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1979 ANNUAL REPORT OF
THE BOARD OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE TRUST FUND

COMMUNICATION

FROM

THE BOARD OF TRUSTEES,
FEDERAL HOSPITAL INSURANCE
TRUST FUND

TRANSMITTING

THE 1979 ANNUAL REPORT OF THE BOARD, PURSUANT TO
SECTION 1817(b) OF THE SOCIAL SECURITY ACT, AS AMENDED



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LETTER OF TRANSMITTAL

BOARD OF TRUSTEES OF THE
FEDERAL HOSPITAL INSURANCE TRUST FUND,
Washington, D.C., April 13, 1979.

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

Sir: We have the honor to transmit to you the 1979 Annual Report of the Board of Trustees of the Federal Hospital Insurance Trust Fund (the 14th such report), in compliance with the provisions of section 1817(b) of the Social Security Act.

Respectfully,

W. MICHAEL BLUMENTHAL,
Secretary of the Treasury
and Managing Trustee of the Trust Fund.
RAY MARSHALL,
Secretary of Labor.

JOSEPH A. CALIFANO, JR.,
Secretary of Health, Education,
and Welfare.

LEONARD D. SCHAEFFER,
Administrator of the Health Care
Financing Administration
and Secretary, Board of Trustees.

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Washington, D.C., April 13, 1979.

THE PRESIDENT OF THE SENATE,
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1979 ANNUAL REPORT OF THE BOARD OF TRUSTEES OF THE FEDERAL HOSPITAL INSURANCE TRUST FUND

THE BOARD OF TRUSTEES

The Federal Hospital Insurance Trust Fund, established on July 30, 1965, is held by the Board of Trustees under the authority of section 1817(b) of the Social Security Act, as amended. The Board is comprised of three members who serve in an ex officio capacity. The members of the Board are the Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health, Education, and Welfare. The Secretary of the Treasury is designated by law as the Managing Trustee. The 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 1817(b)(2) of the Social Security Act. This is the 1979 annual report, the fourteenth such report.

ADVISORY COUNCIL ON SOCIAL SECURITY

The Secretary of Health, Education, and Welfare, on February 26, 1978, announced the appointment of an Advisory Council on Social Security under the provisions of section 706 of the Social Security Act. The Council consists of a Chairman and 12 members representing organizations of employers and of employees, self-employed persons, and the public.

Under the law, the Social Security Advisory Council is charged with making a comprehensive study of the status of the social security cash benefit and Medicare programs. This study is to include an examination of the financial status of the trust funds in relation to the long-term commitments of the program, benefit levels, the scope of coverage, and other aspects of the programs, including their impact on public assistance.

The Council is required to submit its final reports to the Secretary of Health, Education, and Welfare no later than October 1, 1979. After the Council's reports are transmitted by the Secretary to the Congress and to the Board of Trustees of each of the trust funds, the Council will cease to exist. The Council's report and recommendations with respect to the hospital insurance program will be included in the 1980 annual report of the Board of Trustees.

HIGHLIGHTS

(a) Disbursements of the hospital insurance trust fund in fiscal year 1978 were \$17.9 billion, an increase of 17 percent over fiscal year 1977. Most of this increase was due to a substantial rise in the cost of hospital services. Increases in both payroll and nonpayroll expenses in hospitals

were significantly greater than comparable increases in the general economy.

(b) Income to the trust fund amounted to \$18.5 billion, representing an increase of 20.6 percent in fiscal year 1978 over 1977. The majority of this increase was due to higher average earnings for persons in covered employment and increases in the maximum taxable amount of annual earnings and in the tax rate.

(c) The trust fund increased from \$11.1 billion to \$11.8 billion at the end of fiscal year 1978. The effective annual rate of interest earned by the assets of the hospital insurance trust fund during fiscal year 1978 was 7.4 percent.

(d) The Secretary of Health, Education, and Welfare promulgated an inpatient deductible of \$160 for calendar year 1979 and a monthly premium of \$69 for noninsured enrollees for the 12-month period beginning July 1979.

(e) Approximately 23.5 million persons aged 65 and over were protected by the hospital insurance program in July 1978. This represents about 95 percent of the aged population. An additional 2.8 million disabled beneficiaries had protection in the same month.

SOCIAL SECURITY AMENDMENTS SINCE THE 1978 REPORT

During 1978, the following public law affecting the operation of the Federal Hospital Insurance Trust Fund was enacted:

Public Law 95-292, enacted June 13, 1978, provides incentives for the end-stage renal disease (ESRD) patient to self-dialyze at home or in a self-care dialysis unit of a facility; encourages early renal transplantation; and provides incentive reimbursement methods to assure more cost-effective delivery of services to patients who dialyze in institutions and at home. The amendments also provide for experiments and studies on ways to reduce ESRD program costs and for regular reports to the Congress on the cost and operation of the ESRD program. Thus, the law is designed to encourage ESRD beneficiaries to use less costly forms of treatment without jeopardizing their health. Other provisions, unrelated to ESRD, include replacing the Commissioner of Social Security with the Administrator of the Health Care Financing Administration as the Secretary of the Board of Trustees of the Federal Hospital Insurance Trust Fund and extending to October 1, 1978, the interim provisions of Public Law 93-233 concerning teaching physician reimbursement.

NATURE OF THE TRUST FUND

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

The major sources of receipts of this fund are (1) amounts appropriated to it under permanent appropriation on the basis of contributions paid by workers and their employers, and by individuals with self-

employment income, in work covered by the hospital insurance program and (2) amounts deposited in it representing contributions paid by workers employed by State and local governments and by such employers with respect to work covered by the program. The coverage of the hospital insurance program includes workers covered under the old-age, survivors, and disability insurance program and those covered under the railroad retirement program.

All employees, and their employers, in employment covered by the program are required to pay contributions with respect to the wages of individual workers. Cash tips, covered as wages beginning in 1966 under the 1965 amendments, are an exception. Employees pay contributions with respect to cash tips but, prior to 1978, employers did not. Beginning in 1978, under the 1977 amendments, employers are required to pay contributions on that part of the tip income deemed to be wages under the Federal minimum wage law. All covered self-employed persons are required to pay contributions with respect to their self-employment income.

In general, an individual's contributions are computed on annual wages or self-employment income, or both wages and self-employment income combined, up to a specified maximum annual amount, with the contributions being determined first on the wages and then on any self-employment income up to the annual maximum amount.

The hospital insurance contribution rates applicable to taxable earnings in each of the calendar years 1966 and later are shown in table 1. For 1978 and later, the contribution rates shown are the rates scheduled in the provisions of present law. The maximum amount of annual earnings taxable in each year 1966-79 and the bases scheduled in the provisions of present law for each year 1980-81 are shown also. For 1975-78, the contribution and benefit bases were determined under the automatic increase provisions in section 230 of the Social Security Act. In 1979, the base increased to the value shown in table 1. For 1980-81, the base is scheduled to increase to specific amounts as provided under the 1977 amendments. After 1981, the automatic increase provisions will again be applicable.

Except for amounts received under State agreements (to effectuate coverage under the program for State and local government employees) and deposited directly in the trust fund, all contributions are collected by the Internal Revenue Service and deposited in the general fund of the Treasury as internal revenue collections. The contributions received are immediately and automatically appropriated to the trust fund, on an estimated basis. The exact amount of contributions received is not known initially since hospital insurance contributions, old-age, survivors, and disability insurance contributions, and individual income taxes are not separately identified in collection reports received by the Treasury Department. Periodic adjustments are subsequently made to the extent that the estimates are found to differ from the amounts of contributions actually payable on the basis of reported earnings.

An employee who worked for more than one employer during the course of a year and paid contributions on wages in excess of the statutory maximum can receive a refund of the contributions he paid on such excess wages. The amount of contributions subject to refund for any period is a charge against the trust fund.

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.

The income and expenditures of the trust fund are also affected by the provisions of the Railroad Retirement Act which provide for a system of coordination and financial interchange between the railroad retirement program and the hospital insurance program.

Sections 217(g) and 229(b) of the Social Security Act authorize annual reimbursements from the general fund of the Treasury to the hospital insurance trust fund for any costs arising from the granting of noncontributory wage credits for military service, according to periodic determinations made by the Secretary of Health, Education, and Welfare.

Section 231 of the Social Security Act authorizes reimbursement from the general fund of the Treasury to the hospital insurance trust fund for any costs arising from the granting of noncontributory wage credits to individuals who were interned during World War II at a place within the United States operated by the Federal Government for the internment of persons of Japanese ancestry.

Under section 103 of the Social Security Amendments of 1965, hospital insurance benefits are provided to certain uninsured persons aged 65 and over. Such payments are made initially from the hospital insurance trust fund, with reimbursement from the general fund of the Treasury for the costs, including administrative expenses, of the payments. 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.

