APPENDIX

APPENDIX I. STATEMENT OF ACTURIAL ASSUMPTIONS AND BASES EMPLOYED IN ARRIVING AT THE AMOUNT OF THE STANDARD PREMIUM RATE FOR THE SUPPLEMENTARY MEDICAL INSURANCE PROGRAM BEGINNING JULY 1971

This is a statement of actuarial assumptions and bases employed in arriving at the amount of the standard premium rate for the supplementary medical insurance program for the period July 1971 through June 1972. The standard premium rate is that rate which is payable by those who enroll in their initial enrollment period and by those who enroll in a general enrollment period that terminates less than 12 months after the close of their initial enrollment period.

The actuarial determination has been made on the basis of the actual operating experience under the program. Virtually complete operating-experience figures for July 1966 through December 1968 are now available, but because of the timelag in the submission of bills for this program, figures for 1969 are not quite complete, and only partial data for 1970 are available.

ANALYSIS OF DATA ON A CASH BASIS

Current figures for cash expenditures under the program are available on a relatively complete basis through fiscal year 1970, but these figures taken alone are misleading because they do not take into account the liabilities arising from the delay in paying for benefits, which on the average are not made until well after the date that services were received. Such delay is due to the tendency of enrollees to accumulate a number of bills before submitting a claim, the delays by physicians, other suppliers of services, and enrollees in making requests for payment, and the time required by the carriers and intermediaries to adjudicate and pay claims.

The balances in the supplementary medical insurance trust fund at the end of each fiscal year since the incention of the program and the most recent available month are as follows (in millions) :

Month:	*Balance*
June 1967	$486
June 1968	307
June 1969	378
June 1970	57
October 1970	155

The liabilities outstanding on October 31, 1970. for claims incurred but not filed (or filed but not paid) are estimated to be $700 million, while the balance of the trust fund amounts to $155 million. On a cash basis, the fund is adequate to pay benefit claims and administrative expenses as they come due.

It is expected that the trust fund balance will continue to increase during the remainder of fiscal year 1971, because the premium rate of $5.30 per month which was promulgated in December 1969 has a margin of safety for severe adverse conditions. Current experience indicates that the income from the $5.30 premium rate together with equal matching from general revenues will not all be needed to cover costs. It is estimated that the trust fund balance will accumulate to over $200 million by the end of June 1971.

On the basis of claims and administrative expenses paid (cash basis), the average monthly per capita expenditures for the first 21 months of the program, July 1966 through March 1968, amounted to $5.12. Similarly, the average monthly per capita expenditures on a cash basis in the premium period, April 1968 through June 1969, amounted to $8.05. Finally, the average monthly per capita expenditures (cash basis) for the premium period, July 1969 through June 1970, amounted to $8.59.

ANALYSIS OF DATA ON AN INCURRED BASIS

Under the law, the premium rate must be set on an accrual basis, rather than a cash basis. Thus, the cash figures must be adjusted for the estimated increase in liability for benefits to be paid for services rendered during the period (and the accompanying administrative expenses), but that will not have been filed or filed but not paid at the end of the period.

Estimates on an incurred basis for the 18 months involved in the first premium period (July 1966 through December 1967), when the combined rate of $6 [1] applied, indicate that benefits and administrative expenses per capita exceeded income from premiums, interest, and matching Government contributions by $0.34 per month (i.e., 17 cents each), or by 6 percent relatively. During the extension of the premium period from January 1 through March 31, 1968, when the combined rate of $6 was continued by congressional action, the cost per capita was $8.22 compared to income from premiums, matching contributions, and interest of $6.11.

Estimates on an incurred basis for the 15 months involved in the second premium period (April 1968 through June 1969) indicate a total per capita cost of $8.45 which exceeded income from premiums, interest, and matching Government contributions by $0.45 per month, or by 6 percent of the combined rate of $8. These estimates are based on virtually complete experience data.

Estimates on an incurred basis for the third premium period (July 1969 through June 1970) indicate that benefits and administrative expenses per capita were $9.33 on the combined rate basis. The interest earnings on the trust fund amounted to 5 cents per month. Although the combined rate for this period recommended by the actuaries was $8.80, the Secretary promulgated the continuation of the rate of $8.

Estimates for the fourth premium period (July 1970 through June 1971), based on a very limited experience of 4 months, indicate that the total cost per capita will be about $10.08 per month (i.e., $5.04 when divided equally between the beneficiary and the Government).

BASIC ESTIMATE OF FUTURE EXPERIENCE ON AN INCURRED BASIS

In estimating the cost of the program for July 1971 through June 1972, it is necessary to provide for the long-term trend toward greater utilization of medical services and the long-term upward trend of physicians' fees, higher costs for covered institutional and other services, and higher administrative expenses. In the estimates in this section, reasonable assumption as to future increases have been made without allowing for the possibility of severe adverse events that might occur.

For the purpose of estimating the necessary premium rate for July 1971 through June 1972, the assumptions shown below were used.

