim Period is the period from July 1, 1976 to September 30, 1976 and is the transitional period between fiscal years beginning July 1 and fiscal years beginning October 1.

Table 6.--ESTIMATED PROGRESS OF SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND (CASH BASIS)
CALENDAR YEARS 1982-1984 AND ACTUAL DATA FOR 1966-1981
(In millions)

| Calendar year | Income | | | | Disbursements | | | Balance in fund at end of year 2/ |
|---|---|---|---|---|---|---|---|---|
| | Premiums from participants | Government contributions 1/ | Interest on fund | Total income | Benefit payments | Administrative expenses | Total disbursements | |
| **Historical:** | | | | | | | | |
| 1966 | $ 322 | $ 0 | $ 2 | $ 324 | $ 128 | $ 75 | $ 203 | $ 122 |
| 1967 | 640 | 933 | 24 | 1,597 | 1,197 | 110 | 1,307 | 412 |
| 1968 | 832 | 858 | 21 | 1,711 | 1,518 | 184 | 1,702 | 421 |
| 1969 | 914 | 907 | 18 | 1,839 | 1,865 | 196 | 2,061 | 199 |
| 1970 | 1,096 | 1,093 | 12 | 2,201 | 1,975 | 237 | 2,212 | 188 |
| 1971 | 1,302 | 1,313 | 24 | 2,639 | 2,117 | 260 | 2,377 | 450 |
| 1972 | 1,382 | 1,389 | 37 | 2,808 | 2,325 | 289 | 2,614 | 643 |
| 1973 | 1,550 | 1,705 | 57 | 3,311 | 2,526 | 318 | 2,844 | 1,111 |
| 1974 | 1,804 | 2,225 | 95 | 4,124 | 3,318 | 410 | 3,728 | 1,506 |
| 1975 | 1,918 | 2,648 | 106 | 4,673 | 4,273 | 462 | 4,735 | 1,444 |
| 1976 | 2,060 | 3,810 | 107 | 5,977 | 5,080 | 542 | 5,622 | 1,799 |
| 1977 | 2,247 | 5,386 | 172 | 7,805 | 6,038 | 467 | 6,505 | 3,099 |
| 1978 | 2,470 | 6,287 | 299 | 9,056 | 7,252 | 503 | 7,755 | 4,400 |
| 1979 | 2,719 | 6,645 | 404 | 9,768 | 8,708 | 557 | 9,265 | 4,902 |
| 1980 | 3,011 | 7,455 | 408 | 10,874 | 10,635 | 610 | 11,245 | 4,530 |
| 1981 | 3,722 3/ | 11,291 3/ | 361 | 15,374 | 13,113 | 915 | 14,028 | 5,877 |
| **Projected:** | | | | | | | | |
| **Alternative A:** | | | | | | | | |
| 1982 | 3,680 3/ | 12,329 3/ | 496 | 16,505 | 15,596 | 751 | 16,347 | 6,035 |
| 1983 | 4,384 | 15,124 | 631 | 20,139 | 18,344 | 821 | 19,165 | 7,009 |
| 1984 | 4,797 | 17,719 | 736 | 23,252 | 21,360 | 892 | 22,252 | 8,009 |
| **Alternative B:** | | | | | | | | |
| 1982 | 3,680 3/ | 12,329 3/ | 488 | 16,497 | 15,598 | 751 | 16,349 | 6,025 |
| 1983 | 4,384 | 15,150 | 609 | 20,143 | 18,365 | 825 | 19,190 | 6,978 |
| 1984 | 4,814 | 17,848 | 692 | 23,354 | 21,484 | 908 | 22,392 | 7,940 |

1/ The payments shown as being from the general fund of the Treasury include certain interest-adjustment items.
2/ The financial status of the program depends on both the total net assets and the liabilities of the program. (See Table 8)
3/ Section 708 of Title XII of the Social Security Act modified the provisions for the delivery of Social Security benefit checks when the regularly designated delivery day falls on a Saturday, Sunday or legal public holiday. Delivery of benefit checks for January, 1982 occurred on December 31, 1981. Consequently, the SMI premiums withheld from the checks ($264 million) and the general revenue matching contributions ($883 million) were added to the SMI Trust Fund on December 31, 1981. These amounts have been excluded from the estimated premium income and general revenue income for calendar year 1982.

## ACTUARIAL STATUS OF THE TRUST FUND

### 1. ACTUARIAL SOUNDNESS OF THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM

The concept of actuarial soundness, as it applies to the supplementary medical insurance program, is closely related to the concept as it applies to private group insurance. The supplementary medical insurance program essentially is yearly renewable term insurance intended to be self-supporting from premium income paid by the enrollees and from income contributed from general revenue in proportion to premium payments. The law requires the Secretary of Health and Human Services to establish income on the basis of incurred costs. That is, the income to the program during a 12-month period for which financing is being established must be sufficient to pay for services (including associated administrative costs) expected to be rendered during that period even though payment for some of these services will not be made until after the close of the period. The portion of income required to cover those benefits not paid until after the close of the year is added to the trust fund until needed. Thus, the amount of assets in the trust fund at any time should be no less than the costs of the benefits and administration incurred but not yet paid. Since the income per enrollee (premium plus government contribution rate) is established prospectively, it is subject to projection error. As a result, the income to the program may not be equal to incurred costs; therefore trust fund assets should be maintained at a level which is adequate to cover the impact of a moderate degree of projection error as well as the value of incurred but unpaid expenses.

In testing the actuarial soundness of the supplementary medical insurance program, it is not appropriate to look beyond the period for

which the enrollee premium rate and level of general revenue financing have been established. The primary tests of actuarial soundness, then, are that (1) income for years for which financing has been established be sufficient to meet the projected benefits and associated administrative expenses incurred for that period and (2) assets be sufficient to cover projected liabilities which will have been incurred by the end of that time but will not have been paid yet. Even if these tests of actuarial soundness are not met, the program can continue to operate if the trust fund remains at a level adequate to permit the payment of claims as presented. However, to protect against the possibility that cost increases under the program will be higher than assumed, assets should be sufficient to cover the impact of a moderate degree of projection error.

2. INCURRED EXPERIENCE OF THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM

The tests of actuarial soundness of the supplementary medical insurance program noted above rely on the incurred experience of the program. Cash disbursements for benefits and administrative expenses by themselves are misleading, due to the relatively large liabilities outstanding at any time for benefits and processing costs that must be paid for services already performed. These liabilities result from the lag between the time that services are performed and the time that payments for them are made.

The experience of the program is substantially more difficult to determine on an incurred basis than on a cash basis. Payment for some services is reported only on a cash basis, and the incurred experience must be inferred from the cash payment information. For recent time periods, the tabulations of bills are incomplete due to normal

processing delays. Finally, since bills are tabulated only for a sample of beneficiaries, the data is subject to bias and random fluctuation inherent in the sampling process.

Table 7 shows the estimated transactions of the trust fund on an incurred basis. For the reasons stated above, the incurred experience must be viewed as an estimate even for historical years. Various checks, such as cash outlay data, assure that the estimates are reasonably close, however.

### 3. ACCUMULATED EXCESS OF ASSETS OVER LIABILITIES

The liability outstanding at any time for the cost of services performed for which no payment has been made is referred to as "benefits incurred but unpaid." Estimates of the amount of benefits incurred but unpaid as of June 30 of each year, and of the administrative expenses related to processing these benefits, appear in table 8. For most years of the program, assets have not been as large as outstanding liabilities. Nonetheless, the fund has remained positive, allowing claims to be paid.

Program financing has been established through June 1983. On the basis of this financing the estimated deficit of assets over liabilities of $201 million at the end of June 1981 is projected to be completely amortized by the end of June 1982. The excess of assets over liabilities is expected to increase to $775 million under alternative A and $778 million under alternative B at the end of June 1982, and then to further increase to $1,022 million under alternative A and to $1,000 million under alternative B at the end of June 1983. These projected values as of June 30, 1983 amount to about 5 percent of incurred expenditures for the following 12-month period, a level which is sufficient to cover the impact of a moderate degree of projection error.