Section 1818 of the Social Security Act provides that certain persons not eligible for hospital insurance protection either on an insured basis or on the uninsured basis described in the previous paragraph may obtain protection by enrolling in the program and paying a monthly premium.

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 any activity financed through the fund.

Expenditures for benefit payments and administrative expenses under the hospital insurance program are paid out of the trust fund. All expenses incurred by the Department of Health, Education, and Welfare and by the Treasury Department in carrying out the provisions of title XVIII of the Social Security Act pertaining to the hospital insurance program and of the Internal Revenue Code relating to the collection of contributions are charged to the trust fund. The Secretary of Health, Education, and Welfare certifies benefit payments to the Managing Trustee, who makes the payments from the trust fund in accordance therewith.

Hospitals, at their option, are permitted to combine their billing for both hospital and physician components of radiology and pathology services rendered hospital inpatients by hospital-based physicians. Where hospitals elect this billing procedure, payments are made initially from the hospital insurance trust fund, with reimbursement

from the supplementary medical insurance trust fund. The reimbursements so made are on a provisional basis and are subject to adjustment, with appropriate interest allowance, as the actual experience develops and is analyzed.

The Social Security Amendments of 1972 provide that hospital admissions under all Federal programs be reviewed by Professional Standards Review Organizations. Under section 1168 of the Social Security Act, payments for the costs of such reviews are made initially from the hospital insurance trust fund, with reimbursement from the general fund of the Treasury for the costs of reviews of admissions covered under Federal programs other than the hospital insurance program.

The Social Security Amendments of 1967 and 1972 authorize the Secretary of Health, Education, and Welfare to develop and conduct a broad range of experiments and demonstration projects designed to determine various methods of increasing efficiency and economy in providing health care services, while maintaining the quality of such services, under the hospital insurance and supplementary medical insurance programs. The costs of such experiments and demonstration projects are paid out of the hospital insurance and supplementary medical insurance trust funds.

Congress has authorized expenditures from the trust funds for construction, rental, and lease or purchase contract of office buildings and related facilities for use in connection with the administration of the hospital insurance program. Both the capital costs of construction financed directly from the trust funds 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 are 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 statements of the operations 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, on a daily basis, 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. These obligations 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 month.

TABLE 1.—CONTRIBUTION RATES AND MAXIMUM TAXABLE AMOUNT OF ANNUAL EARNINGS

Calendar years	Maximum taxable amount of annual earnings	Contribution rates (percent of taxable earnings)	
		Employees and employers, each	Self-employed
Past experience:			
1966.....	\$6,600	0.35	0.35
1967.....	6,600	.50	.50
1968-71.....	7,800	.60	.60
1972.....	9,000	.60	.60
1973.....	10,800	1.00	1.00
1974.....	13,200	.90	.90
1975.....	14,100	.90	.90
1976.....	15,300	.90	.90
1977.....	16,500	.90	.90
1978.....	17,700	1.00	1.00
1979.....	22,900	1.05	1.05
Changes scheduled in present law:			
1980.....	25,900	1.05	1.05
1981.....	29,700	1.30	1.30
1982-84.....	(1)	1.30	1.30
1985.....	(1)	1.35	1.35
1986 and later.....	(1)	1.45	1.45

¹ Subject to automatic increase.

SUMMARY OF THE OPERATIONS OF THE TRUST FUND, FISCAL YEAR 1978

A statement of the income and disbursements of the Federal Hospital Insurance Trust Fund in fiscal year 1978, and of the assets of the fund at the beginning and end of the fiscal year, is presented in table 2. Corresponding amounts for fiscal year 1977 are also shown in the table.

The total assets of the trust fund amounted to \$11,115 million on September 30, 1977. During fiscal year 1978, total receipts amounted to \$18,543 million, and total disbursements were \$17,862 million. The assets of the trust funds thus increased \$681 million during the year to a total of \$11,796 million on September 30, 1978.

Included in total receipts during fiscal year 1978 were \$14,913 million representing contributions appropriated to the trust fund and \$1,844 million representing amounts received in accordance with State agreements for coverage of State and local government employees and deposited in the trust fund. As an offset, \$80 million was transferred from the trust fund into the Treasury as repayment for the estimated amount of contributions subject to refund to employees who worked for more than one employer during the course of a year and paid contributions on wages in excess of the statutory maximum earnings base.

Net contributions amounted to \$16,677 million, representing an increase of 22 percent over the amount of \$13,649 million for the preceding 12-month period. This growth in contribution income resulted primarily from (1) the higher level of earnings in covered employment; (2) the two increases in the maximum annual amount of earnings taxable—from \$15,300 to \$16,500 and from \$16,500 to \$17,700—that be-

came effective on January 1, 1977, and January 1, 1978, respectively; and (3) the increase in the combined tax rate from 1.8 percent to 2.0 percent effective January 1, 1978.

The section entitled "Nature of the Trust Fund" referred to provisions of the Social Security Act under which certain persons aged 65 and over but not otherwise eligible for hospital insurance protection may obtain such protection by enrolling in the program and paying a monthly premium. Premiums collected from such voluntary participants in fiscal year 1978 amounted to about \$12 million.

In accordance with provisions for annual reimbursement from the general fund of the Treasury for the costs of granting noncontributory wage credits for military service, the Secretary of Health, Education, and Welfare made a determination in 1975 of the level annual appropriations to the trust fund necessary to amortize over a 39-year period, beginning in fiscal year 1977, the estimated total additional costs, for military service performed before 1957, arising from payments that have been made since July 1966 and that will be made in future years, taking into account the amounts of annual appropriations in fiscal years 1966-76 that have been deposited into the trust fund. The annual amount resulting from this determination was \$141 million. Reimbursement from general revenues for costs arising from the granting of noncontributory wage credits to persons of Japanese ancestry who were interned during World War II was \$2 million in fiscal year 1978, based on a determination made by the Secretary of Health, Education, and Welfare in 1976. Thus, a reimbursement amounting to \$143 million was received by the trust fund in December 1977.

Again, the section entitled "Nature of the Trust Fund" referred to provisions under which the hospital insurance trust fund is to be reimbursed from the general fund of the Treasury for costs of paying benefits under this program on behalf of certain uninsured persons. The reimbursement in fiscal year 1978 amounted to \$688 million, consisting of \$657 million for benefit payments, \$13 million for administrative expenses, and \$18 million due the trust fund for interest on adjustments to costs in prior fiscal years.

The remaining \$780 million of receipts consisted almost entirely of interest on the investments of the trust fund.

Of the \$17,862 million in total disbursements, \$17,417 million represented benefits paid directly from the trust fund for health services covered under title XVIII of the Social Security Act. As offsets to benefit payments, transfers were made from the supplementary medical insurance trust fund amounting to \$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. Net benefit payments from the trust fund in fiscal year 1978, therefore, amounted to \$17,411 million, an increase of 16.8 percent over the corresponding amount of \$14,906 million paid during the preceding 12 months. An additional \$4 million in disbursements constituted payment for costs of experiments and demonstration projects in providing health care services.

The remaining \$447 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.

Table 3 compares the actual experience in fiscal year 1978 with the estimates presented in the 1977 and 1978 annual reports. The section entitled "Nature of the Trust Fund" referred to the appropriation of contributions to the trust funds on an estimated basis, with subsequent periodic adjustments to account for differences from the amounts of contributions actually payable on the basis of reported earnings. In interpreting the figures in table 3, it should be noted that the "actual" amount of contributions in fiscal year 1978 reflects the aforementioned type of adjustments to contributions for prior fiscal years. On the other hand, the "actual" amount of contributions in fiscal year 1978 does not reflect adjustments to contributions for fiscal year 1978 that were to be made after September 30, 1978. While estimated contributions in 1977 differed from actual contributions by 7 percent, the difference between actual contributions and those estimated in the 1978 report was negligible. Actual benefit payments were 3 percent lower than estimated in the 1977 report and one percent lower than estimated in the 1978 report.

The assets of the hospital insurance trust fund at the end of fiscal year 1977 totaled \$11,115 million, consisting of \$10,974 million in the form of obligations of the U.S. Government or of federally-sponsored agency obligations and an undisbursed balance of \$141 million. The assets of the hospital insurance trust fund at the end of fiscal year 1978 totaled \$11,796 million, consisting of \$11,757 million in the form of obligations of the U.S. Government or of federally-sponsored agency obligations and an undisbursed balance of \$39 million. Table 4 shows the total assets of the fund and their distribution at the end of fiscal years 1977 and 1978.