[In percent]

Calendar year	Assumed increase over previous year		
	Physicians' fees [1]	Costs of other covered services	Utilization of pyysicians' services
1970	2.5	14.5	2.5
1971	6.8	15.0	2.0
1972	6.5	15.0	2.0

[1] As recognized by the program.

The small increase of physicians' fees in 1970 over 1969 reflects the continued deferment of recognition of increases in physicians' fees for reimbursement purposes that was put into effect at the end of 1968.

The rates of increase for calendar year 1971 are based on the assumption that such deferment will be moved forward by 1 year on January 1, 1971, and the prevailing level will be moved back to the 75th percentile by regulation at the

[1] $3 premium plus the matching Federal payment.

same time. Also, it is assumed that in the future, the deferment of recognition of increases in physicians' fees will be moved forward with an approximate average lag of 18 months.

It should also be noted that these assumed rates of increase take into account the fact that the costs of covered nonphysician services, such as hospital outpatient care and home health services, which represent only about 13 percent of the total cost of the program, have been increasing more rapidly than physicians' fees and have not been subject to a deferment of recognition of cost changes.

Administrative expenses are assumed to represent about 11½ percent of the benefit payments; this figure is based on the actual budget estimate for fiscal year 1972. The average interest rate on the invested assets of the trust fund is assumed to be about 7 percent.

It is estimated that the incurred monthly per capita *total* cost, on a calendar-year basis, would have been $8.98 for 1969 if there had not been the influenza epidemic in early 1969. This consists of $8.01 for benefits and $0.97 for administrative expenses. This approach has been taken in order to obtain a proper base on which to build estimates of future costs; the possibility of epidemics occurring is later taken into account by adding a contingency margin to the estimated costs for "normal" conditions.

On the basis of the foregoing assumptions, it is estimated that the monthly per capita *benefit* cost on a calendar-year basis will be $8.56 for 1970. The corresponding benefit-cost figures estimated for 1971 and 1972 are $9.48 and $10.51, respectively. To these must be added the monthly per capita costs for administrative expenses, which are estimated at $1.02 for 1970, $1.12 for 1971, and $1.21 for 1972. Thus, the monthly per capita *total* cost on an incurred basis is estimated at $9.58 for 1970, $10.60 for 1971, and $11.72 for 1972.

The monthly per capita total cost on an incurred basis for the premium period July 1971 through June 1972 is determined by averaging the corresponding total cost per capita for calendar years 1971 and 1972. This average is $11.16. When divided equally between the beneficiary and the Government, it supports a premium rate of $5.58 which under the law is rounded to the nearest 10 cents or $5.60. This methodology is used due to the fact that the estimated costs of this program can be properly determined only on a calendar year basis because of the deductible feature being on a calendar year basis.

EFFECT OF INTEREST EARNINGS ON THE CONTINGENCY MARGIN

In addition to the $0.04 contingency margin arising from the rounding procedure indicated above, the interest earnings of the trust fund are also available toward the margin for contingencies. If they are not needed to pay benefits and administrative expenses in the current period, they will reduce the unfunded liability for the past deficiency in the premium rate. Interest earnings for fiscal year 1972 are estimated to be the equivalent of about 8 cents per capita (i.e., 4 cents in terms of premium) in available income. Thus the total contingency margin amounts of $0.12 per capita.

SUMMARY AND RECOMMENDATION

Based on all available evidence and analyses, the standard premium rate for fiscal year 1972 should be promulgated at $5.60 per month. This recommended premium rate contains an estimated $.06 margin for contingencies—2 cents from the basic calculation and 4 cents from interest earnings. The rate is determined based on the assumptions that there will continue to be a deferment of recognition of increases in physicians' fees for reimbursement purposes and that this deferment will be advanced by 12 months on January 1, 1971 and thereafter maintain an approximate average lag of 18 months.

The explanation of the $.30 increase in the standard monthly premium rate for the new premium period can be summarized as follows:

(*a*) The utilization of physicians' services is assumed to be higher in the new premium period than in the current period and so the program cost is higher—an increase of about 10 cents.

(*b*) The level of physicians' fees recognized by the program is assumed to be higher in the new premium period than in the current period, and so the program cost is higher—an increase of about 31 cents.

(*c*) The increase in unit cost and utilization of the institutional services covered by the program (13 percent of the total) is estimated to increase the cost of the program by 9 cents.

(*d*) The promulgated rate includes an allowance of 6 cents to provide a margin for contingencies, since the foregoing cost figures are based on reasonable cost projections and do not allow for any possible adverse morbidity experience (such as the influenza epidemic of 1968–69). The 6 cents for contingencies is a reduction of $0.18 from a planned contingency of $0.24 in the current $5.30 rate and a reduction of $0.20 from the $0.26 that is now estimated to be the actual margin over incurred costs during the current period. It is to be noted that this is the first period during which cost experience is expected to be more favorable than the estimates.

It should be noted that the $50 annual deductible in the program becomes a smaller proportion of the total incurred medical expenses for a beneficiary when there are increases in the unit price and utilization rate of covered services. Thus, the costs increases described in (*a*) and (*b*) above include an allowance for this fact and are higher than they would be if only the assumption of an increase in the utilization of services and an increase in the level of fees were considered.