Table 7.--ESTIMATED INCOME AND DISBURSEMENTS INCURRED UNDER SUPPLEMENTARY MEDICAL INSURANCE PROGRAM, 12-MONTH PERIODS ENDING JUNE 30, 1967-1983
(In millions)

| 12-month period ending June 30, | Premiums from participants | Government contributions | Interest on fund | Benefit payments | Administrative expenses | Net operations in year |
|---|---|---|---|---|---|---|
| historical | | | | | | |
| 1967 | $ 647 | $ 647 | $ 15 | $1,108 | $190* | $ 11 |
| 1968 | 698 | 698 | 21 | 1,443 | 147 | -173 |
| 1969 | 903 | 903 | 24 | 1,766 | 209 | -145 |
| 1970 | 936 | 936 | 12 | 1,930 | 212 | -258 |
| 1971 | 1,253 | 1,253 | 18 | 2,090 | 255 | 179 |
| 1972 | 1,340 | 1,340 | 29 | 2,289 | 293 | 127 |
| 1973 | 1,427 | 1,426 | 45 | 2,499 | 257 | 142 |
| 1974 | 1,704 | 2,031 | 76 | 3,152 | 449 | 210 |
| 1975 | 1,887 | 2,395 | 107 | 3,945 | 424 | 20 |
| 1976 | 1,951 | 2,972 | 109 | 4,846 | 548 | -362 |
| 1977 | 2,156 | 4,697 | 157 | 5,916 | 511 | 583 |
| 1978 | 2,358 | 5,991 | 247 | 7,041 | 509 | 1,046 |
| 1979 | 2,601 | 6,570 | 372 | 8,311 | 594 | 638 |
| 1980 | 2,823 | 6,627 | 421 | 10,098 | 615 | -842 |
| 1981 | 3,178 | 8,219 | 371 | 12,246 | 903 | -1,381 |
| Projected: | | | | | | |
| Alternative A: | | | | | | |
| 1982 | 3,705 | 12,440 | 436 | 14,853 | 752 | 976 |
| 1983 | 4,184 | 13,832 | 586 | 17,540 | 815 | 247 |
| Alternative B: | | | | | | |
| 1982 | 3,705 | 12,440 | 439 | 14,853 | 752 | 979 |
| 1983 | 4,184 | 13,832 | 567 | 17,545 | 816 | 222 |

*Includes administrative expenses incurred prior to the beginning of the program.

Table 8.--SUMMARY OF ESTIMATED ASSETS AND LIABILITIES OF THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM, ON JUNE 30, 1967-1983
(Dollar amounts in millions)

| 12-month period ending June 30, | Balance in trust fund | Government contributions due and unpaid | Total assets | Benefits incurred but unpaid | Administrative costs incurred but unpaid | Total liabilities | Excess of assests over liabilities | Ratio* |
|---|---|---|---|---|---|---|---|---|
| Historical: | | | | | | | | |
| 1967 | $ 486 | $24 | $ 510 | $ 444 | $ 55 | $ 499 | $ 11 | .01 |
| 1968 | 307 | 88 | 395 | 497 | 60 | 557 | -162 | -.08 |
| 1969 | 378 | 7 | 385 | 618 | 74 | 692 | -307 | -.14 |
| 1970 | 57 | 15 | 72 | 569 | 69 | 638 | -566 | -.24 |
| 1971 | 290 | 22 | 312 | 624 | 76 | 700 | -388 | -.15 |
| 1972 | 481 | -3 | 478 | 658 | 80 | 738 | -260 | -.09 |
| 1973 | 746 | -7 | 739 | 766 | 91 | 857 | -118 | -.03 |
| 1974 | 1,272 | -5 | 1,267 | 1,044 | 131 | 1,175 | 92 | .02 |
| 1975 | 1,424 | 67 | 1,491 | 1,224 | 150 | 1,374 | 117 | .02 |
| 1976 | 1,219 | 105 | 1,324 | 1,398 | 170 | 1,568 | -244 | -.04 |
| 1977 | 2,170 | 91 | 2,261 | 1,725 | 198 | 1,923 | 338 | .04 |
| 1978 | 3,786 | 40 | 3,826 | 2,209 | 233 | 2,442 | 1,384 | .16 |
| 1979 | 4,880 | 2 | 4,882 | 2,600 | 261 | 2,861 | 2,021 | .19 |
| 1980 | 4,657 | 0 | 4,657 | 3,182 | 296 | 3,478 | 1,179 | .09 |
| 1981 | 3,801 | 0 | 3,801 | 3,670 | 332 | 4,002 | -201 | -.01 |
| Projected: | | | | | | | | |
| Alternative A: | | | | | | | | |
| 1982 | 5,372 | 0 | 5,372 | 4,236 | 361 | 4,597 | 775 | .04 |
| 1983 | 6,282 | 0 | 6,282 | 4,870 | 390 | 5,260 | 1,022 | .05 |
| Alternative B: | | | | | | | | |
| 1982 | 5,375 | 0 | 5,375 | 4,236 | 361 | 4,597 | 778 | .04 |
| 1983 | 6,264 | 0 | 6,264 | 4,873 | 391 | 5,264 | 1,000 | .05 |

*Ratio of the excess of assets over liabilities to the following year's total incurred expenditures.

## 4. SENSITIVITY TESTING

Some of the assumptions underlying the projection presented in this report are highly uncertain, and variations in these assumptions would have a substantial impact on expenditures. In order to test the future status of the program under varying assumptions, a low cost projection and a high cost projection were prepared by varying these key assumptions. The low and high cost alternative sets of assumptions are intended to reflect growth rates for the various components of program costs which are more favorable and adverse, respectively, than those of the intermediate projection and which are not unreasonable themselves in light of the nature and historical experience of the program. As such, they provide a range of financial outcomes within which the actual experience of the program might reasonably be expected to fall.

Table 9 indicates that, under the low cost assumptions, trust fund assets would exceed liabilities significantly by the end of June 1983 (the period through which financing has been established), reaching a level of 18 percent of the following year's incurred expenditures. If these low growth rates were actually to materialize, then subsequent financing rates could be adjusted downward in order to lower the excess of assets over liabilities to more appropriate levels. Under the high cost assumptions, trust fund liabilities would exceed assets by the end of June 1983, reaching a level of -6 percent of the following year's incurred expenditures. If these high growth rates were to occur, the subsequent financing rates would have to be adjusted upward in order to generate more appropriate levels for the excess of assets over liabilities.

Table 9.--ACTUARIAL STATUS OF THE SMI TRUST FUND UNDER THREE SETS OF ASSUMPTIONS FOR THE 12-MONTH PERIOD ENDING WITH JUNE 30, 1981-1983

| | This Projection | | | Low Cost Projection | | | High Cost Projection | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1981 | 1982 | 1983 | 1981 | 1982 | 1983 | 1981 | 1982 | 1983 |
| Projection factors (in percent): 1/ | | | | | | | | | |
| Physicians' fees 2/ | | | | | | | | | |
| Aged | 8.3 | 11.0 | 10.0 | 7.8 | 10.5 | 9.5 | 8.8 | 11.5 | 10.5 |
| Disabled | 8.3 | 11.0 | 10.0 | 7.8 | 10.5 | 9.5 | 8.8 | 11.5 | 10.5 |
| Utilization of physicians' services 3/ | | | | | | | | | |
| Aged | 7.0 | 8.4 | 4.9 | 6.0 | 6.4 | 2.9 | 8.0 | 10.4 | 6.9 |
| Disabled | 9.8 | 11.2 | 8.9 | 7.8 | 6.2 | 3.9 | 11.8 | 16.2 | 13.9 |
| Outpatient hospital services per enrollee | | | | | | | | | |
| Aged | 22.0 | 25.1 | 23.6 | 19.0 | 18.1 | 13.6 | 25.0 | 32.1 | 33.6 |
| Disabled | 20.9 | 25.8 | 17.7 | 12.9 | 15.8 | 7.7 | 28.9 | 35.8 | 27.7 |
| Actuarial status (in millions): | | | | | | | | | |
| Assets | $3,801 | $5,375 | $6,264 | $3,801 | $5,956 | $8,179 | $3,801 | $4,772 | $4,255 |
| Liabilities | 4,002 | 4,597 | 5,264 | 3,797 | 4,290 | 4,798 | 4,207 | 4,909 | 5,748 |
| Assets less liabilities | $ -201 | $ 778 | $1,000 | $ 4 | $1,666 | $3,381 | $ -406 | $ -137 | $-1,493 |
| Ratio of assets less liabilities to expenditures (in percent) 4/ | -1.3 | 4.2 | 4.7 | 0.0 | 9.8 | 17.6 | -2.5 | -0.7 | -6.3 |

1/ Because of the manner in which alternative economic assumptions affect the projected operations of the supplementary medical insurance program, there is not a substantial difference in the projections based upon the two sets of assumptions. Therefore only one projection, alternative B is presented here. Appendix A presents an explanation of the effects of alternative A and alternative B on the projections in this report.

2/ As recognized for payment under the program.

3/ Increase in the number of services received per enrollee and greater relative use of more expensive services.