The net decrease in the par value of the investments owned by the fund during fiscal year 1977 amounted to \$36 million. New securities at a total par value of \$16,555 million were acquired during the fiscal year through the investment of receipts and the reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the fiscal year was \$16,591 million. Included in these amounts is \$14.669 million in certificates of indebtedness that were acquired and \$14.850 million in certificates of indebtedness that were redeemed during the fiscal year.

The net increase in the par value of the investments held by the fund during fiscal year 1978 amounted to \$784 million. New securities at a total par value of \$19,951 million were acquired during the fiscal year through the investment of receipts and the reinvestment of funds made available from the redemption of securities. The par value of securities redeemed during the fiscal year was \$19.167 million. Included in these amounts is \$17.798 million in certificates of indebtedness that were acquired and \$17.567 million in certificates of indebtedness that were redeemed within the fiscal year.

The effective annual rate of interest earned by the assets of the hospital insurance trust fund during the 12 months ending June 30, 1978, was 7.4 percent. (This period is used because interest on special issues is paid semiannually on June 30 and December 31). The interest rate on public-debt obligations issued for purchase by the trust fund in June 1978 was 8¼ percent, payable semiannually.

TABLE 2.—STATEMENT OF OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING FISCAL YEARS 1977 AND 1978

[In thousands of dollars]

	Fiscal year 1977	Fiscal year 1978
Total assets of the trust fund, beginning of period.....	\$10,947,810	\$11,114,685
Receipts:		
Contributions:		
Appropriations.....	\$12,434,383	\$14,913,356
Deposits arising from State agreements.....	1,276,073	1,843,511
Gross contributions.....	13,710,455	16,756,867
Less payment into the Treasury for contributions subject to refund.....	61,920	79,600
Net contributions.....	13,648,535	16,677,267
Premiums collected from voluntary participants.....	10,506	12,094
Transfer from railroad retirement account.....		213,745
Reimbursement from general fund of Treasury for costs of—		
Noncontributory credits for military service.....	141,000	141,000
Noncontributory credits for U.S. citizens of Japanese ancestry interned during World War II.....		1,997
Benefits for uninsured persons:		
Benefit payments.....	775,000	657,048
Administrative expenses.....	16,000	12,800
Interest on adjustments to costs in prior fiscal years.....	12,000	18,093
Total reimbursement for costs for benefits for uninsured persons.....	803,000	687,941
Review of medicaid, and maternal and child health hospital admissions.....		29,000
Interest:		
Interest on investments.....	769,925	780,058
Interest on amounts of interfund transfers due to adjustment in allocation of administrative expenses and construction costs ¹	1,041	-88
Total interest.....	770,966	779,970
Gifts.....	3	
Total receipts.....	\$15,374,010	\$18,543,015
Disbursements:		
Benefit payments:		
Paid directly from the trust fund for the costs of health services.....	14,911,842	17,416,782
Less transfers from the supplementary medical 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
Net benefit payments.....	14,905,842	17,410,782
Costs of experiments and demonstration projects ³	6,528	4,350
Administrative expenses:		
Department of Health, Education, and Welfare ⁴	292,671	425,506
Treasury Department.....	11,973	13,996
Construction of facilities.....	90	2,473
Gross administrative expenses.....	304,734	441,975
Interfund transfers due to adjustment in allocation of:		
Administrative expenses.....	-9,000	4,469
Costs of construction ⁴	-954	100
Less receipts from sale of supplies, materials, etc.....	15	8
Net administrative expenses.....	294,765	446,537
Total disbursements.....	15,207,134	17,861,668
Net addition to the trust fund.....	166,875	681,346
Total assets of the trust fund, end of period.....	\$11,114,685	\$11,796,031

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

² For explanation, see text.

³ Includes administrative expenses of the intermediaries.

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

TABLE 3.—COMPARISON OF ACTUAL AND ESTIMATED OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND, FISCAL YEAR 1978

[Dollar amounts in millions]

Item	Comparison of actual experience with estimates for fiscal year 1978 published in—				
	1978 report			1977 report	
	Actual amount	Estimated amount	Actual as percentage of estimate	Estimated amount	Actual as percentage of estimate
Net contributions.....	\$16,677	\$16,701	100	\$17,933	93
Benefit payments.....	17,411	17,543	99	17,925	97

TABLE 4.—ASSETS OF THE HOSPITAL INSURANCE TRUST FUND, BY TYPE, AT THE END OF FISCAL YEARS 1977 AND 1978

	Sept. 30, 1977, book value ¹	Sept. 30, 1978, book value ¹
Investments in public-debt obligations sold only to this fund (special issues):		
Certificates of indebtedness:		
7 percent, 1978.....	\$506,993,000.00	
8 ¹ / ₄ percent, 1979.....		\$737,003,000.00
Notes:		
6 ⁵ / ₈ percent, 1980.....	2,113,173,000.00	1,530,179,000.00
Bonds:		
7 ¹ / ₈ percent, 1979.....	290,112,000.00	
7 ¹ / ₈ percent, 1992.....	524,479,000.00	524,479,000.00
7 ³ / ₈ percent, 1981.....	165,760,000.00	165,760,000.00
7 ³ / ₈ percent, 1982.....	165,760,000.00	165,760,000.00
7 ³ / ₈ percent, 1983.....	165,760,000.00	165,760,000.00
7 ³ / ₈ percent, 1984.....	165,760,000.00	165,760,000.00
7 ³ / ₈ percent, 1985.....	165,759,000.00	165,759,000.00
7 ³ / ₈ percent, 1986.....	165,759,000.00	165,759,000.00
7 ³ / ₈ percent, 1987.....	165,759,000.00	165,759,000.00
7 ³ / ₈ percent, 1988.....	165,760,000.00	165,760,000.00
7 ³ / ₈ percent, 1989.....	165,760,000.00	165,760,000.00
7 ³ / ₈ percent, 1990.....	571,444,000.00	571,444,000.00
7 ¹ / ₂ percent, 1981.....	109,372,000.00	109,372,000.00
7 ¹ / ₂ percent, 1982.....	109,372,000.00	109,372,000.00
7 ¹ / ₂ percent, 1983.....	109,372,000.00	109,372,000.00
7 ¹ / ₂ percent, 1984.....	109,372,000.00	109,372,000.00
7 ¹ / ₂ percent, 1985.....	109,373,000.00	109,373,000.00
7 ¹ / ₂ percent, 1986.....	109,373,000.00	109,373,000.00
7 ¹ / ₂ percent, 1987.....	109,373,000.00	109,373,000.00
7 ¹ / ₂ percent, 1988.....	109,372,000.00	109,372,000.00
7 ¹ / ₂ percent, 1989.....	109,372,000.00	109,372,000.00
7 ¹ / ₂ percent, 1990.....	109,372,000.00	109,372,000.00
7 ¹ / ₂ percent, 1991.....	680,816,000.00	680,816,000.00
7 ⁵ / ₈ percent, 1981.....	405,685,000.00	405,685,000.00
7 ⁵ / ₈ percent, 1982.....	405,685,000.00	405,685,000.00
7 ⁵ / ₈ percent, 1983.....	405,685,000.00	405,685,000.00
7 ⁵ / ₈ percent, 1984.....	405,685,000.00	405,685,000.00
7 ⁵ / ₈ percent, 1985.....	405,685,000.00	405,685,000.00
7 ⁵ / ₈ percent, 1986.....	405,685,000.00	405,685,000.00
7 ⁵ / ₈ percent, 1987.....	405,685,000.00	405,685,000.00
7 ⁵ / ₈ percent, 1988.....	405,684,000.00	405,684,000.00
7 ⁵ / ₈ percent, 1989.....	405,684,000.00	405,684,000.00
8 ¹ / ₄ percent, 1981.....		45,347,000.00
8 ¹ / ₄ percent, 1982.....		45,347,000.00
8 ¹ / ₄ percent, 1983.....		45,347,000.00
8 ¹ / ₄ percent, 1984.....		45,347,000.00
8 ¹ / ₄ percent, 1985.....		45,347,000.00
8 ¹ / ₄ percent, 1986.....		45,346,000.00
8 ¹ / ₄ percent, 1987.....		45,346,000.00
8 ¹ / ₄ percent, 1988.....		45,347,000.00
8 ¹ / ₄ percent, 1989.....		45,347,000.00
8 ¹ / ₄ percent, 1990.....		45,347,000.00
8 ¹ / ₄ percent, 1991.....		45,347,000.00
8 ¹ / ₄ percent, 1992.....		201,684,000.00
8 ¹ / ₄ percent, 1993.....		726,163,000.00
Total public-debt obligations sold only to this fund (special issues).....	\$10,923,740,000.00	\$11,707,306,000.00
Investments in federally-sponsored agency obligations:		
Participations certificates:		
Federal Assets Liquidation Trust—Government National Mortgage Association:		
5.20 percent, 1982.....	50,000,000.00	50,000,000.00
Total investments.....	\$10,973,740,000.00	\$11,757,306,000.00
Undisbursed balance.....	140,945,202.67	38,725,498.62
Total assets.....	\$11,114,685,202.67	\$11,796,031,498.62

¹ Par value, plus unamortized premium, less discount outstanding.