Appendix II. Summary of Principal Provisions

Public Law 89–97, approved July 30, 1965, amended the Social Security Act by establishing the supplementary medical insurance program. A summary of its principal provisions, as amended by subsequent legislation up to and including Public Law 90–248, approved January 2, 1968, is as follows:

I. COVERAGE PROVISIONS (FOR CONTRIBUTION AND BENEFIT PURPOSES)

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

(*b*) Persons attaining age 65 after 1965—similar election in the 7-month period centering around the month of attainment of age 65 (or first subsequent month when eligibility requirements are met), to be effective for month of attaining age 65 if elected in advance (otherwise, effective for first to third month following election).

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

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

II. BENEFITS PROVIDED

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

(*b*) Amount of reimbursement—plan pays:

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

(ii) for all other services, 80 percent of reasonable charge (or, in the case of institutional services, 80 percent of reasonable cost) after the participant has paid a calendar-year deductible of $50; special limits on out-of-hospital mental-care costs (50 percent coinsurance and $250 maximum annual reimbursement), and on home health services (100 visits per calendar year).

(*c*) Basis of payment—reimbursement on a "reasonable charge" basis to the enrollee or to individual suppliers of services on the basis of an assignment from the enrollee, or on a "reasonable cost" basis to the particular institution for institutional suppliers of services. When payment is made on a "reasonable charge" basis directly to individual suppliers (by assignment), the "reasonable charge" determination by the carrier must be accepted as the full charge for the services, and the supplier cannot bill the patient for amounts in excess of the "reasonable charge"; otherwise, payment is made to the enrollee on the basis of an itemized bill, whether or not receipted (prior to January 2, 1968, payment was made to participant only upon presentation of a receipted bill).

(*d*) Services not covered—self-administered drugs (only covered under hospital insurance, and then only when the individual is receiving covered hospital or extended care facility services and only when ordinarily furnished in and by such hospital or facility), private duty nursing, dental services, routine physical and eye examinations, elective cosmetic surgery, services performed by a relative or household member, services performed by a governmental agency (except when it provides services to the public generally as a community institution or agency), eyeglasses and hearing aids, and cases eligible under workmen's compensation.

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

III. FINANCING

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

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

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

(*d*) Supplementary medical insurance trust fund—established on same basis as old-age and survivors insurance, disability insurance, and hospital insurance trust funds, with separate boards of trustees (same membership) and with same investment procedures. Premiums paid or deducted from benefits on the behalf

of enrollees are transferred to this trust fund. In addition, matching funds are appropriated from the general fund of the Treasury and are transferred to the trust fund simultaneously with the premiums (with proper interest adjustment if any difference in timing occurs).

Appendix III. Nature of the Trust Fund

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

The major sources of receipts of the trust fund are (1) amounts deposited in or transferred to it with respect to the premiums paid by persons aged 65 or over who elect to participate in the program and (2) the matching contributions of the Federal Government that are authorized to be appropriated and transferred to it from the general fund of the Treasury.

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

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

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

Section 1833 of the Social Security Act provides that pathology and radiology services rendered by physicians after March 1968 to hospital inpatients are not subject to the deductible and coinsurance provisions of the supplementary medical insurance program. Hospitals, at their option, are permitted to combine their billing for both hospital and physician components of radiology and pathology services rendered hospital inpatients by hospital-based physicians. Where hospitals elect this billing procedure, payments are made initially from the hospital insurance trust fund, with remibursement from the supplementary medical insurance trust fund. The reimbursements so made are on a provisional basis and are subject to adjustment, with appropriate interest allowances, as the actual experience develops and is analyzed.

Congress has authorized expenditures from the trust funds for construction of office buildings and related facilities for the Social Security Administration. The costs of such construction are included as part of the administrative expenses in the financial statements of operations of the trust funds as set forth in previous sections of this report. The net worth of the resulting facilities—just as the net worth of all other capital assets—is not carried as an asset in such statements.

That portion of each trust fund which, in the judgment of the managing trustee, is not required to meet current expenditures for benefits and administra-

tion is invested in interest-bearing obligations of the U.S. Government, in obligations guaranteed as to both principal and interest by the United States, or in certain federally-sponsored agency obligations that are designated in the laws authorizing their issuance as lawful investments for fiduciary and trust funds under the control and authority of the United States or any officer of the United States. Obligations of these types may be acquired on original issue at the issue price or by purchase of outstanding obligations at their market price.

In addition, the Social Security Act authorizes the issuance of special public-debt obligations for purchase exclusively by the trust fund. The law requires that such special public-debt obligations shall have maturities fixed with due regard for the needs of the trust fund and shall bear interest at a rate based on the average market yield (computed by the managing trustee on the basis of market quotations as of the end of the calendar month next preceding the date of such issue) on all marketable interest-bearing obligations of the United States forming a part of the public debt which are not due or callable until after the expiration of 4 years from the end of such calendar month. Where such average market yield is a multiple of one-eighth of 1 percent, this is taken as the rate of interest on such special obligations; otherwise, such rate is the multiple of one-eighth of 1 percent nearest such market yield.