4/ Ratio of assets less liabilities at the end of the year to total incurred expenditures during the following year, expressed as a percent.

## CONCLUSION

The financing of the supplementary medical insurance program has been established through June 1983, by the promulgation of standard monthly premium rates (paid by or on behalf of each enrollee) of $11.00 for the year ending June 1982 and $12.20 for the year ending June 1983 and of actuarial rates which determine the amount to be contributed from general revenue on behalf of each enrollee.

Under both sets of intermediate assumptions used in this report, income, composed of premiums paid by the participants, general revenue contributions and interest earned by the trust fund, is projected to exceed disbursements during FY 1982 and FY 1983. As a result, the assets in the trust fund, on a cash basis, are projected to increase from $3.7 billion at the end of fiscal year 1981 to an estimated $5.7 billion at the end of fiscal year 1982 and then to increase to an estimated $6.6 billion at the end of fiscal year 1983.

Program liabilities exceeded assets by approximately $201 million at the end of June 1981. However the financing for the 12-month period ending June 30, 1982 was established to place the trust fund on a sound actuarial basis. During the 12-month period ending June 30, 1982, the assets of the trust fund increase more quickly than liabilities increase, so that by June 30, 1982, assets exceed liabilities by $775 million under alternative A and $778 million under alternative B. By the end of June 1983 assets are projected to exceed liabilities by $1,022 million under alternative A and by $1,000 million under alternative B (representing 5 percent of projected incurred expenditures for the following 12-month period). Under

more pessimistic assumptions as to cost increases, assets based on financing already established will be insufficient to cover outstanding liabilities. However, the trust fund should remain positive allowing claims to be paid. Hence, the financing established through June 1983 is sufficient to cover projected benefit and administrative costs incurred through that time period and to build a level of trust fund assets which is adequate to cover the impact of a moderate degree of projection error.

## APPENDIX A

## ACTUARIAL METHODOLOGY AND PRINCIPAL ASSUMPTIONS FOR COST ESTIMATES FOR THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM*

### 1. ESTIMATES FOR AGED AND DISABLED (EXCLUDING ESRD) ENROLLEES

a. Introduction

Estimates for aged and disabled enrollees--excluding disabled persons with end stage renal disease (ESRD)--are prepared by establishing, as accurately as possible, reasonable charges incurred per enrollee in a recent year (the 12-month period ending June 30, 1980, for this report) and projecting these charges through the estimating period. The per enrollee charges are then converted to reimbursement amounts by subtracting the per enrollee values of the deductible and coinsurance. Aggregate reimbursement amounts are calculated by multiplying the per enrollee reimbursement amounts by the projected enrollment. In order to estimate cash disbursements, an allowance is made for the delay between receipt of service and payment therefor.

Disabled persons with ESRD have per enrollee costs which are higher and quite different in nature from those of most other disabled persons. Hence, program costs for them have been excluded from the analysis in this section and are included in a later section.

b. Establishing a Projection Base:

(1) Physician Services:

Reimbursement amounts for physician services (and small amounts for other services) are paid through organizations acting for the Health Care Financing Administration, referred to as carriers. The carriers determine whether

*Prepared by the Division of Medicare Cost Estimates, Bureau of Data Management and Strategy, Health Care Financing Administration

billed services are covered under the program and determine the reasonable charges for the services. A record of the amount reimbursed after reduction for coinsurance and the deductible is transmitted to the central office in the form of a "payment record."

Payment records for 0.1 percent of aged beneficiaries and 1.0 percent of disabled beneficiaries are tabulated by date of service, thus providing a data base which is constructed on an incurred basis. Certain minor adjustments are made to the tabulated sample data to correct for biases and random fluctuation inherent in the sampling process. Having the data on an incurred basis is necessary to meet the statutory requirement that the program be financed on this basis; it also makes possible a comparison of program experience with non-program data sources.

As a check on the validity of the projection base, incurred reimbursement amounts are compared with cash expenditures reported by the carriers through an independent reporting system. In a program with continuously increasing incurred reimbursement amounts, cash payments are expected to be slightly lower than incurred expenses (except in the first year of coverage of a service or group of beneficiaries, when the difference should be substantial). These differences between cash and incurred reimbursement amounts occur because of the lag between receipt of services and payment therefor.

(2) Institutional and Other Services:

Reimbursement amounts for institutional services under the supplementary medical insurance program are paid by the same fiscal intermediaries that pay for hospital insurance services. The principal institutional services covered under the supplementary medical insurance program are outpatient hospital care

and home health agency services. However, due to program changes mandated by P.L. 96-499, almost all future payments for home health agency services will be made from the hospital insurance trust fund.

Reimbursements for institutional services occur in two stages. Provider bills are submitted to the intermediaries, and interim payments are made on the basis of these bills. The bills are then submitted to the central office, and tabulations for a sample of beneficiaries are prepared in a manner parallel to that for payment records.

At the close of a provider's accounting period, a cost report is submitted and lump-sum payments or recoveries are made to correct for the difference between interim payments made to the provider and the retroactively determined reasonable cost for providing covered services (net of coinsurance and deductible amounts). The amounts of these retroactive settlements are reported on a cash basis, and approximations are necessary to allocate these payments to the time of service.

Group practice prepayment plans are reimbursed directly by the Health Care Financing Administration on a reasonable cost basis. Comprehensive data are available for these payments only on a cash basis, and certain approximations must be made to allocate expenses to the period when services were rendered.

(3) Summary of Historical Data:

Table A1 summarizes the incurred reimbursement amounts per enrollee for the various services for each of the 12-month periods ending June 30, through 1980. Also shown are average enrollment figures for these years. In order to analyze the historical trends in prices and use of services, these reimbursement

amounts are converted to the reasonable charges or reasonable costs on which reimbursement was based. This process is necessary largely because the fixed deductible becomes a smaller percentage of charges each year and thus causes reimbursement to rise faster than charges or costs. Table A2 shows the reasonable charges or costs per enrollee corresponding to the reimbursement values shown in table A1.

c. Per Enrollee Increases

(1) Physician Services:

Per enrollee charges for physician services are affected by a variety of factors. Some of these can be identified explicitly. Others can be recognized only by the fact that the explicitly quantifiable factors do not explain all of the increase in per enrollee charges year-to-year.

Increases in average charge per service are one of the most important elements creating increasing charges per enrollee. The physician fee component of the consumer price index provides an estimate of the historical increases in average charge per service. Increases in this index are shown in the first column of table A3.

Bills submitted to the carriers during a 12-month period beginning July 1 are subject, by statute, to certain limitations on the level of fees to be recognized by the program for reimbursement purposes. The fee level recognized for a particular service by a physician is subject to reduction if it exceeds the median charge that the physician assessed for the same service in the preceding calendar year. This median charge is called the "customary" charge.

Table A1.--INCURRED REIMBURSEMENT AMOUNTS PER ENROLLEE: HISTORICAL

| Year ending June 30, | Average enrollment (millions) | All services | Physician | Inpatient radiology and pathology* | Outpatient hospital | Home health agency | Group practice prepayment plan | Independent lab |
|---|---|---|---|---|---|---|---|---|
| Aged: | | | | | | | | |
| 1967 | 17.750 | $62.40 | $59.02 | | $1.41 | $ .79 | $ .88 | $ .30 |
| 1968 | 18.038 | 80.04 | 72.56 | $1.89 | 2.40 | 1.49 | 1.35 | .35 |
| 1969 | 18.833 | 93.72 | 79.06 | 6.57 | 4.23 | 1.92 | 1.54 | .40 |
| 1970 | 19.312 | 99.90 | 82.84 | 7.14 | 5.93 | 2.00 | 1.51 | .48 |
| 1971 | 19.664 | 106.27 | 87.80 | 7.21 | 7.56 | 1.68 | 1.41 | .61 |
| 1972 | 20.043 | 114.22 | 94.82 | 6.77 | 8.58 | 1.61 | 1.66 | .78 |
| 1973 | 20.428 | 122.38 | 100.95 | 6.99 | 9.45 | 2.17 | 1.88 | .94 |
| 1974 | 20.988 | 134.33 | 109.97 | 7.44 | 11.36 | 2.03 | 2.32 | 1.21 |
| 1975 | 21.504 | 160.21 | 127.48 | 8.72 | 15.48 | 3.84 | 3.05 | 1.64 |
| 1976 | 22.089 | 188.57 | 145.30 | 10.89 | 21.30 | 5.21 | 3.85 | 2.02 |
| 1977 | 22.605 | 221.46 | 167.13 | 12.22 | 28.72 | 6.54 | 4.37 | 2.48 |
| 1978 | 23.133 | 254.82 | 192.86 | 14.79 | 33.42 | 6.82 | 4.00 | 2.93 |
| 1979 | 23.693 | 290.73 | 218.90 | 16.44 | 40.46 | 6.85 | 4.75 | 3.33 |
| 1980 | 24.287 | 344.03 | 258.99 | 18.88 | 47.36 | 7.64 | 7.10 | 4.06 |
| Disabled (excluding ESRD): | | | | | | | | |
| 1974 | 1.636 | 117.29 | 90.13 | 7.54 | 13.93 | 3.46 | 1.57 | .66 |
| 1975 | 1.813 | 149.73 | 117.40 | 8.40 | 17.37 | 3.59 | 1.91 | 1.06 |
| 1976 | 2.015 | 179.09 | 138.49 | 10.03 | 21.74 | 5.14 | 2.22 | 1.47 |
| 1977 | 2.229 | 220.62 | 161.97 | 13.03 | 36.50 | 4.79 | 2.33 | 2.00 |
| 1978 | 2.419 | 256.67 | 189.40 | 14.25 | 42.84 | 5.55 | 2.02 | 2.61 |
| 1979 | 2.560 | 303.40 | 225.10 | 17.15 | 50.54 | 5.11 | 2.31 | 3.19 |
| 1980 | 2.637 | 365.23 | 271.35 | 20.02 | 60.39 | 6.13 | 3.44 | 3.90 |