EXPECTED OPERATIONS AND STATUS OF THE TRUST FUND DURING THE PERIOD OCTOBER 1, 1978, TO DECEMBER 31, 1981

The expected operations of the trust fund during fiscal years 1979-81 are shown in table 5, together with the past experience of the program. The projection shown in table 5—and the entirety of this section—is based on the intermediate set of projection assumptions labeled alternative II, which is presented in detail in appendix A.

The estimates of income from hospital insurance contributions are at a considerably higher level during the period projected than during the past. This occurs primarily as a result of the increases in the hospital insurance tax rate which took place on January 1, 1978, and on January 1, 1979, and the higher earnings bases scheduled in the law.

Income received through the financial interchange between the railroad retirement account and the trust fund under the provisions of the Railroad Retirement Act is estimated on the same basis as income from hospital insurance contributions. Estimates of the corresponding outgo are included in the disbursement items.

Estimated income to the trust fund which is appropriated from general revenues to reimburse the program for the cost of coverage of noninsured persons is the same as the estimates of disbursements for such persons, net of corrections for differences between costs and amounts transferred for previous years. Premium income and disbursements for other noninsured persons over age 65 who may enroll in the hospital insurance program on a voluntary basis are based on an estimated enrollment of 22,000 in fiscal year 1979.

Reimbursement from general revenues for military wage credits is projected at \$141 million in each year. This is based on the determination made by the Secretary of Health, Education, and Welfare in 1975 of the level annual appropriations necessary to amortize the additional costs arising from these wage credits.

Estimated reimbursement from general revenues for the cost, paid initially from the hospital insurance trust fund, of Professional Standard Review Organization (PSRO) review of hospital admissions under Federal programs other than the hospital insurance program is based on estimates of the payments for such reviews, net of corrections for differences between payments and amounts transferred in previous years.

The investment of new assets received during fiscal years 1979-81 is assumed to be in the form of special public-debt obligations bearing interest rates ranging from 9 percent, payable semiannually, in 1979 to 8½ percent in 1981. The average effective annual rate of interest on the assets held by the hospital insurance trust fund on September 30, 1978, was 7.7 percent.

Disbursements for benefits are projected to increase sharply in fiscal years 1979-81, primarily as a result of the high rate of increase in hospital costs reimbursable under the program. The expenditures for benefit payments shown in table 5 differ slightly from those shown in the 1980 Federal budget. These estimates are based on a more recent demographic and economic projection, and they do not reflect the implementation of certain proposed changes in regulations which were included in the budget.

The actual operation of the hospital insurance program is organized, in general, on a calendar year basis. Earnings subject to taxation and the applicable tax rates are established by calendar year, as are the in-patient deductible and other cost sharing amounts. The projected operations of the trust fund on a calendar year basis are shown in table 6, according to the same basis as used in table 5. The following discussion of the financing of the program is on a calendar year basis.

The ratios of assets in the trust fund at the beginning of each calendar year to total disbursements during that year are shown in table 7 for past years and as projected through 1981. The ratio of assets to disbursements grew gradually until it reached approximately the level of one-half of a year's expenditures as of the beginning of 1971. After dropping slightly during both of the following 2 years, it increased to 69 percent in 1974 and 79 percent in 1975. The ratio decreased slightly in 1976 to 77 percent and decreased sharply in 1977 and 1978 to 66 percent and 57 percent, respectively. It is projected to decline during the next 3 years to 51 percent at the beginning of 1981.

TABLE 5.—OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING FISCAL YEARS 1967-81

[In millions of dollars]

Fiscal year 1	Income							Disbursements			Trust fund		
	Payroll taxes	Transfers from railroad retirement account	Reimbursement for uninsured persons	Premiums from voluntary enrollees	Reimbursement for military wage credits	Reimbursement for PSRO review	Interest on investments	Total income	Benefit payments	Administrative expenses 2	Total disbursements	Net increase in fund	Fund at end of year
Historical data:													
1967	\$2,689	\$16	\$327			\$11	\$46	\$3,089	\$2,508	\$89	\$2,597	\$492	\$1,343
1968	3,514	44	273			11	61	3,902	3,736	79	3,815	88	1,431
1969	4,423	54	749			22	96	5,344	4,654	104	4,758	586	2,017
1970	4,785	64	617			11	137	5,614	4,804	149	4,953	661	2,677
1971	4,898	66	863			11	180	6,018	5,442	150	5,592	426	3,103
1972	5,226	66	503			48	188	6,031	6,108	167	6,276	—245	2,859
1973	7,663	63	381			48	196	8,352	6,648	194	6,842	1,510	4,369
1974	10,602	99	451	\$4		48	405	11,610	7,806	259	8,065	3,545	7,914
1975	11,291	132	481	6		48	609	12,568	10,353	259	10,612	1,956	9,870
1976	12,031	138	610	8		48	709	13,544	12,267	312	12,579	966	10,836
T.Q.	3,366	143	* 0	2		0	5	3,516	3,315	89	3,404	112	10,918
1977	13,649	* 0	* 803	11		141	770	15,374	14,906	301	15,207	167	11,115
1978	16,677	* 214	688	12		* 143	780	18,543	17,411	451	17,862	681	11,796
Projection:													
1979	20,115	196	734	17		141	879	22,115	20,264	489	20,753	1,362	13,158
1980	23,434	231	697	21		141	1,007	25,566	23,450	499	23,949	1,617	14,775
1981	30,286	267	698	25		141	1,252	32,721	27,105	582	27,687	5,034	19,809

¹ For 1967 through 1976, fiscal years cover the interval from July 1 through June 30, the 3-mo. interval from July 1, 1976, through Sept. 30, 1976, is labeled "T.Q.," the transition quarter; fiscal years 1977-81 cover the interval from Oct. 1 through Sept. 30.

² Includes costs of experiments and demonstration projects.

³ The 1977 transfer is for benefits and administrative expenses during the 5-quarter period covering the transition quarter and fiscal year 1977.

⁴ The 1978 transfer is for contributions during the 5-quarter period covering the transition quarter and fiscal year 1977.

⁵ Includes \$2,000,000 in reimbursement from general revenues for costs arising from the granting of noncontributory wage credits to persons of Japanese ancestry who were interned during World War II.

TABLE 6.—OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING CALENDAR YEARS 1966-81

[In millions of dollars]

Calendar year	Income							Disbursements			Trust fund			
	Payroll taxes	Transfers from railroad retirement account	Reimbursement for uninsured persons	Premiums from voluntary enrollees	Reimbursement for military wage credits	Reimbursement for PSRO review	Interest on investments	Total income	Benefit payments	Administrative expenses ¹	Total disbursements	Net increase in fund	Fund at end of year	
Historical data:														
1966	\$1,858	\$16	\$26			\$11		\$32	\$1,943	\$891	\$108	\$999	\$944	\$944
1967	3,152	44	301			11		51	3,559	3,353	77	3,430	129	1,073
1968	4,116	54		1,022		22		74	5,287	4,179	99	4,277	1,010	2,083
1969	4,473	64	617			11		113	5,279	4,739	118	4,857	422	2,505
1970	4,881	66	863			11		158	5,979	5,124	157	5,281	698	3,202
1971	4,921	66	503			48		193	5,732	5,751	150	5,900	-168	3,034
1972	5,731	63	381			48		180	6,403	6,318	185	6,503	-99	2,935
1973	9,944	99	451		\$2	48		278	10,821	7,057	232	7,289	3,532	6,467
1974	10,844	132	471		5	48		523	12,024	9,099	272	9,372	2,652	9,119
1975	11,502	138	621		7	48		664	12,980	11,315	266	11,581	1,399	10,517
1976	12,727	143	20		9	141		746	13,766	13,340	339	13,679	88	10,605
1977	14,114	30	2803		12	143		784	15,856	15,737	283	16,019	-163	10,442
1978	17,324	214	688		13	141	\$29	805	19,213	17,682	496	18,178	1,035	11,477
Projection:														
1979	21,098	196	734		17	141	33	963	23,182	20,996	492	21,488	1,694	13,171
1980	24,038	231	697		21	141	35	1,115	26,278	24,267	540	24,807	1,471	14,642
1981	32,652	267	698		25	141	52	1,469	35,304	28,088	596	28,684	6,620	21,262

¹ Includes costs of experiments and demonstration projects.² No transfer is made in 1976 because of the change in transfer dates from December to March. The 1977 transfer is for benefits and administrative expenses during the 15-mo. period beginning July 1976 and ending September 1977.³ No transfer is made in 1977 because of the change in transfer dates from August to June. The 1978 transfer is for contributions during the 5-quarter period covering the transition quarter and fiscal year 1977.⁴ Includes \$2 million in reimbursement from general revenues for costs arising from the granting of noncontributory wage credits to persons of Japanese ancestry who were interned during World War II.