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

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

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

Appendix IV.—Assumptions, Methodology, and Details of Cost Estimates

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

(A) BASIS OF FINANCING OF SUPPLEMENTARY MEDICAL INSURANCE PROGRAM: INCURRED BASIS OF PROGRAM, CASH BASIS OF BUDGET

The premium rate of the supplementary medical insurance program for any period is based on the services performed in that period, regardless of when paid; that is, on the incurred costs rather than the cash actually paid. Consequently, premium rates for any future period must be based on projections of the liability that will occur during that period for benefits and administrative costs related to services performed in that period.

Budget estimates, however, are for the cash disbursements that will be made from the supplementary medical insurance trust fund by the Treasury. Such disbursements are based on amounts transferred under "letters of credit" [1] from the bank accounts of the Treasury to those of the various carriers and intermediaries,[2] and in the case of direct payments to certain providers, on actual disbursements by the Social Security Administration. The actual cash payments to beneficiaries and providers must necessarily lag a few days behind such

[1] Letters of credit are a financial device that permits intermediaries to minimize idle cash balances, so that cash is not transferred from the Treasury accounts until actually needed.

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

transfers (except to the extent that some carriers utilize the float on the checks disbursed, so as to minimize the bank balances). Payment for most supplementary medical insurance services will lag behind the incurred liability due to the time required for providers or beneficiaries to submit the claims and for the intermediaries and carriers to adjudicate and pay them. In the case of institutional benefits, however, advanced financing is possible; but even in this case, on the average there is a substantial lag between the incurred liability and the actual payment, even for interim payments. Further, virtually all advanced funding is currently made from the hospital insurance trust fund. In addition, there is a lag in the settlements with institutions for the differences between final and interim payments, which have resulted in payment of substantial additional reimbursements to these institutions. Only in the case of payments to group practice plans who have elected to deal directly with the Social Security Administration are payments made on a relatively current basis.

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

(B) COMPARISON OF INCURRED AND CASH PROJECTIONS

The principal economic variables involved—such as utilization and price increases, effects of influenza and other epidemics, changes in the operating philosophies of institutions or physicians, etc.—are in general, related to the services performed, rather than the cash payments made, which follow with a substantial lag. Consequently, the best way to project the cash payments is to first project the incurred services, and adjust for the expected lag with which the services will be paid.

On the other hand, administrative policy changes, especially policy changes related to the level of the reasonable cost screen, are applied on a cash basis. Thus a fee that is being processed is compared to the screen currently in effect, not that which would relate to the period in which a service was performed. Further, in the absence of radical changes in program policy, changes in the general level of benefits paid tend to take place slowly so that reasonably accurate projections of the short-run (i.e., 1 or 2 years) cash outlays of the program can be made by simply projecting the cash actually paid in the most recent period, using economic and actuarial assumptions appropriate to the periods in which the services for which payment is made were performed. Further, adjustments can be made in anticipation of the effect of changes in the primary economic variables or in administrative policy and the lag with which they will take effect, and projections adjusted accordingly. For periods 3 to 5 years in the future, such projections should indicate the same general level of outgo as the more sophisticated projections on an incurred basis.

(C) PRINCIPAL COMPONENTS OF PROJECTIONS

Benefits under the supplementary medical insurance program can be distinguished both by the type of service or provider for which the benefit is paid and the type of payment mechanism used. Program administration may affect both the amount paid and the promptness of payment, by directly affecting the benefit paid (as in the case of fee screen policy) or by affecting the payment mechanism (for example, the regulations barring payments to institutions which have not submitted cost reports with reasonable promptness). Further, for purposes of estimating the present levels of program benefits, the benefits must be divided by types of payment mechanisms, since this is the form in which data from the program are available.

The primary forms of payment are: (1) through "carriers" (Blue Shield plans or other insurance companies), which establish the "reasonable charge" for each service and reimburse providers if an assignment has been made and enrollees otherwise, (2) through "intermediaries" (primarily Blue Cross) who make interim payments to institutions (hospitals, certain rehabilitation and public agencies, extended care facilities, and home health agencies), and later adjust these payments for the difference between such interim payments and

audited "reasonable costs," and (3) direct payments to group practice plans and institutions electing to deal directly with the Social Security Administration.

Since each of these payment mechanisms involves its own lags between the dates on which services are performed and the dates on which payments are made and other administrative peculiarities, a separate series of adjustments is required for each payment mechanism. Further, administrative policy is generally directed to benefits paid under a particular mechanism; e.g., the freeze on the prevailing fee level applied to services paid through the carriers and not to either the institutional or the direct payments. Finally, the currency and quality of the basic data—and consequently the accuracy of estimates made from it—varies substantially by source.