*Includes services on payment records and those using combined billing; amounts shown are for April 1968 and later when combined billings are authorized and inpatient radiology and pathology charges are reimbursed at 100 percent.

Table A2.--INCURRED REASONABLE CHARGES OR COSTS PER ENROLLEE: HISTORICAL

| Year ending June 30, | Average enrollment (millions) | All services | Physician | Inpatient radiology and pathology* | Outpatient hospital | Home health agency | Group practice prepayment plan | Independent lab |
|---|---|---|---|---|---|---|---|---|
| Aged: | | | | | | | | |
| 1967 | 17.750 | $109.36 | $103.44 | | $2.47 | $1.38 | $1.55 | $.52 |
| 1968 | 18.038 | 128.14 | 117.21 | $1.89 | 3.88 | 2.41 | 2.18 | .57 |
| 1969 | 18.833 | 145.58 | 126.11 | 6.57 | 6.74 | 3.06 | 2.46 | .64 |
| 1970 | 19.312 | 154.02 | 131.18 | 7.14 | 9.39 | 3.16 | 2.39 | .76 |
| 1971 | 19.664 | 162.58 | 137.72 | 7.21 | 11.86 | 2.63 | 2.21 | .95 |
| 1972 | 20.043 | 173.14 | 146.82 | 6.77 | 13.28 | 2.49 | 2.57 | 1.21 |
| 1973 | 20.428 | 186.56 | 157.43 | 6.99 | 14.73 | 3.01 | 2.93 | 1.47 |
| 1974 | 20.988 | 204.56 | 171.39 | 7.44 | 17.70 | 2.53 | 3.62 | 1.88 |
| 1975 | 21.504 | 237.08 | 193.14 | 8.72 | 23.46 | 4.65 | 4.62 | 2.49 |
| 1976 | 22.089 | 272.57 | 215.26 | 10.89 | 31.55 | 6.17 | 5.70 | 3.00 |
| 1977 | 22.605 | 314.06 | 242.62 | 12.22 | 41.69 | 7.59 | 6.34 | 3.60 |
| 1978 | 23.133 | 355.84 | 275.59 | 14.79 | 47.76 | 7.80 | 5.71 | 4.19 |
| 1979 | 23.693 | 401.08 | 308.50 | 16.44 | 57.02 | 7.72 | 6.70 | 4.70 |
| 1980 | 24.287 | 468.34 | 359.69 | 18.88 | 65.78 | 8.49 | 9.86 | 5.64 |
| Disabled (excluding ESRD): | | | | | | | | |
| 1974 | 1.636 | 173.97 | 137.55 | 7.54 | 21.26 | 4.23 | 2.39 | 1.00 |
| 1975 | 1.813 | 215.04 | 172.53 | 8.40 | 25.53 | 4.22 | 2.80 | 1.56 |
| 1976 | 2.015 | 251.34 | 198.89 | 10.03 | 31.22 | 5.90 | 3.19 | 2.11 |
| 1977 | 2.229 | 305.11 | 228.95 | 13.03 | 51.59 | 5.42 | 3.29 | 2.83 |
| 1978 | 2.419 | 351.80 | 264.94 | 14.25 | 59.93 | 6.21 | 2.82 | 3.65 |
| 1979 | 2.560 | 410.36 | 310.31 | 17.15 | 69.67 | 5.64 | 3.19 | 4.40 |
| 1980 | 2.637 | 487.81 | 369.02 | 20.02 | 82.12 | 6.67 | 4.68 | 5.30 |

*Includes services on payment records and those using combined billing; amounts shown are for April 1968 and later when combined billings are authorized and inpatient radiology and pathology charges are reimbursed at 100 percent.

Table A3.--COMPONENTS OF INCREASES IN TOTAL RECOGNIZED CHARGES PER ENROLLEE FOR PHYSICIAN SERVICES: HISTORICAL
(In percent)

| Year ending June 30, | Increase Due to Price Changes | | | | Increase Due to Residual Factors | | | Total increase in recognized charges per enrollee |
|---|---|---|---|---|---|---|---|---|
| | Increase in physician fee component of CPI | Reduction due to fee screens: Cumulative effect | Reduction due to fee screens: Yearly changes | Net increase in reasonable charges | Gross residual factors | Effect of denials | Net residual factors | |
| Aged: | | | | | | | | |
| 1967 | 7.6 | -2.6 | | | | | | |
| 1968 | 5.9 | -3.6 | -0.7 | 5.2 | 9.5 | -1.4 | 8.1 | 13.3 |
| 1969 | 6.2 | -5.0 | -1.4 | 4.8 | 3.2 | -0.4 | 2.8 | 7.6 |
| 1970 | 6.7 | -7.5 | -2.8 | 3.9 | 3.2 | -3.1 | 0.1 | 4.0 |
| 1971 | 7.5 | -10.1 | -3.0 | 4.5 | 3.7 | -3.2 | 0.5 | 5.0 |
| 1972 | 5.2 | -11.2 | -1.2 | 4.0 | 2.2 | 0.4 | 2.6 | 6.6 |
| 1973 | 2.6 | -11.7 | -0.5 | 2.1 | 5.7 | -0.6 | 5.1 | 7.2 |
| 1974 | 5.0 | -13.2 | -1.6 | 3.4 | 6.1 | -0.6 | 5.5 | 8.9 |
| 1975 | 12.8 | -16.2 | -3.6 | 9.2 | 3.8 | -0.3 | 3.5 | 12.7 |
| 1976 | 11.4 | -18.6 | -2.9 | 8.5 | 2.9 | 0.1 | 3.0 | 11.5 |
| 1977 | 10.2 | -19.5 | -0.9 | 9.3 | 3.3 | 0.1 | 3.4 | 12.7 |
| 1978 | 8.9 | -19.4 | 0.5 | 9.4 | 4.1 | 0.1 | 4.2 | 13.6 |
| 1979 | 8.6 | -20.0 | -0.5 | 8.1 | 4.1 | -0.3 | 3.8 | 11.9 |
| 1980 | 11.5 | -22.1 | -2.3 | 9.2 | 7.3 | 0.1 | 7.4 | 16.6 |
| Disabled (excluding ESRD): | | | | | | | | |
| 1974 | 5.0 | -13.2 | | | | | | |
| 1975 | 12.8 | -16.2 | -2.6 | 10.2 | 15.5 | -0.3 | 15.2 | 25.4 |
| 1976 | 11.4 | -18.6 | -2.6 | 8.8 | 6.4 | 0.1 | 6.5 | 15.3 |
| 1977 | 10.2 | -19.5 | -0.7 | 9.5 | 5.5 | 0.1 | 5.6 | 15.1 |
| 1978 | 8.9 | -19.4 | 0.7 | 9.6 | 6.0 | 0.1 | 6.1 | 15.7 |
| 1979 | 8.6 | -20.0 | -0.2 | 8.4 | 9.0 | -0.3 | 8.7 | 17.1 |
| 1980 | 11.5 | -22.1 | -2.1 | 9.4 | 9.4 | 0.1 | 9.5 | 18.9 |

Fees are subject to further reduction if they exceed the "prevailing" charge for the locality. The prevailing charge is defined as the 75th percentile of customary charges for a particular service in a particular locality. Since July 1, 1975, the rate of increase in prevailing charges has been limited further by the application of an "economic index." The customary and prevailing charge limits maintained by the carriers are called "fee screens." Reasonable charges are charges on which reimbursement is based, after they have been reduced by the fee screens.