TABLE 7.—Ratio of assets in the fund at the beginning of the year to disbursements during the year for the hospital insurance trust fund

Calendar year:	Ratio (percent)
Historical data:	
1967	28
1968	25
1969	43
1970	47
1971	54
1972	47
1973	40
1974	69
1975	79
1976	77
1977	66
1978	57
Projection:	
1979	53
1980	53
1981	51

ACTUARIAL STATUS OF THE TRUST FUND

The 1971 Advisory Council recommended that the hospital insurance program be operated on the general financing principle that annual income to the program should be approximately equal to annual outlays of the program plus an amount to maintain a balance in the trust fund equal to one year's expenditures. This principle reflects the view that a sizable fund is needed for the contingency that future income and outgo may differ substantially from projected levels, but that it is unnecessary and impractical to fund fully the future benefits of workers as they accrue the right to those future benefits.

The projected expenditures under the program, expressed as percentages of taxable payroll, are summarized for selected years over the next 25-year period in table 8. The ratio of expenditures to taxable payroll has increased from 0.95 percent in 1967 to an estimated 2.05 percent in 1978, reflecting both the higher rate of increase in hospital costs than in earnings subject to hospital insurance taxes and the extension of hospital insurance benefits to disabled beneficiaries and persons suffering from end-stage renal disease. Further increases in this ratio to 2.12 percent in 1980, 2.73 percent in 1985, and 4.92 percent by the year 2000 result from the assumption that the cost of institutional health care will continue to increase at a higher rate than taxable earnings (see appendix A for a description of the methodology and assumptions used in this projection).

The allowances necessary to build the trust fund to the level of a year's disbursements and to maintain it at that level, after accounting for the offsetting effect of interest earnings, are shown also in table 8. Since the level of the trust fund at the beginning of calendar year 1979 is 53 percent of the projected disbursements during 1979, a cost is associated with increasing it to the 100 percent level. Building the trust fund to the level of a year's disbursements could be accomplished in a single year, in a period of several years, or over the entire 25-year projection period. Because of the many patterns of trust fund growth possible, the allowance for trust fund building and maintenance has,

for purposes of display in table 8, been developed to provide for uniform growth of the trust fund from the level of 53 percent at the beginning of 1979 to the level of 100 percent at the end of the 25-year projection period.

The adequacy of the financing of the hospital insurance program under current law is measured by comparing on a year-to-year basis the actual tax rates specified by law with the corresponding total costs of the program, expressed as percentages of taxable payroll. If these two items are exactly equal in each year of the 25-year projection period and all projections assumptions are realized, tax revenues along with interest income will be sufficient to provide for benefits and administrative expenses for insured persons and to build the trust fund gradually to the level of a year's outgo by the end of the period. In practice, however, tax rate schedules generally are designed with rate changes occurring only at intervals of several years, rather than with continual year-by-year increases to match exactly with projected cost increases. To the extent that small differences between the yearly costs of the program and the the corresponding tax rates occur for short periods of time and are offset by subsequent differences in the reverse direction, the substance of the financing objectives will have been met.

The projected total costs of the program, expressed as percentages of taxable payroll, and the tax rates scheduled under current law are shown in table 8 for selected years over the 25-year period 1979–2003. The total cost of the program, including expenditures plus trust fund building and maintenance, exceeds the tax rate in nearly every year of the projection. Furthermore, expenditures for benefits and administrative expenses alone exceed the corresponding tax rates for all future years beginning in the mid-1980's. The trust fund as a percent of a year's disbursements is projected to drop to a level of 51 percent by the beginning of 1981 and then to increase to a level of about 77 percent in 1984. The trust fund is projected to decline rapidly thereafter until it is completely exhausted in about 1992.

The actuarial balance of the hospital insurance program is defined to be the excess of the average tax rate for the 25-year valuation period over the average cost of the program, expressed as a percent of taxable payroll, for the same period. The average tax rate for the 25-year period 1979–2003 is 2.78 percent; the average cost of the program is 3.82 percent of taxable payroll, composed of 3.64 percent for program expenditures and 0.18 percent for the building and maintenance of the trust fund. The resulting actuarial balance, as shown in table 9, is a deficit of 1.04 percent of taxable payroll.

Long-range cost estimates for the hospital insurance program have been made, since the beginning of the program, for the 25-year period beginning with the year of the report. A relatively long valuation period, such as 25 years, is necessary in order to depict the pattern of rising costs which will ensue if trends over the past two decades continue into the future. Even a valuation period as long as 25 years fails to present fully the future contingencies that reasonably may be expected, such as the impact of the demographic shift after the turn of the century which is discussed in the old-age, survivors, and disability insurance report. On the other hand, the degree of uncertainty concerning future hospital costs, relative to the remainder of the

economy, is sufficiently great as to limit the usefulness of projections beyond 25 years. A precise prediction of the future is not possible, even in the short range; however, both short- and long-range estimates can be made, based on reasonable assumptions, which will indicate the trend and general range of future costs.

Since future economic, demographic, and health care usage and cost experience may differ considerably from any single set of assumptions on which cost estimates are based, projections also have been prepared on the basis of two alternative sets of assumptions. The estimated operations of the hospital insurance trust fund during calendar years 1978-85 are summarized in table 10 for all three alternatives, and table 11 compares the actuarial balance under each of the three. The assumptions underlying alternative II, the intermediate projection, are presented in substantial detail in appendix A. The assumptions used in preparing alternative projections I and III also are summarized in appendix A. The projections shown in the statement of expected operations and status of the trust fund through December 31, 1981, contained earlier in this report, are based on the assumptions contained in alternative II.

The three alternative sets of assumptions were selected in order to indicate the general range in which the cost of the program reasonably might be expected to fall. The alternative I assumptions are somewhat more optimistic than those of alternative II, resulting in a lower average cost over the 25-year period and a stronger trust fund development. Alternatives I and III provide for a fairly wide range of possible experience. Actual experience reasonably may be expected to fall within the range, but no guarantee can be made that this will be the case, particularly in light of the wide variations in experience that have occurred since the beginning of the program. The projected trust fund development under alternative III also provides a measure of the strength of the financing of the program. An adequate financing schedule ought to be sufficiently strong to withstand, for a period of several consecutive years, conditions in the general economy and in the hospital sector which are substantially more adverse than anticipated under alternative II.

Under alternative II, the trust fund as a percent of a year's disbursements is projected to increase in the early 1980's and to decline rapidly thereafter until it is completely exhausted in about 1992. Under alternative I, the trust fund is projected to grow steadily in the 1980's, then to decline until the fund is completely exhausted in about 1998. Under alternative III, the trust fund as a percent of a year's disbursements is projected to increase in the early 1980's, then decrease steadily, with complete exhaustion of the fund by the late 1980's. These projections do not reflect any reduction in disbursements due to certain proposed changes in regulations which were included in the 1980 Federal budget but which have not yet been implemented.

The divergence in outcomes among the three alternatives is reflected both in the estimated operations of the trust fund and in the 25-year average costs. The variations in the underlying assumptions, as shown in appendix A, can be characterized as (1) moderate in terms of magnitude of the differences on a year-by-year basis and (2) persistent over the duration of the 25-year period. Under alternative II, program costs are projected to grow at a rate which gradually declines to

an ultimate level of 2.7 percent more rapidly than taxable payroll. Under alternative I, program costs are projected to grow at a somewhat lower rate which gradually declines to an ultimate difference of 0.9 percent. Similarly, alternative III follows a pattern whereby program costs initially increase at a somewhat higher rate than under alternative II, gradually declining to an ultimate difference of about 4.7 percent. Recent experience has indicated that economic conditions producing results as adverse as those under alternative III can occur. In view of this and because of the wide range of possible experience, it is important that a substantial balance be maintained in the hospital insurance trust fund as a reserve for contingencies.