Economic data concerning the trends of the cost of health care are generally available by the type of service performed. Thus, for the purpose of projecting the future levels of the services performed, it is convenient to break down the supplementary medical insurance benefits by the type of service which is provided. In general, this requires a further subdivision of services paid by each type of payment mechanism. Thus, the benefits paid by carriers and recorded by payment records are broken into those for house visits, office visits, in-patient visits, surgery, X-ray, and laboratory, radiologists, and pathologists for care of in-patients, outpatient radiology and pathology, and miscellaneous. Institutional benefits are divided into services provided by hospital outpatient departments, independent clinics, home health agencies, extended care facilities, and hospital in-patient departments (for patients who have exhausted their hospital insurance benefits). For convenience, however, and also because no accuracy is sacrificed, weighted factors were derived for price increases and utilization increases separately only for (1) radiology and pathology for in-patients, (2) other physician services and miscellaneous services paid by carriers, (3) all institutional services, and (4) group practice plans.

(D) PRIMARY RELIANCE ON PROGRAM DATA

There are many variables that affect the difference in the level of services that will be sought and performed for a population that is insured under a specific program and a population insured under a different kind of program or mix of programs or not insured at all. Although data illuminating the behavior of most of the important variables affecting health insurance is incomplete and scarce, data concerning the variables that affect the difference in levels of utilization between the different types of program is particularly scarce and inconclusive. Much more reliable data is available for the cost of particular insured groups under particular insured programs where statistics are available from actual programs. Far more accurate estimates can be made of the future cost of a particular program by paying attention to data derived directly from experience under that program, rather than attempts to use other data. For example, an attempt to base estimates of the specific benefits on general estimates of the cost of medical services for the entire population would require a projection of the latter with problems similar to those of projecting the specific program costs, and an additional step—determining the proportion of each type of service used by covered persons. Not only is the data derived directly from the program of far superior accuracy and reliability, but the additional step introduces another nontrivial source of error, since reliable data is not available for either the level or trend of the proportions required.

Further, it is generally more helpful to estimate the change that will occur in a particular economic series as a result of the impact of any forecast events, rather than to ignore the series as a base for projecting the future. Thus, such items as the ratio or the expenditures of the program or a particular part of the program to, say, the gross national product, is very interesting, but not very helpful, in projecting the cost of the various components of the supplementary medical insurance program.

(E) PRINCIPAL SOURCES OF DATA

As discussed above, data from the program is available separately by the type of payment mechanism used. The principal components will be discussed in turn.

1—Benefits paid through carriers (benefits on payment records)

Approximately 86 percent of supplementary medical insurance benefits are paid by carriers; and carriers are required to submit payment records covering all payments made.

There is a substantial lag between the date on which services are performed, and the date on which payment records are received by the Social Security Administration. A major part of the lag is due to physicians or beneficiaries collecting a number of bills before submitting them to carriers for payment. Further delays result from the time required by carriers to query Baltimore for the status of the deductible and to adjudicate and pay the claims, especially if the information submitted is incomplete or special handling is required to determine the reasonable fee or whether the services were covered. There may be a further delay before payment records are submitted. There is also the possibility that payment records for some benefits paid have never been submitted.

Finally, editing and processing of payment records by the Social Security Administration is required before tabulation, and if the edit produces any inconsistencies, a very long delay may result from returning the payment record to the carrier for correction. (In the first years of the program, many payment records that were returned to carriers were never resubmitted, probably because some carriers did not maintain adequate documentation with which to meet Social Security Administration specifications. Consequently, the actuarial sample is based on those submitted, not those accepted. Currently, however, the proportion never returned is very small as monitored by statistical controls.)

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

For purposes of projecting the future, an allowance must be made for the effect of the very severe influenza epidemic that occurred during the winter of 1968–69. A study of some data from the national disease therapeutic index concerning nonhospital physician visits for influenza, and considerations of consistency required for feasible solutions to a number of relationships believed to hold concerning the data, indicate that the abnormal increase in cost due to the flu epidemic was approximately $0.75 per capita in 1969.

2. Inpatient radiology and pathology paid through hospital insurance

As a result of 1969 amendments, hospital-based radiologists and pathologists have the option of concluding agreements with a hospital, under which the hospital bills for their services. Where these agreements are in effect, payment is made for these services from the hospital insurance trust fund by the hospital insurance intermediary and subsequently reimbursed from the supplementary medical insurance trust fund. Payments to hospitals are made on a basis of an estimated average cost of all inpatient radiology and pathology reimbursed by hospital insurance for that hospital. The actual liability of the program, however, depends on subsequent cost settlements with the hospitals.

Estimates have to be made of the liability of the program for such liability from the proportion of payment records that covered services for inpatient radiology and pathology prior to April 1968 when this payment mechanism became available. Prior to that date, payment records were submitted for all professional radiology and pathology. Payment records are not complete, however, due to the omission of payment records covering services where the deductible was not initially satisfied, but was later satisfied by a subsequent claim. Estimates were prepared on the basis of such information as was available.