The average reduction in submitted fees has increased almost every year due both to administrative actions and to differentials in the rate of increase in fees between the calendar year in which the fee screens are established and the July to June period in which the screens are applied. The result is that the net increase in per enrollee charges due to price changes (i.e., the increase in fee levels recognized for reimbursement purposes) has been less than the increase in submitted fees. The second column of table A3 shows the reduction of charges due to the impact of the fee screen operation to date. The year-to-year changes in this impact are shown in the third column.

Per enrollee charges also have increased each year as a result of more physician visits per enrollee, increasing use of specialists and more expensive techniques, and other factors. The fifth column of table A3 shows the increase in charges per enrollee resulting from these residual causes. Because the measurement of increased recognized charges per service is subject to error, this error is included implicitly under residual causes.

The proportion of charges that has been denied as non-covered care has increased in most years. To the extent that this increase in denials reflects the effect of administrative actions defining covered services, it will cause a non-recurring distorting effect on the increase due to net residual factors. The gross residual factor is adjusted for the impact of changes in denials as shown in the sixth column of table A3. This column is used in the projection to indicate the amount of cost increases to be expected in the future from residual causes. The seventh column shows the net increase due to residual factors.

The last column of table A3 shows the total increase in charges per enrollee for physician services. It includes the effects of all the items discussed above.

Projected increases in total recognized charges per enrollee are shown in table A4. Column 1 of table A4 shows the projected average increase in customary charges in each of the 12-month periods ending June 30, 1981 through 1985. As described above, each of these increases depends on the increases in fees actually submitted during the preceding calendar year. Thus, this column represents actual and projected average increases in physicians' fees for calendar years 1979 through 1983, respectively. In principle, further adjustments should be made for the year-to-year variations created by the process of selecting the 75th percentile of customary charges for each service in each locality to establish prevailing charges and for the fact that, of necessity, some fees are not screened in exactly the manner described (e.g., when new categories of services arise for which there is no historical data base).

Table A4.--COMPONENTS OF INCREASES IN TOTAL RECOGNIZED CHARGES PER ENROLLEE FOR PHYSICIAN SERVICES: PROJECTED
(In percent)

| Year ending June 30, | Increase before effect of economic index | Reduction due to economic index | Net increase in reasonable charges | Gross residual factors | Effects of denials | Net residual factors | Total increase in recognized charges per enrollee |
|---|---|---|---|---|---|---|---|
| **Alternative A:** | | | | | | | |
| **Aged:** | | | | | | | |
| 1981 | 9.9 | -1.6 | 8.3 | 7.6 | 0.0 | 7.6 | 15.9 |
| 1982 | 11.7 | -0.7 | 11.0 | 9.4 | 0.0 | 9.4 | 20.4 |
| 1983 | 10.6 | -0.6 | 10.0 | 5.4 | 0.0 | 5.4 | 15.4 |
| 1984 | 9.4 | -0.9 | 8.5 | 4.4 | 0.0 | 4.4 | 12.9 |
| 1985 | 8.2 | -0.7 | 7.5 | 4.3 | 0.0 | 4.3 | 11.8 |
| **Disabled (excluding ESRD):** | | | | | | | |
| 1981 | 9.9 | -1.6 | 8.3 | 10.6 | 0.0 | 10.6 | 18.9 |
| 1982 | 11.7 | -0.7 | 11.0 | 12.5 | 0.0 | 12.5 | 23.5 |
| 1983 | 10.6 | -0.6 | 10.0 | 9.8 | 0.0 | 9.8 | 19.8 |
| 1984 | 9.4 | -0.9 | 8.5 | 8.9 | 0.0 | 8.9 | 17.4 |
| 1985 | 8.2 | -0.7 | 7.5 | 7.5 | 0.0 | 7.5 | 15.0 |
| **Alternative B:** | | | | | | | |
| **Aged:** | | | | | | | |
| 1981 | 9.9 | -1.6 | 8.3 | 7.6 | 0.0 | 7.6 | 15.9 |
| 1982 | 11.7 | -0.7 | 11.0 | 9.4 | 0.0 | 9.4 | 20.4 |
| 1983 | 10.6 | -0.6 | 10.0 | 5.4 | 0.0 | 5.4 | 15.4 |
| 1984 | 9.7 | -1.0 | 8.7 | 4.4 | 0.0 | 4.4 | 13.1 |
| 1985 | 9.2 | -0.6 | 8.6 | 4.4 | 0.0 | 4.4 | 13.0 |
| **Disabled (excluding ESRD):** | | | | | | | |
| 1981 | 9.9 | -1.6 | 8.3 | 10.6 | 0.0 | 10.6 | 18.9 |
| 1982 | 11.7 | -0.7 | 11.0 | 12.5 | 0.0 | 12.5 | 23.5 |
| 1983 | 10.6 | -0.6 | 10.0 | 9.8 | 0.0 | 9.8 | 19.8 |
| 1984 | 9.7 | -1.0 | 8.7 | 8.9 | 0.0 | 8.9 | 17.6 |
| 1985 | 9.2 | -0.6 | 8.6 | 7.6 | 0.0 | 7.6 | 16.2 |

The impact on year-to-year increases in reasonable charges of these two factors is treated as negligible (although, of course, they may have some effect on the absolute level of fees). The effects of the economic index on the average charge increase is shown in column 2. The projected net increase in reasonable charges is shown in column 3; this compares with the corresponding historical data shown in column 4 of table A3.

The projection of residual factors assumes no further changes in the proportion of claims denied consistent with the very small changes observed in the last few years (see table A3).

(2) Institutional and Other Services:

The historical and projected increases in charges or costs per enrollee for institutional and other services are shown in table A5. The year-to-year changes in some services have been quite erratic. Because these series provide only a rough indication of future trends in costs, identical series of increase factors are used for alternative A and alternative B.

d. Projected Charges and Costs:

Table A6 shows projections of per enrollee incurred charges and costs based on the assumptions in tables A4 and A5. Table A7 shows the total reimbursement amounts per enrollee that result from subtracting the average amounts of copayment per enrollee from the total covered charges in table A6. The aggregate reimbursement amounts shown are derived by multiplying average enrollment by average reimbursement per enrollee.

Table A5.--INCREASES IN RECOGNIZED CHARGES AND COSTS PER ENROLLEE FOR INSTITUTIONAL AND OTHER SERVICES
(In percent)

| Year Ending June 30, | Inpatient radiology and pathology | Outpatient hospital | Home health agency | Group practice prepayment plan | Independent lab |
|---|---|---|---|---|---|
| **Aged:** | | | | | |
| **Historical:** | | | | | |
| 1968 | | 57.1 | 74.6 | 40.6 | 9.6 |
| 1969 | -13.1 * | 73.7 | 27.0 | 12.8 | 12.3 |
| 1970 | 8.7 | 39.3 | 3.3 | -2.8 | 18.7 |
| 1971 | 1.0 | 26.3 | -16.8 | -7.5 | 25.0 |
| 1972 | -6.1 | 12.0 | -5.3 | 16.3 | 27.4 |
| 1973 | 3.2 | 10.9 | 20.9 | 14.0 | 21.5 |
| 1974 | 6.4 | 20.2 | -15.9 | 23.5 | 27.9 |
| 1975 | 17.2 | 32.5 | 83.8 | 27.6 | 32.4 |
| 1976 | 24.9 | 34.5 | 32.7 | 23.4 | 20.5 |
| 1977 | 12.2 | 32.1 | 23.0 | 11.2 | 20.0 |
| 1978 | 21.0 | 14.6 | 2.8 | -9.9 | 16.4 |
| 1979 | 11.2 | 19.4 | -1.0 | 17.3 | 12.2 |
| 1980 | 14.8 | 15.4 | 10.0 | 47.2 | 20.0 |
| **Projected:** | | | | | |
| 1981 | 22.5 | 22.0 | 7.2 | 29.5 | 6.6 |
| 1982 | 19.9 | 25.1 | -70.5 | 25.0 | 5.2 |
| 1983 | 12.8 | 23.6 | -92.9 | 20.0 | 15.2 |
| 1984 | 15.0 | 15.2 | 21.1 | 15.0 | 15.0 |
| 1985 | 15.5 | 15.0 | 10.0 | 10.0 | 15.0 |
| **Disabled (excluding ESRD):** | | | | | |
| **Historical:** | | | | | |
| 1975 | 11.4 | 20.1 | -0.2 | 17.2 | 56.0 |
| 1976 | 19.4 | 22.3 | 39.8 | 13.9 | 35.3 |
| 1977 | 29.9 | 65.2 | -8.1 | 3.1 | 34.1 |
| 1978 | 9.4 | 16.2 | 14.6 | -14.3 | 29.0 |
| 1979 | 20.4 | 16.3 | -9.2 | 13.1 | 20.5 |
| 1980 | 16.7 | 17.9 | 18.3 | 46.7 | 20.5 |
| **Projected:** | | | | | |
| 1981 | 21.0 | 20.9 | 16.3 | 30.5 | 13.6 |
| 1982 | 18.7 | 25.8 | -71.5 | 25.0 | -1.3 |
| 1983 | 13.8 | 17.7 | -100.0 | 20.0 | 16.3 |
| 1984 | 14.8 | 15.1 | 0.0 | 15.0 | 20.4 |
| 1985 | 15.0 | 15.0 | 0.0 | 10.0 | 15.0 |

* Percentage change over prior year annualized value.