TABLE 8.—COST AND TAX RATES OF THE HOSPITAL INSURANCE PROGRAM, EXPRESSED AS A PERCENT OF TAXABLE PAYROLL

Calendar year	Expenditures under the program ¹	Trust fund building and maintenance ²	Total cost of the program	Tax rate scheduled in the law ³	Difference
Historical data:					
1967	0.95				
1968	1.05				
1969	1.13				
1970	1.21				
1971	1.33				
1972	1.31				
1973	1.34				
1974	1.42				
1975	1.69				
1976	1.84				
1977	1.93				
1978	2.05				
Projection:					
1979	2.03	0.11	2.14	2.10	-0.04
1980	2.12	0.12	2.24	2.10	-.14
1981	2.19	0.13	2.32	2.60	+.28
1982	2.31	0.13	2.44	2.60	+.16
1983	2.44	0.14	2.58	2.60	-.02
1984	2.57	0.15	2.72	2.60	-.12
1985	2.73	0.16	2.89	2.70	-.19
1990	3.51	0.19	3.70	2.90	-.80
1995	4.27	0.19	4.46	2.90	-1.56
2000	4.92	0.21	5.13	2.90	-2.23
Average ⁴	3.64	0.18	3.82	2.78	-1.04

¹ Costs attributable to insured beneficiaries only. Benefits and administrative costs for noninsured persons are financed through general revenue transfers and premium payments rather than through payroll taxes.

² Allowance for building the trust fund balance to the level of a year's outgo and maintaining it at that level, after accounting for the offsetting effect of interest earnings.

³ Rates for employees and employers combined.

⁴ Average for the 25-year period 1979-2003.

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

TABLE 9.—Actuarial balance of the hospital insurance program, expressed as a percent of taxable payroll

Average contribution rate, scheduled under present law ¹	2.78
Average cost of the program: ¹	
Expenditures, for benefit payments and administrative costs for insured beneficiaries	3.64
Building and maintaining the trust fund, at the level of 1 year's expenditures	0.18
Total cost of the program	3.82
Actuarial balance	-1.04

¹ Average for the 25-year period 1979-2003.

(NOTE: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.)

TABLE 10.—ESTIMATED OPERATIONS OF THE HOSPITAL INSURANCE TRUST FUND DURING
CALENDAR YEARS 1978-85, UNDER ALTERNATIVE SETS OF ASSUMPTIONS

[Dollar amounts in billions]

Calendar year	Total income	Total disbursements	Net increase in fund	Fund at end of year	Ratio of assets to disbursements ¹ (percent)
Alternative I:					
1978 ²	\$19.2	\$18.2	\$1.0	\$11.5	57
1979	23.2	21.5	1.7	13.2	53
1980	26.4	24.8	1.6	14.8	53
1981	35.5	28.6	6.8	21.6	52
1982	40.1	32.9	7.2	28.8	66
1983	44.0	37.5	6.5	35.3	77
1984	47.4	41.9	5.5	40.8	84
1985	52.2	46.5	5.7	46.4	88
Alternative II:					
1978 ²	19.2	18.2	1.0	11.5	57
1979	23.2	21.5	1.7	13.2	53
1980	26.3	24.8	1.5	14.6	53
1981	35.3	28.7	6.6	21.3	51
1982	39.6	33.1	6.5	27.8	64
1983	43.3	37.9	5.4	33.2	73
1984	46.6	42.9	3.8	37.0	77
1985	51.5	48.5	3.0	40.0	76
Alternative III:					
1978 ²	19.2	18.2	1.0	11.5	57
1979	23.2	21.5	1.7	13.2	53
1980	25.9	24.8	1.1	14.4	53
1981	35.0	29.0	6.1	20.4	50
1982	39.4	33.9	5.5	26.0	60
1983	43.5	39.6	3.8	29.8	66
1984	47.6	46.4	1.2	31.0	64
1985	53.2	54.3	-1.1	29.9	57

¹ Ratio of assets in the trust fund at the beginning of the year to disbursements during the year.² Figures for 1978 represent actual experience.

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

TABLE 11.—ACTUARIAL BALANCE OF THE HOSPITAL INSURANCE PROGRAM, UNDER ALTERNATIVE SETS OF ASSUMPTIONS

[In percent]

	Alternative		
	I	II	III
Average contribution rate, scheduled under present law ¹	2.78	2.78	2.78
Average cost of the program, for expenditures and for trust fund building and maintenance ²	3.11	3.82	4.88
Actuarial balance	- .33	-1.04	-2.10

¹ Average for the 25-yr period 1979-2003.² Average for the 25-yr period 1979-2003, expressed as a percent of taxable payroll.

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

CONCLUSION

The present financing schedule for the hospital insurance program is not adequate to provide for the expenditures anticipated over the entire 25-year valuation period if the assumptions underlying the estimates are realized. Tax rates currently specified in the law (including the scheduled increases in 1981, 1985, and 1986) are sufficient, along with interest earnings, to support program expenditures over the next 9 years. However, they are not sufficient, under current assumptions, to provide for adequate growth in the trust fund—relative

to annual disbursements—toward the level of a full year's disbursements recommended by the 1971 Advisory Council. The financing for the remainder of the 25-year valuation period is not sufficient even to provide for projected benefits and administrative expenses. The average percent of payroll necessary to provide for benefits and administrative expenses plus growth in the trust fund to the level of one year's disbursements exceeds the average tax rate scheduled in the law, producing an average deficit of 1.04 percent of taxable payroll over the entire 25-year projection period. Even under the more optimistic alternative I assumptions, the present financing schedule will result in the fund being exhausted by 1998.

The trust fund balance at the beginning of 1979 was 53 percent of the projected disbursements for 1979, well below the level of a full year's disbursements. The ratio of fund to disbursements is projected to drop to a level of 51 percent by the beginning of 1981 and then to return to a level of about 77 percent by 1984. The trust fund is projected to decline rapidly thereafter, until it is completely exhausted in about 1992. Under the less optimistic alternative III assumptions, the decline of the trust fund is accelerated, with complete exhaustion of the fund by the late 1980's.

The hospital insurance trust fund is not in imminent danger of being unable to provide benefits which become payable. However, the present financing schedule does not provide for adequate growth in the trust fund (relative to annual disbursements); and, after the mid-1980's, disbursements exceed income, leading to complete exhaustion of the fund by about 1992. The Board recommends that Congress take action to examine ways of strengthening the long-range financing of the hospital insurance system. The Board also recommends that action be taken to curtail the rapid growth in the cost of the hospital insurance program which has occurred during recent years and which is anticipated in the future.

APPENDIXES

APPENDIX A.—ACTUARIAL METHODOLOGY AND PRINCIPAL ASSUMPTIONS FOR THE HOSPITAL INSURANCE COST ESTIMATES¹

The basic methodology and assumptions used in the estimates for the hospital insurance program are described in this appendix. In addition, sensitivity testing of program costs under alternative sets of assumptions is presented.

1. PROGRAM COSTS

The principal steps involved in projecting the future costs of the hospital insurance program are (1) establishing the present cost of services provided to beneficiaries, by type of service, to serve as a projection base; (2) projecting increases in the cost of inpatient hospital services covered under the program; (3) projecting increases in the cost of skilled nursing facility and home health agency services covered under the program; and (4) projecting increases in administrative costs. The major emphasis will be directed toward the cost of inpatient hospital services, which accounts for approximately 95 percent of benefit expenditures.

a. Projection base

The hospital insurance program is obligated, by law, to reimburse institutional providers for the reasonable cost of providing covered services to beneficiaries. In order to establish a suitable base from which to project the future costs of the program, the incurred reasonable cost of services provided must be reconstructed for the most recent period for which a reliable determination can be made. To do this, payments to providers must be attributed to dates of service, rather than to payment dates. In addition, the nonrecurring effects of any changes in regulations or administration of the program and of any items affecting only the timing and flow of payments to providers must be eliminated. As a result, the rates of increase in the incurred cost of the program differ from the increases in cash disbursements shown in tables 5 and 6.

The reasonable costs of covered services to beneficiaries are determined on the basis of provider cost reports. Payments to a provider initially are made on an "interim" basis; to adjust interim payments to the level of retroactively determined costs, a series of payments or recoveries is effected through the course of cost settlement with the provider. The net amounts paid to date to providers in the form of

¹ Prepared by the Division of Medicare Cost Estimates, Health Care Financing Administration.

cost settlements are known; however, the incomplete data available do not permit a precise determination of the exact amounts incurred during specific periods of time. Due to the time required to obtain cost reports from providers, to verify these reports, and to perform audits (where appropriate), final settlements have lagged behind the liability for such payments or recoveries by as much as several years for some providers. Hence, the final cost of the program has not been completely determined for the most recent years of the program, and some degree of uncertainty remains even for earlier years.

Additional problems are posed by changes in administrative or reimbursement policy which have a substantial effect on either the amount or incidence of payment. The extent and timing of the incorporation of such changes into interim payment rates and cost settlement amounts cannot be determined precisely.