3. Institutional services reimbursed by intermediaries

Payments by intermediaries to hospitals for outpatient hospital services, to hospitals for services for beneficiaries who have exhausted their hospital insurance benefits (negligible in amount), to extended care facilities for outpatient services, and to home health agencies for services not covered by hospital insurance—are reimbursed by the hospital insurance intermediary on an interim basis, and adjusted by a subsequent settlement with the institution on the basis of an audited cost report. As in the case of benefits under the hospital insurance program, interim bills are submitted to support claims for interim payments. These bills can be tabulated by date of service, and an estimate thus made of the interim payments for these services on an incurred basis, the data available in the actuarial sample, however, contain substantial biases. Estimates of the level of the overall bias for the accumulated experience for the years 1966–69 are of the order of 10–15 percent (negative), but estimates of the specific bias applicable to a particular year, such as 1969, are not available. Further, study of

a very small sample indicates that on the average, final cost settlements result in increasing the interim payments for the outpatient institutional payments by about one third.

Finally, an adjustment must be made for the effect of the flu epidemic in 1968–69. The overall error possible in the estimates for the outpatient institutional services is of the order of 18 percent, or about 3 percent of the total supplementary medical insurance cost.

4. Group practice plans

Group practice plans are reimbursed on an interim payment system that is designed to reimburse currently for services performed. Consequently, cash payments for these services have been taken as the same as accrued benefits for these services.

5. Institutions reimbursed directly by Social Security Administration

The same basic procedures used by intermediaries is also followed by the Social Security Administration direct reimbursement group. Although data from this source should be analysed separately, the amount involved has been too small to merit priority compared to other sources of potential error. Consequently, direct institutional reimbursements were analysed jointly with other institutional benefits.

(F) ASSUMPTIONS CONCERNING INCREASES IN PRICES, UTILIZATION, AND THE EFFECT OF CONTROLS ON PHYSICIAN FEES

The experience under the program (as estimated from the actuarial samples and the current medicare survey) and assumptions concerning the future as to increases in average physician fees, utilization of physician services, and the effect of Social Security Administration policy with regard to prevailing fees—appears in table A.

The average price increases shown are based on weighted averages of the Bureau of Labor Statistics indexes for house and office visits and special indexes for geriatric inpatient surgical and heart care.

The estimates for the effect of the fee screens for years 1966–70 are based on data from the Office of Research and Statistics 5-percent sample for 1966–68 and on the results of special surveys conducted during 1969–70 on a cash basis. Unfortunately, the latter are unreliable due to the presence of many obvious inconsistencies in the data. Utilization increases shown for 1966–69 are essentially residuals, smoothed to form an orderly progression.

Substantial errors are possible in any of these series, since no reliable program data is available that bears directly on price increases, utilization levels, or the effect of fee screens. Finally, substantial fluctuations are possible in the general level of health care costs.

(G) EFFECT OF ADMINISTRATIVE POLICY

Policy changes in the administration of the reasonable fee screen are of crucial importance in estimating future experience. Some changes have already been put into effect, and others are planned for the future. Although these actions are within the latitude permitted by the discretion delegated to the Secretary by Congress, these actions are in general coordinated with and in anticipation of action by Congress. Future policy will be set to conform to actual congressional action. Current estimates are based on the policy changes that would be anticipated assuming passage of H.R. 17550 of the 91st Congress.

The principal policy changes made or anticipated are as follows:

(1) Claims processed after January 1 and before July 1, 1971, will be subjected to a reasonable fee screen based on 1969 data, rather than on 1968 data as it has been (at least theoretically) since January 1969. The prevailing fee for any type of service will be set at the 75th percentile of the customary fees according to this data base, rather than the 83d percentile used in the past.

(2) Claims processed after July 1, 1971, will be subject to a reasonable fee screen based on data from 1970.

(3) After passage of legislation containing the provisions relating to the reasonable fee screen that were in H.R. 17550, the prevailing fees will be set each year at the level based on 1970 data projected to the year in question by an economic index, based partly on average earnings and partly on the cost of office practice.

(4) On July 1 of each succeeding year, the prevailing fee screen will be adjusted so as to be based on data from the prior calendar year, to be in effect during the next year. If the prevailing fees in that year are higher than that of 1970 projected to that year by an economic index of physician costs (including their own labor), the prevailing fee screen will be lowered accordingly.

The effect of these changes in policy is very difficult to assess due to insufficient information concerning the distributions of customary charges and the effect of price changes on these distributions through time—or even as to the actual effect of past changes in fee screen policy. Further, a change in policy affects only those services which are being reduced. At present, around 40 percent (by bills) of all services are reduced; so that adjustments to the screen have no influence on reimbursement for more than half of all services.

Using such data as is available and a large measure of a priori reasoning, the effect of the policy changes with regard to reasonable fees were estimated as shown in the column "Effect of the fee screen" in table A.

Another administrative policy decision that may have a significant impact on the level of benefits paid by the program was the proposed regulations which recognized as an inpatient service covered under hospital insurance diagnostic testing procedures during the seven days prior to admittance to a hospital. This policy change is consistent with provisions of H.R. 17550. The effect of this change was to transfer a significant portion of the supplementary medical insurance outpatient benefit to the hospital insurance program. Estimates of the cost of the institutional benefits was adjusted to take into account this transfer of liability.