Table A6.—INCURRED REASONABLE CHARGES OR COSTS PER ENROLLEE: PROJECTED

| Year ending June 30, | All services | Physician | Inpatient radiology and pathology | Outpatient hospital | Home health agency | Group practice prepayment plan | Independent lab |
|---|---|---|---|---|---|---|---|
| Alternative A: | | | | | | | |
| Aged: | | | | | | | |
| 1981 | $548.16 | $416.92 | $23.12 | $80.24 | $9.10 | $12.77 | $6.01 |
| 1982 | 654.82 | 501.77 | 27.71 | 100.38 | 2.68 | 15.96 | 6.32 |
| 1983 | 760.77 | 578.83 | 31.26 | 124.06 | .19 | 19.15 | 7.28 |
| 1984 | 863.17 | 653.71 | 35.94 | 142.90 | .23 | 22.02 | 8.37 |
| 1985 | 970.90 | 730.96 | 41.51 | 164.33 | .25 | 24.22 | 9.63 |
| Disabled (excluding ESRD): | | | | | | | |
| 1981 | 582.33 | 438.90 | 24.23 | 99.31 | 7.76 | 6.11 | 6.02 |
| 1982 | 711.30 | 541.87 | 28.75 | 124.89 | 2.21 | 7.64 | 5.94 |
| 1983 | 844.90 | 649.05 | 32.73 | 147.04 | .00 | 9.17 | 6.91 |
| 1984 | 987.36 | 761.70 | 37.56 | 169.23 | .00 | 10.55 | 8.32 |
| 1985 | 1,134.90 | 875.92 | 43.19 | 194.61 | .00 | 11.61 | 9.57 |
| Alternative B: | | | | | | | |
| Aged: | | | | | | | |
| 1981 | 548.16 | 416.92 | 23.12 | 80.24 | 9.10 | 12.77 | 6.01 |
| 1982 | 654.82 | 501.77 | 27.71 | 100.38 | 2.68 | 15.96 | 6.32 |
| 1983 | 760.77 | 578.83 | 31.26 | 124.06 | .19 | 19.15 | 7.28 |
| 1984 | 864.38 | 654.92 | 35.94 | 142.90 | .23 | 22.02 | 8.37 |
| 1985 | 979.75 | 739.81 | 41.51 | 164.33 | .25 | 24.22 | 9.63 |
| Disabled (excluding ESRD): | | | | | | | |
| 1981 | 582.33 | 438.90 | 24.23 | 99.31 | 7.76 | 6.11 | 6.02 |
| 1982 | 711.30 | 541.87 | 28.75 | 124.89 | 2.21 | 7.64 | 5.94 |
| 1983 | 844.90 | 649.05 | 32.73 | 147.04 | .00 | 9.17 | 6.91 |
| 1984 | 988.76 | 763.10 | 37.56 | 169.23 | .00 | 10.55 | 8.32 |
| 1985 | 1,145.49 | 886.51 | 43.19 | 194.61 | .00 | 11.61 | 9.57 |

Table A7.--INCURRED REIMBURSEMENT AMOUNTS: PROJECTED

| Year ending June 30, | Average enrollment (millions) | Reimbursement amounts | |
|---|---|---|---|
| | | Per enrollee | Aggregate (millions) |
| Alternative A: | | | |
| Aged: | | | |
| 1981 | 24.826 | $408.80 | $10,149 |
| 1982 | 25.336 | 488.13 | 12,367 |
| 1983 | 25.851 | 567.40 | 14,668 |
| 1984 | 26.459 | 650.00 | 17,198 |
| 1985 | 27.160 | 737.01 | 20,017 |
| Disabled (excluding ESRD): | | | |
| 1981 | 2.683 | 440.36 | 1,181 |
| 1982 | 2.679 | 537.70 | 1,440 |
| 1983 | 2.664 | 638.67 | 1,701 |
| 1984 | 2.632 | 752.85 | 1,982 |
| 1985 | 2.603 | 871.11 | 2,267 |
| Alternative B: | | | |
| Aged: | | | |
| 1981 | 24.826 | 408.80 | 10,149 |
| 1982 | 25.336 | 488.13 | 12,367 |
| 1983 | 25.851 | 567.40 | 14,668 |
| 1984 | 26.459 | 650.99 | 17,225 |
| 1985 | 27.160 | 744.10 | 20,210 |
| Disabled (excluding ESRD): | | | |
| 1981 | 2.683 | 440.36 | 1,181 |
| 1982 | 2.679 | 537.70 | 1,440 |
| 1983 | 2.664 | 638.67 | 1,701 |
| 1984 | 2.632 | 753.99 | 1,985 |
| 1985 | 2.603 | 879.56 | 2,289 |

2. ESTIMATES FOR PERSONS SUFFERING FROM END STAGE RENAL DISEASE

Certain persons suffering from end stage renal disease (ESRD) have been eligible to enroll for SMI coverage since July 1973 (under Section 299I of P.L. 92-603). For analytical purposes those enrollees suffering from ESRD who are also eligible as disability insurance beneficiaries are included in this section because their per enrollee costs are both higher and different in nature from those of most other disabled persons.

The estimates assume that charges for SMI ESRD services under Medicare will increase at an average of 6.3 percent per year under alternative A and 6.9 percent per year under alternative B over the projection period (July 1, 1980 through June 30, 1985). The estimates also assume a continued rapid increase in enrollment. The historical and projected enrollment and costs are shown in table A8.

3. SUMMARY OF AGGREGATE REIMBURSEMENT AMOUNTS ON A CASH BASIS

Table A9 shows aggregate historical and projected reimbursement amounts on a cash basis, by type of beneficiary. The difference between reimbursement amounts on a cash basis and incurred reimbursement amounts results from the lag between the time of service and the time of payment.

4. ADMINISTRATIVE EXPENSE

The ratio of administrative expenses to benefit payments has been approximately 7 percent in recent years and is projected to decline slowly in future years. Projections of administrative costs are based on estimates of workloads and approved budgets for carriers, intermediaries and Federal administration agencies.

Table A8.--INCURRED REIMBURSEMENT AMOUNTS FOR END STAGE RENAL DISEASE

| Year ending June 30, | Disabled ESRD and ESRD only | | | ESRD only |
|---|---|---|---|---|
| | Average enrollment (thousands) | Reimbursement amounts | | Reimbursement amounts |
| | | Per enrollee | Aggregate (millions) | Aggregate (millions) |
| Alternative A: | | | | |
| 1974 | 14 | $10,071 | $141 | $ 98 |
| 1975 | 21 | 10,857 | 228 | 155 |
| 1976 | 27 | 11,852 | 320 | 209 |
| 1977 | 31 | 13,516 | 419 | 267 |
| 1978 | 36 | 14,611 | 526 | 330 |
| 1979 | 41 | 15,756 | 646 | 399 |
| 1980 | 48 | 16,208 | 778 | 474 |
| 1981 | 53 | 17,283 | 916 | 551 |
| 1982 | 57 | 18,351 | 1,046 | 622 |
| 1983 | 60 | 19,517 | 1,171 | 690 |
| 1984 | 63 | 20,476 | 1,290 | 753 |
| 1985 | 66 | 21,348 | 1,409 | 817 |
| Alternative B: | | | | |
| 1974 | 14 | 10,071 | 141 | 98 |
| 1975 | 21 | 10,857 | 228 | 155 |
| 1976 | 27 | 11,852 | 320 | 209 |
| 1977 | 31 | 13,516 | 419 | 267 |
| 1978 | 36 | 14,611 | 526 | 330 |
| 1979 | 41 | 15,756 | 646 | 399 |
| 1980 | 48 | 16,208 | 778 | 474 |
| 1981 | 53 | 17,283 | 916 | 551 |
| 1982 | 57 | 18,333 | 1,045 | 622 |
| 1983 | 60 | 19,600 | 1,176 | 693 |
| 1984 | 63 | 20,825 | 1,312 | 766 |
| 1985 | 66 | 21,955 | 1,449 | 841 |