The process of allocating the various types of payments made under the program to the proper incurred period—using incomplete data and estimates of the impact of administrative actions—presents difficult problems, the solution to which can be only approximate. Under the circumstances, the best that can be expected is that the actual incurred cost of the program for a recent period can be estimated within a few percent. This increases the error of projection directly, by incorporating any error in estimating the base year into all future years.

b. Hospital costs

The hospital insurance program reimburses participating hospitals for the reasonable cost of providing covered services to beneficiaries. Because of its cost reimbursement nature, the program essentially pays for the share of aggregate inpatient hospital costs which is allocated to beneficiaries. Hence, for analysis and projection purposes, trends in program costs can be separated conceptually into (1) increases in aggregate expenditures by hospitals for all patients in producing services of the types covered by the program and (2) changes in the share of these expenditures that are for hospital insurance beneficiaries and hence will be paid by the hospital insurance program.

Increases in aggregate inpatient hospital costs can be analyzed into three broad categories:

(1) Economic factors—the increase in unit costs that would result if hospitals' input cost increases (wage increases for hospital employees and price increases for goods and services purchased by hospitals) were the same as those for the general economy;

(2) Volume of services—the increase in total output of units of service (as measured by hospital admissions); and

(3) Unit input intensity—the increase in total costs due to increased labor and nonlabor input intensity (wage and price increases for hospital inputs which are more rapid than for workers and products in the general economy, plus increases in the number of hospital employees and amount of supplies and equipment used to produce a unit of service).

It has been possible to isolate some of these elements and to identify their roles in previous hospital cost increases. Table A1 shows the values of the principal components of the increases for historical periods for which data are available and the projected trends used in the estimates.

Increases in economic factors can be divided into those for payroll and those for nonpayroll expenditures. Slightly more than half of hospital costs are for direct payroll expenses. This proportion has declined over the years, and a modest continuation in the decline is projected. The weighted averages of the economic factors in table A1 reflect these year-by-year proportions. Increases in average wages in the period 1966-77 generally ranged from $5\frac{1}{2}$ to 7 percent per year, with the exception of somewhat higher increases in 1976 and 1977. Changes in the CPI during the same period generally varied between $2\frac{1}{2}$ and $6\frac{1}{2}$ percent, with the exception of substantially higher rates of increases in 1974 and 1975. The increases in both average wages and CPI beyond 1977 are based on assumptions used in projecting experience under the OASDI program.

Increases in volume of service (as measured by admissions) are separated into (1) a part due to population growth and (2) a part due to changes in the average number of admissions per capita. The population projection used in this report is based on assumptions used in projecting experience under the OASDI program. Admission incidence rates increased on average 1.7 percent during the 10-year pre-Medicare period 1956-65; the trend in the period 1966-74 has been relatively consistent, with the rate of increase averaging between 1 and 2 percent per year. Increases in admission incidence in the period 1975-77 averaged less than 1 percent. This trend is projected for the next 10 years, with a gradual tapering to an ultimate rate of increase that results solely from aging in the general population (i.e., admissions per capita by age and sex ultimately are assumed to be constant, so that the increases in overall average admissions per capita are due solely to changes in the mix of age and sex).

Unit input intensity changes can be analyzed and projected in terms of payroll and nonpayroll components in a manner similar to that for economic factors. The payroll component can be divided further between unit input intensity increases related to (1) the excess of average wage increases for hospital employees over average wage increases in the general economy and (2) increases in the average number of hospital employees per admission.

For several years preceding the beginning of the hospital insurance program, average hospital wages and salaries (as derived from data reported by the American Hospital Association) increased at a rate of about 1 percent per year more rapidly than the rate of increase in earnings in OASDI-covered employment. During the 1966-77 period, this differential has fluctuated widely, but has averaged slightly higher than 1 percent. Several factors contributing to this differential can be identified, including (1) growth in third-party reimbursement of hospitals—through Medicare, Medicaid, and comprehensive private plans—which is likely to have weakened hospital resistance to wage demands; (2) increased proportions of highly trained and more highly paid personnel; (3) an increased degree of labor organization and activity; and (4) the fact that hospital employees historically have earned less than similarly skilled workers in other industries. Over the short term, the differential level assumed is generally consistent with experience over the last 11 years but slightly lower due to the relatively high rates of increase projected for average wages in the

entire economy. Eventually the level of this differential would be expected to diminish further; and hence, the projection assumes only a modest continuation of the wage level intensity factor over the long run.

The number of hospital employees has continued to increase more rapidly than the number of admissions over the past 20 years. Increases in employee intensity averaged 2 percent per year during the 10 years preceding Medicare. The early years of the program were marked by a substantial surge in employees per admission, followed by a period of only modest increases during the imposition of economic stabilization program controls. Many of the same factors which have affected hospital wage level differentials can be identified also as contributing to the increase in employee intensity; in addition, the increased number and complexity of services provided within a given admission have been significant factors. The projection assumes, in general, a continuation of the pre-Medicare trend, gradually tapering to reflect a lower rate of industry growth than during the earlier period.

Nonlabor unit input intensity is a composite of several heterogeneous components. These include (1) price increases for goods and services that hospitals purchase which do not parallel increases in the CPI, (2) increases in the volume of medical and other supplies purchased and used per admission, and (3) increases in medical equipment and other capital assets employed in the provision of a hospital admission. Due to a lack of data, the nonlabor intensity factor cannot be separated into its component parts and must be treated as a residual. Historically, this factor has increased at a high rate and in an erratic fashion. Increases during the 1956-65 period averaged nearly 51½ percent; these were followed by an irregular series of increases during the period 1966-72 ranging between 5 and 18½ percent. The second and third years of the controlled period 1972-74 produced increases of only 2 to 3 percent, substantially below even the increases for the 10-year pre-Medicare period. Preliminary data indicate that the nonlabor intensity factor is declining sharply in 1978. The projection assumes a continuation of this trend in the near future, with a return to a level consistent with experience during recent years (excluding years subject to economic stabilization program controls) by 1982, followed by a gradual decline to a level consistent with experience during the decade preceding Medicare.

Aggregate inpatient hospital costs—reflecting the composite of economic factors, volume of service, and unit input intensity—have exhibited a very rapid rate and irregular pattern of increases. Although the pre-Medicare period produced an average rate of increase of approximately 10½ percent, typical rates in subsequent years have tended to vary between 12 and 19 percent.

Changes in the program's share of aggregate hospital costs result from (1) changes in the proportion of the population covered, including changes due to legislation; (2) changes in the relative number and value of services received by beneficiaries; and (3) the effect of administrative actions defining the services eligible for reimbursement and affecting the level of program payments. Historical and projected changes in the hospital insurance program's share of aggregate inpa-

tient hospital costs appear in table A1, with changes in the proportion of the population covered netted from the other sources. As indicated in the table, the share of hospital costs allocated to beneficiaries has fluctuated somewhat in recent years.

The increases experienced in the proportion of the population covered reflect the more rapid rate of increase in the number of persons aged 65 and over than in the total population of the United States and, beginning in mid-1973, the coverage of certain disabled beneficiaries and persons with end-stage renal disease. Increases in the proportion of the population covered are projected to continue, reflecting a continuation of the demographic shift into categories of the population which are eligible for hospital insurance protection.

Other sources which contribute to changes in the program's share of hospital costs include changes in the relative number and value of services received by beneficiaries and the effect of administrative actions defining covered services and affecting payment levels. Data are not available which would enable a quantitative separation between the two components for historical years. The projection assumes, over the long range, changes in these "other sources" only due to the effects of demographic shifts on the number of services received by beneficiaries as a proportion of the total number of hospital services provided for the entire population. Increases in the average age of beneficiaries and of persons not covered lead to higher expected levels of usage of hospital services by both groups, the net effect of which is reflected as changes in "other sources."

c. Skilled nursing facility and home health agency costs

Historical experience with the number of days of care covered in skilled nursing facilities under the hospital insurance program has been characterized by wide swings. The number of covered days dropped very sharply in 1970 and continued to decline through 1972. This was the result of strict enforcement of regulations separating skilled nursing from custodial care. Because of the small fraction of nursing home care covered under the program, this reduction primarily reflected the determination that Medicare was not liable for payment rather than reduced usage of services. The 1972 amendments extended benefits to persons who require skilled rehabilitative services regardless of their need for skilled nursing services (the former prerequisite for benefits). This change and subsequent related changes in regulations have resulted in significant increases in the number of services covered by the program. Some continuation of this pattern is assumed for the next 5 years, with only modest increases projected thereafter.

Increases in the average cost per day in skilled nursing facilities under the program are caused principally by increasing payroll costs for nurses and other skilled labor required. Projected rates of increase are assumed to be only slightly higher than increases in general wages throughout the 25-year projection period. The resulting increases in the cost of skilled nursing facility services are shown in table A2.