H. PROJECTIONS OF FUTURE INCURRED EXPERIENCE

Details of the projection of future experience are summarized in "Appendix 1: Statement of Actuarial Assumptions and Bases Employed in Arriving at the Amount of the Standard Premium Rate for the Supplementary Medical Insurance Program Beginning July, 1971." The basic method used was as follows. For projections of the experience for future calendar years, the average cost per capita of all covered benefits in 1969, adjusted for the flu epidemic, was projected to future years by weighted average factors which allowed for (1) increase in prices of covered services; (2) increase in utilization of covered services; and (3) an allowance for the leverage of the static $50 deductible.

Projections of fiscal year experience were made by averaging the projections on a calendar year basis, since the effect of the $50 deductible cannot be separated into the effects in the first half and the second half of a calendar year.

I. ACCOUNTING CHANGE WITH REGARD TO THE DEDUCTIBLE CARRIED OVER

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

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

For calendar years beginning with 1968, the assumptions with regard to the deductable carried over will have negligible effect, since the additional costs paid as a result of deductibles carried over from the preceding year will be approximately equal to the deductibles carried over to the succeeding year. In 1966–67, however, due to the application of the full $50 deductible in a

6-month period for 1966, there was an unusually large amount of additional benefits paid in 1967 as a result of deductibles carried over from 1966. As a result, comparisons between the experience in 1967 and that of later years are difficult. Further, the experience in 1966 is artificially favorable not only because of the application of the full deductible in a short period, but also because there were no deductibles carried over from a prior period. Beginning with 1968, however, these problems disappear, since the deductible carried over from the previous year approximately offsets that carried over to the next.

(J) PROJECTIONS OF FUTURE CASH EXPERIENCE

The estimates contained in this report of cash expenditures are based on estimates used to prepare the budget, and agree with amounts shown therein. Since these estimates were submitted in August 1970, they are based on information available then as to the level of expenditures under the program and administrative policy decisions that had been made through that date, and not changed to reflect new information available since then other than a reduction ordered by the Office of Management and Budget to reflect an administration decision to request new legislation to put the deductible on a dynamic basis that would substantially reduce the cost of the program.

Two distinct approaches are followed in the projection of cash benefits. First, the estimates on an accrued basis are adjusted for the lags in actual payment, according to each payment mechanism. Estimates are also prepared by projecting the cash actually paid in the most recent year to future years, allowing indirectly for the effect of price increases, increases in utilization, etc. Reasonable agreement between the two methods of estimating future costs on a cash basis was achieved. Such cash projections provide a check on the general level of estimates prepared, on an incurred basis.

The cash figures used for each type of benefit in the latter calculations are derived from checks actually drawn to providers of services, not on the letter of credit payments which form the basis of the Treasury accounts. Consequently, a small discrepancy develops between the level of cash expenditure indicated by the Treasury statements and that actually paid for benefits. Additional discrepancies result from other accounting adjustments made by the Treasury.

(K) GENERAL LEVEL OF ACCURACY OF THE ESTIMATES

Due to the inadequacies in the data available from the program noted in the earlier discussion, the estimates of incurred costs for calendar year 1969 can only be regarded as within 5 percent of the actual liability. Further, substantial fluctuations in the level of cost from year to year must be anticipated, as a result of flu or other epidemics, and other fluctuations in the need for the services covered. Finally, the impact of projected administrative actions cannot be anticipated with certainty.[1] Thus the estimates are probably accurate only to within 5 to 10 percent depending on how far costs are projected into the future.

TABLE A.—INCREASES IN PHYSICIAN PRICES, UTILIZATION, AND EFFECT OF THE FEE SCREENS

[In percent]

Year	Prices	Utilization	Effect of change in screens [1]	Increases in charges
1967/1966	7.2	4.0	−1.5	9.7
1968/1967	6.6	3.0	0	9.6
1969/1968	7.7	2.0	−3.0	6.7
1970/1969	7.0	2.5	−4.5	5.0
1971/1970	6.0	2.0	0.8	8.8
1972/1971	5.6	2.0	0.9	8.5
1973/1972	5.2	2.0	−.2	7.0

[1] Difference between reductions in year y and y+1. Initial reductions in 1966 were about 1½ percent of payment records.

[1] In fact, policy on many aspects has not been determined. For example, the actual economic index to be used in projecting the maximum prevailing fee screen and the methodology to be followed have not been determined.