Table A9.--AGGREGATE REIMBURSEMENT AMOUNTS ON A CASH BASIS
(In millions)

| Fiscal year | Aged | Disabled (excluding ESRD) | Disabled ESRD and ESRD only | Total |
|---|---|---|---|---|
| Historical: | | | | |
| 1967 | $ 664 | | | $ 644 |
| 1968 | 1,390 | | | 1,390 |
| 1969 | 1,645 | | | 1,645 |
| 1970 | 1,979 | | | 1,979 |
| 1971 | 2,035 | | | 2,035 |
| 1972 | 2,255 | | | 2,255 |
| 1973 | 2,391 | | | 2,391 |
| 1974 | 2,652 | $ 132 | $ 90 | 2,874 |
| 1975 | 3,341 | 257 | 167 | 3,765 |
| 1976 | 4,074 | 339 | 259 | 4,672 |
| Interim* | 1,083 | 106 | 80 | 1,269 |
| 1977 | 4,992 | 494 | 381 | 5,867 |
| 1978 | 5,776 | 606 | 470 | 6,852 |
| 1979 | 6,903 | 762 | 594 | 8,259 |
| 1980 | 8,441 | 970 | 733 | 10,144 |
| 1981 | 10,289 | 1,197 | 859 | 12,345 |
| Projected: | | | | |
| Alternative A: | | | | |
| 1982 | 12,463 | 1,448 | 992 | 14,903 |
| 1983 | 14,754 | 1,710 | 1,120 | 17,584 |
| 1984 | 17,297 | 1,988 | 1,241 | 20,526 |
| Alternative B: | | | | |
| 1982 | 12,463 | 1,448 | 992 | 14,903 |
| 1983 | 14,759 | 1,711 | 1,125 | 17,595 |
| 1984 | 17,351 | 1,994 | 1,259 | 20,604 |

*Interim Period is the period from July 1, 1976 to September 30, 1976 and is the transitional period between fiscal years beginning July 1 and fiscal years beginning October 1.

APPENDIX B

STATEMENT OF ACTUARIAL ASSUMPTIONS AND BASES
EMPLOYED IN DETERMINING THE MONTHLY ACTUARIAL
RATES AND THE STANDARD MONTHLY
PREMIUM RATE FOR THE SUPPLEMENTARY MEDICAL INSURANCE
PROGRAM BEGINNING JULY 1982*

1. ACTUARIAL STATUS OF THE SUPPLEMENTARY MEDICAL INSURANCE TRUST FUND

The law requires that the SMI program be financed on an incurred basis. That is, program income during the 12-month period for which the actuarial rates are effective must be sufficient to pay for services furnished during that period (including associated administrative costs) even though payment for some of these services will not be made until after the close of the period. The portion of income required to cover benefits not paid until after the close of the 12-month period is added to the trust fund until needed. Thus, the assets in the trust fund at any time should be no less than benefit and administrative costs incurred but not yet paid.

Because the rates are established prospectively, they are subject to projection error. As a result, the income to the program may not equal incurred costs. Therefore, trust fund assets should be maintained at a level that is adequate to cover a moderate degree of projection error in addition to the amount of incurred but unpaid expense. Table 1 summarizes the estimated status of the trust fund as of June 30 for each of the years 1980 - 1982.

*This statement appeared in the Federal Register of December 31, 1981. Projections shown in this statement differ from the projections shown in the rest of the report because of minor changes in assumptions since the rates were announced.

Table 1.--ACTUARIAL STATUS OF THE SMI TRUST FUND
12-MONTH PERIODS ENDING JUNE 30 OF 1980-1982
(In Millions)

| 12-Month Period Ending June 30, | Assets | Liabilities | Assets Less Liabilities |
|---|---|---|---|
| 1980 | $4,658 | $3,479 | $1,179 |
| 1981 | 3,801 | 3,964 | -163 |
| 1982 | 5,564 | 4,521 | 1,043 |

2. MONTHLY ACTUARIAL RATE FOR ENROLLEES AGE 65 AND OLDER

The monthly actuarial rate is one-half the monthly projected cost of benefits and administrative expenses for each enrollee age 65 and older, adjusted to allow for interest earnings on assets in the trust fund and a contingency margin. The contingency margin is an amount appropriate to provide for a moderate degree of projection error and to amortize unfunded liabilities.

The monthly actuarial rate for enrollees age 65 and older for the 12-month period ending June 30, 1983, was determined by projecting per-enrollee cost for the 12-month period ending June 30, 1980, by type of service. The projected costs for the 12-month periods ending June 30 of 1980-1983 are shown in Table 2. The values for the 12-month period ending June 30, 1980, were established from program data. Subsequent periods were projected using a combination of program data and data from external sources. The projection factors used are shown in Table 3.

TABLE 2.--DERIVATION OF MONTHLY ACTUARIAL RATE FOR ENROLLEES AGE 65 AND OVER
12-MONTH PERIODS ENDING JUNE 30 OF 1980-1983

| | 1980 | 1981 | 1982 | 1983 |
|---|---|---|---|---|
| Covered services (at level recognized): | | | | |
| Physicians' reasonable charges | $14.99 | $17.29 | $20.62 | $23.75 |
| Radiology and pathology | .79 | .96 | 1.15 | 1.30 |
| Outpatient hospital and other institutions | 2.74 | 3.34 | 4.02 | 4.96 |
| Home health agencies | .35 | .38 | .11 | .01 |
| Group practice prepayment plans | .41 | .53 | .66 | .80 |
| Independent lab | .24 | .25 | .26 | .30 |
| Total services | 19.52 | 22.75 | 26.82 | 31.12 |
| Cost sharing: | | | | |
| Deductible | -1.87 | -1.88 | -2.17 | -2.47 |
| Coinsurance | -3.31 | -3.91 | -4.68 | -5.47 |
| Total benefits | 14.34 | 16.96 | 19.97 | 23.18 |
| Administrative expenses | .87 | 1.25 | 1.02 | 1.09 |
| Incurred expenditures | 15.21 | 18.21 | 20.99 | 24.27 |
| Value of interest on fund | -.37 | -.29 | -.34 | -.51 |
| Contingency margin for projection error and to amortize unfunded liabilities | -1.44 | -1.62 | 1.95 | .84 |
| Monthly actuarial rate | $13.40 | $16.30 | $22.60 | $24.60 |

TABLE 3.--PROJECTION FACTORS 1/
12-MONTH PERIODS ENDING JUNE 30 OF 1981-1983
(In percent)

| 12-month period ending June 30, | Physicians' services | | Radiology and pathology | Outpatient hospital services | Home health agency services | Group practice prepayment plans | Independent lab services |
|---|---|---|---|---|---|---|---|
| | Fees2/ | Utilization3/ | | | | | |
| **Aged:** | | | | | | | |
| 1981 | 7.8 | 7.0 | 22.5 | 22.0 | 7.2 | 29.5 | 6.6 |
| 1982 | 10.5 | 7.9 | 19.9 | 20.1 | -70.5 | 25.0 | 5.2 |
| 1983 | 9.8 | 4.9 | 12.8 | 23.6 | -92.9 | 20.0 | 15.2 |
| **Disabled:** | | | | | | | |
| 1981 | 7.8 | 9.8 | 21.0 | 20.9 | 16.3 | 30.5 | 13.6 |
| 1982 | 10.5 | 10.7 | 18.7 | 20.8 | -71.5 | 25.0 | -1.3 |
| 1983 | 9.8 | 8.9 | 13.8 | 17.7 | -100.0 | 20.0 | 16.3 |

1/ All values are per enrollee. Also, the values for 1981 and 1982 differ significantly from those contained in last year's notice due to an additional year's data which support the current values and due to the implementation of the provisions of the 1980 Omnibus Reconciliation Act, Pub. L. 96-499, and the 1981 Omnibus Budget Reconciliation Act, Pub. L. 97-35.

2/ As recognized for payment under the program.

3/ Increase in the number of services received per enrollee and greater relative use of more expensive services.