TABLE B.—PRICE AND UTILIZATION INCREASE ASSUMPTIONS COMBINED (AS RECOGNIZED BY PROGRAM) INCREASE OVER PRIOR YEAR

[In percent]

Year	Physician services records	Inpatient radiology and pathology	Group practice plans	Institutions
1970	5.0	7.0	9.0	14.5
1971	8.8	10.8	8.0	15.0
1972	8.5	10.5	7.6	15.0
1973	7.0	9.0	7.2	15.0

TABLE 1.—REIMBURSEMENT FOR SERVICES ON PAYMENT RECORDS

Year	Enrollment (millions)	Reimbursement (millions)		Reimbursement per capita	
		Accrued	Cash	Accrued	Cash
1966	17.7	$452.2	$120.3	$25.55	$6.80
1967	17.9	1,254.4	1,117.5	70.21	62.43
1968	18.4	1,465.5	1,420.8	79.63	77.22
1969	19.0	1,633.0	1,592.5	85.97	83.82
1970	19.4	----	1,699.4	----	87.60

TABLE 2.—REIMBURSEMENT FOR INSTITUTIONAL SERVICES

[In millions]

Year	Enrollment	Interim reimbursement		Final settlements, cash	Interim reimbursement per capita	
		Actuarial sample	cash		Actuarial sample	Cash
1966	17.7	$15.8	$2.6	0	$0.89	$0.15
1967	17.9	50.0	41.3	$0.4	2.79	2.31
1968	18.4	75.3	67.4	2.0	4.09	3.66
1969	19.0	107.5	98.5	11.0	5.66	5.18
1970	19.4	----	104.5	59.4	----	5.39

TABLE 3.—SUMMARY OF BENEFITS PER CAPITA BY TYPE OF BENEFIT

Year	Payment records	Direct inpatient R. & P.	Institutions			Total
			G.P.P.P.	Interim	Adjustment	
1966	$25.55	----	$0.34	$1.07	$0.35	$27.31
1967	70.21	----	1.05	2.79	0.92	74.97
1968	79.65	$0.92	1.27	4.89	1.61	88.34
1969	85.97	1.25	1.45	6.43	2.12	97.22

APPENDIX V.—LEGISLATIVE HISTORY AFFECTING THE TRUST FUND

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

Premium rates.—The Social Security Amendments of 1965, which established the supplementary medical insurance program, fixed the premium rate for indi-

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

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

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

Investments.—Since the inception of the program, provision has been made for the investment of funds which are not required to meet current disbursements. As provided in the Social Security Act, the funds may be invested only in interest-bearing obligations of the U.S. Government or in obligations guaranteed as to both principal and interest by the United States; or the funds may be invested in certain federally-sponsored agency obligations that are designed in the laws authorizing their issuance as lawful investments for fiduciary and trust funds under the control and authority of the United States or any officer of the United States. These obligations may be acquired on original issue at the issue price or by purchase of outstanding obligations at their market price. In addition, the Social Security Act authorizes the issuance of public-debt obligation for purchase by the trust funds.

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

Appendix VI. Statutory Provisions, as of December 31, 1970, Creating the Trust Fund, Defining the Duties of the Board of Trustees, and Providing For Advisory Councils on Social Security

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

Federal supplementary medical insurance trust fund.—Section 1841. (*a*) There is hereby created on the books of the Treasury of the United States a trust fund to be known as the "Federal supplementary medical insurance trust fund" (hereinafter in this section referred to as the "trust fund"). The trust fund shall con-

sist of such amounts as may be deposited in, or appropriated to, such fund as provided in this part.

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

(1) Hold the trust fund;

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

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

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

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

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

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

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

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

fiscal year) to the trust fund from the railroad retirement account amounts, equivalent to the amounts not previously so transferred which the Secretary of Health, Education, and Welfare shall have certified as overpayments to the Railroad Retirement Board pursuant to section 1870(b) of this act.

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

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

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

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

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

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

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

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

(*e*)(1) In the case of an individual receiving an annuity under subchapter III of chapter 83 of title 5, United States Code, or any other law administered by the Civil Service Commission providing retirement or survivorship protection, to whom neither subsection (a) nor subsection (b) applies, his monthly premiums under this part (and the monthly premiums of the spouse of such individual under this part if neither subsection (a) nor subsection (b) applies to such spouse and if such individual agrees) shall, upon notice from the Secretary of Health, Education, and Welfare to the Civil Service Commission, be collected by deducting the amount thereof from each installment of such annuity. Such deduction

shall be made in such manner and at such times as the Civil Service Commission may determine. The Civil Service Commission shall furnish such information as the Secretary of Health, Education, and Welfare may reasonably request in order to carry out his functions under this part with respect to individuals to whom this subsection applies.

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

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

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

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

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

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

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

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

Advisory Council on Social Security.—Section 706(a). During 1969 (but not before February 1, 1969) and every fourth year thereafter (but not before February 1 of such fourth year), the Secretary shall appoint an Advisory Council on Social Security for the purpose of reviewing the status of the Federal old-age and survivors insurance trust fund, the Federal disability insurance trust fund, the Federal hospital insurance trust fund, and the Federal supplementary medical insurance trust fund in relation to the long-term commitments of the old-age, survivors, and disability insurance program and the programs under parts A and B of title XVIII, and of reviewing the scope of coverage and the adequacy of benefits under, and all other aspects of, these programs, including their impact on the public assistance programs under this act.

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

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

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

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

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

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

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

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

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