The projected monthly rate required to pay for one-half of the total of benefits and administrative costs for enrollees age 65 and over for the 12-month period ending June 30, 1983, is $24.27. The monthly actuarial rate of $24.60 provides an adjustment for interest earnings and $.84 for a contingency margin. This margin amortizes a small unfunded liability for the aged and provides a small contingency for projection error.

3. MONTHLY ACTUARIAL RATE FOR DISABLED ENROLLEES

Disabled enrollees are those persons enrolled in SMI because of entitlement to disability benefits for not less than 24 months or because of entitlement to Medicare under the end-stage renal disease program. Projected monthly costs for disabled enrollees (other than those suffering from end-stage renal disease) in Table 3 are prepared in a fashion exactly parallel to projections for the aged, using appropriate actuarial assumptions. Costs for the end-stage renal disease program are projected using a different computer model because of the complex demographic problems involved. The combined results for all disabled enrollees are shown in Table 4.

The projected monthly rate required to pay for one-half of the total of benefits and administrative costs for disabled enrollees for the 12-month period ending June 30, 1983, is $45.59. The monthly actuarial rate of $42.10 provides an adjustment for interest earnings and $.01 for a contingency margin. This margin is small since there is already a more than moderate excess of assets over liabilities for the disabled.

TABLE 4.--DERIVATION OF MONTHLY ACTUARIAL RATE FOR DISABLED ENROLLEES
12-MONTH PERIODS ENDING JUNE 30 OF 1980-1983

| | 1980 | 1981 | 1982 | 1983 |
|---|---|---|---|---|
| Covered services (at level recognized): | | | | |
| Physicians' reasonable charges | $18.28 | $21.54 | $26.01 | $30.79 |
| Radiology and pathology | .83 | 1.01 | 1.20 | 1.36 |
| Outpatient hospital and other institutions | 15.22 | 17.80 | 20.52 | 23.41 |
| Home health agencies | .28 | .33 | .09 | .00 |
| Group practice prepayment plans | .20 | .25 | .32 | .38 |
| Independent lab | .32 | .37 | .38 | .44 |
| Total services | 35.13 | 41.30 | 48.52 | 56.38 |
| Cost Sharing: | | | | |
| Deductible | -1.59 | -1.67 | -1.97 | -2.30 |
| Coinsurance | -6.49 | -7.66 | -9.05 | -10.54 |
| Total benefits | 27.05 | 31.97 | 37.50 | 43.54 |
| Administrative expenses | 1.64 | 2.36 | 1.91 | 2.05 |
| Incurred expenditures | 28.69 | 34.33 | 39.41 | 45.59 |
| Value of interest and other income on fund | -3.07 | -2.98 | -2.71 | -3.50 |
| Contingency margin for projection error and to amortize unfunded liabilities | -.62 | -5.85 | -.10 | .01 |
| Monthly actuarial rate | $25.00 | $25.50 | $36.60 | $42.10 |

## 4. SENSITIVITY TESTING

Several factors contribute to uncertainty about future trends in medical care costs. In view of this, it seems appropriate to test the adequacy of the rates announced here using alternative assumptions. The most unpredictable factors that contribute significantly to future costs are outpatient hospital costs, physician utilization (measured indirectly and reflecting the use of more visits per enrollee, the use of more expensive services, and other factors not explained by simple price per service increases), and increases in physician fees as constrained by the program's reasonable charge screens and economic index. Two alternative sets of assumptions and the results of those assumptions are shown in Table 5. All assumptions not shown in Table 5 are the same as in Table 3.

Table 5 no longer analyzes the variability of the cost of home health agency services. Section 930 of Pub. L. 96-499 amended section 1832(a)(2)(A) of the Act to provide for unlimited home health visits under both hospital insurance and supplementary medical insurance, and amended section 1812(a)(3) to eliminate the requirement for a prior hospitalization for payment under hospital insurance. Also, section 1833(d) of the Act requires that services that could be paid under either hospital insurance or supplementary medical insurance are to be paid under hospital insurance. Therefore, virtually all home health services are now paid under the hospital insurance program. Consequently, alternative sets of assumptions are no longer provided for home health services in analyzing the adequacy of the rates announced.

Table 5.—PROJECTION FACTORS AND THE ACTUARIAL STATUS OF THE SMI TRUST FUND UNDER ALTERNATIVE SETS OF ASSUMPTIONS
12-MONTH PERIODS ENDING JUNE 30 OF 1981-1983

| | This Projection | | | Low Cost Projection | | | High Cost Projection | | |
|---|---|---|---|---|---|---|---|---|---|
| | 1981 | 1982 | 1983 | 1981 | 1982 | 1983 | 1981 | 1982 | 1983 |
| Projection factors (in percent): 1/ | | | | | | | | | |
| Physicians' fees 2/ | | | | | | | | | |
| Aged | 7.8 | 10.5 | 9.8 | 7.3 | 10.0 | 9.3 | 8.3 | 11.0 | 10.3 |
| Disabled | 7.8 | 10.5 | 9.8 | 7.3 | 10.0 | 9.3 | 8.3 | 11.0 | 10.3 |
| Utilization of physicians' services 3/ | | | | | | | | | |
| Aged | 7.0 | 7.9 | 4.9 | 6.0 | 5.9 | 2.9 | 8.0 | 9.9 | 6.9 |
| Disabled | 9.8 | 10.7 | 8.9 | 7.8 | 5.7 | 3.9 | 11.8 | 15.7 | 13.9 |
| Outpatient hospital services per enrollee | | | | | | | | | |
| Aged | 22.0 | 20.1 | 23.6 | 19.0 | 13.1 | 13.6 | 25.0 | 27.1 | 33.6 |
| Disabled | 20.9 | 20.8 | 17.7 | 12.9 | 10.8 | 7.7 | 28.9 | 30.8 | 27.7 |
| Actuarial status (in millions): | | | | | | | | | |
| Assets | $3,801 | $5,564 | $6,729 | $3,801 | $6,135 | $8,565 | $3,801 | $4,971 | $4,786 |
| Liabilities | 3,964 | 4,521 | 5,176 | 3,757 | 4,213 | 4,715 | 4,166 | 4,828 | 5,653 |
| Assets less liabilities | $ -163 | $1,043 | $1,553 | $ 44 | $1,922 | $3,850 | $ -365 | $ 143 | $ -867 |
| Ratio of assets less liabilities to expenditures (in percent) 4/ | -1.1 | 5.8 | 7.3 | 0.3 | 11.5 | 20.3 | -2.3 | 0.7 | -3.7 |

1/ The values for 1981 and 1982 differ significantly from those contained in last year's notice due to an additional year's data which support the current values and due to the implementation of the provisions of Pub. L. 96-499 and Pub. L. 97-35.

2/ As recognized for payment under the program.

3/ Increase in the number of services received per enrollee and greater relative use of more expensive services.

4/ Ratio of assets less liabilities at the end of the year to total incurred expenditures during the following year, expressed as a percent.

Table 5 indicates that, under the assumptions used in preparing this report, the monthly actuarial rates will result in an excess of assets over liabilities of $1,553 million by the end of June 1983. This amounts to 7.3 percent of the estimated total incurred expenditures for the following year. Assumptions which are somewhat more pessimistic, and, therefore, which indicate the degree that assets can accommodate projection errors, produce a deficit of $867 million by the end of June 1983, which amounts to a deficit of 3.7 percent of the estimated total incurred expenditures for the following year. Under fairly optimistic assumptions, the monthly actuarial rates will result in an excess of $3,850 million, which amounts to 20.3 percent of the estimated total incurred expenditures for the following year.

## 5. STANDARD PREMIUM RATE

The law provides that the standard monthly premium rate for both aged and disabled enrollees, shall be the lesser of:

1. The monthly actuarial rate for enrollees age 65 and older; or
2. The current standard monthly premium, increased by the same percentage that the level of old-age, survivors, and disability insurance (OASDI) benefits has been increased since the May preceding the announcement (and rounded to the nearer multiple of ten cents).

The standard monthly premium rate for the 12-month period ending with June 30, 1982, is $11.00. The OASDI benefit table increased 11.2 percent in June 1981. The $11.00 rate, increased by 11.2 percent and rounded to the nearer ten cent multiple, is $12.20. Since this is less than the aged actuarial rate, the standard premium rate will be $12.20 for the 12 months ending with June 1983.

## APPENDIX C

## STATEMENT OF ACTUARIAL OPINION

It is my opinion that (1) the methodology used herein is based upon sound principles of actuarial practice and (2) the assumptions used and the resulting cost estimates are in the aggregate reasonable for the purpose of evaluating the actuarial and financial status of the Federal Supplementary Medical Insurance Trust Fund, taking into account the experience and expectations of the program.

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