Program experience with home health agency costs has shown a generally upward trend. The number of visits has fluctuated somewhat from year to year, with very sharp increases appearing in the last 3

years. Relatively large increases are assumed for the next few years, followed by a projected pattern of increases similar to that for skilled nursing facilities. Cost per service is assumed to increase at a rate only slightly higher than increases in general wages. The resulting home health agency cost increases are shown in table A2.

d. Administrative expenses

The costs of administering the hospital insurance program have remained relatively small, in comparison with benefit amounts, throughout the history of the program. The ratio of administrative expenses to benefit payments has generally fallen within the range of 2 to 3 percent. The short-range projection of administrative costs is based on estimates of workloads and approved budgets for intermediaries and the Health Care Financing Administration. In the long range, administrative cost increases are based on assumed increases in workloads, primarily due to growth and aging of the population, and on assumed unit cost increases of 2 percent less than the increases in average wages shown in table A1.

2. FINANCING

In order to analyze costs and to evaluate the financing of a program supported by payroll taxes, program costs must be compared on a year-by-year basis with the taxable payroll which provides the source of income for these costs. Since the vast majority of total program costs relates to insured beneficiaries and since general revenue appropriations and premium payments are available to support the uninsured segments, the remainder of this report will focus on the financing for insured beneficiaries.

a. Taxable payroll

Taxable payroll increases can be separated into a part due to increases in covered wages and a part due to increases in the number of covered workers. The taxable payroll projection used in this report is based on assumptions used in projecting experience under the OASDI program. Increases in taxable payroll assumed for this report are shown in table A2.

b. Relationship between program costs and taxable payroll

The single most meaningful measure of program cost increases, with reference to the financing of the system, is the relationship between program cost increases and taxable payroll increases. If the rates of increase in both series are the same, a level tax rate over time will be adequate to support the program. However, to the extent that program costs increase more rapidly than taxable payroll, a schedule of increasing tax rates will be required to finance the system over time. Table A2 shows the resulting increases in program costs relative to taxable payroll over the 25-year projection period. These relative increases fluctuate somewhat during the 1978-80 period, due to the ad hoc increases in the maximum earnings subject to taxes. After 1980, the relative increases reduce gradually to an ultimate level of approximately 2.7 percent per year. The result of these increases over the duration of the projection period is a continued increase in the year-by-year ratios of program expenditures to taxable payroll, as shown in table A3.

3. SENSITIVITY TESTING OF COSTS UNDER ALTERNATIVE ASSUMPTIONS

Over the past 20 years, aggregate inpatient hospital costs for all patients have increased substantially faster than increases in average wages and prices in the general economy. As indicated in table A1, the 10-year period preceding Medicare was characterized by an average 10.4 percent increase in hospital costs, nearly $7\frac{1}{2}$ percent higher than the increase attributable to general wage and price increases. The 1966-71 period experienced substantially higher increases in total hospital costs, averaging 16 percent per year. Of this increase, general economic factors accounted for only $5\frac{1}{2}$ percent; the remaining $10\frac{1}{2}$ percent reflected increases in the volume of services provided and in unit input intensity. Even during the 1972-74 period of economic stabilization program controls, hospital costs increased at an average rate of about $12\frac{1}{2}$ percent, over $5\frac{1}{2}$ percent higher than the amount attributable to increases in average wages and in the CPI. Experience for the fully decontrolled years 1975-77 shows an average annual increase in hospital costs of about 16 percent, of which about 8 percent is in excess of increases in general economic factors. Preliminary indications for 1978 show hospital cost increases declining to about 4 percent higher than wages and prices in the general economy.

The sustained, high rates of hospital cost increases in the past raise serious questions concerning future cost increases which might be anticipated. Under conventional economic wisdom, the hospital industry would not be expected to sustain indefinitely the same rate of growth, relative to the general economy, experienced during the last 20 years. The growth pattern has diminished slightly in recent years, but shows no indication of halting. The most reasonable pattern of cost increase assumptions for the future, then, would fall between the two extremes of (1) an indefinite continuation of the past levels of excess of hospital cost increases over general economic factors and (2) a decline in the near term to hospital cost increase levels approaching those for the economy as a whole.

In view of the uncertainty of future cost trends, projected costs for the hospital insurance program have been prepared under three alternative sets of assumptions. A summary of the assumptions and results is shown in table A3. The set of assumptions labeled "Alternative II" forms the basis for the detailed discussion of hospital cost trends and resulting program costs presented throughout this report. It represents an intermediate set of cost increase assumptions, compared with the lower cost and more optimistic alternative I and the higher cost and less optimistic alternative III. Increases in the economic factors (average wages and CPI) for the three alternatives are consistent with those underlying the OASDI report.

As noted earlier, the single most meaningful measure of hospital insurance program cost increases, with reference to the financing of the system, is the relationship between program cost increases and taxable payroll increases. The extent to which program cost increases exceed increases in taxable payroll will determine how steeply tax rates must increase to finance the system over time.

Under alternative II, program costs are projected ultimately to increase approximately 2.7 percent faster than increases in taxable pay-

roll. Program expenditures, which are currently about 2 percent of taxable payroll, increase to a level of almost 5 percent by the year 2000 under alternative II assumptions. Hence, if all of the projection assumptions are realized over time, hospital insurance tax rates by the end of the 25-year period will have to be substantially higher than those provided in the present financing schedule (2.9 percent of taxable payroll, for 1986 and later).

Alternative I and III contain assumptions which result in program costs increasing, relative to taxable payroll increases, approximately 2 percent less and 2 percent more rapidly, respectively, than the results under alternative II. Under alternative I, program costs ultimately increase 0.9 percent more rapidly than increases in taxable payroll. By the year 2000, program expenditures under this alternative would be over 3.5 percent of taxable payroll. Hence, hospital insurance tax rates required by the end of the valuation period would be greater than those currently scheduled, even under the optimistic alternative I assumptions. Under alternative III, program costs ultimately increase 4.7 percent more rapidly than increases in taxable payroll. The result of this differential is a level of program expenditures in the year 2000 which is almost 7.0 percent of taxable payroll, more than 4.0 percent higher than the 2.9 percent tax rate currently scheduled.

TABLE A1.—COMPONENTS OF HISTORICAL AND PROJECTED INCREASES IN HOSPITAL COSTS¹

[Percent]

Calendar year	Economic factors			Volume of services ²		Unit input intensity ³				Aggregate inpatient hospital costs ⁴	HI share		HI inpatient hospital costs
	Average wages	CPI	Weighted average ³	Total population	Admission incidence	Wage level	Employee intensity	Nonlabor intensity	Weighted average ³		Proportion of population	Other sources	
Historical data:													
1956-65	3.7	1.6	3.0	1.6	1.7	1.0	2.0	5.3	4.1	10.4			
1966	5.5	3.0	4.6	1.1	0.5	-4.6	8.2	8.4	5.5	11.7			
1967	5.7	2.8	4.7	1.1	-0.7	3.4	6.2	18.4	13.5	18.6			
1968	6.4	4.2	5.7	1.0	0.1	3.3	4.4	11.6	9.7	16.5	0.6	7.5	24.6
1969	6.6	5.4	6.6	1.0	2.6	2.6	3.5	9.9	8.2	18.4	0.5	-3.7	15.2
1970	5.4	5.9	6.0	1.1	2.4	4.5	1.3	8.3	7.3	16.8	0.5	-5.3	12.0
1971	6.6	4.3	5.9	1.0	2.0	3.5	-0.1	6.1	4.8	13.7	0.6	-0.8	13.5
1972	7.0	3.3	5.6	0.9	1.2	1.1	0.2	11.3	5.8	13.5	0.7	-3.3	10.9
1973	6.5	6.2	6.6	0.7	2.4	-1.8	0.0	3.1	0.4	10.1	5.3	1.0	16.4
1974	6.6	11.0	9.0	0.7	3.0	-0.8	2.3	2.0	1.8	14.5	6.0	3.1	23.6
1975	6.3	9.1	8.0	0.7	1.0	4.2	2.5	10.5	9.0	18.7	2.2	1.6	22.5
1976	8.1	5.8	7.3	0.7	0.9	0.9	1.5	10.9	6.8	15.7	1.9	1.9	18.9
1977	7.7	6.5	7.4	0.8	0.0	-0.7	2.9	8.5	5.6	13.7	1.7	0.8	16.2
Projection:													
1978	8.4	7.6	8.3	0.8	0.4	0.0	2.4	3.5	3.0	12.5	1.6	1.8	15.9
1979	8.3	9.4	9.1	0.8	0.4	0.0	2.0	2.5	2.3	12.6	1.3	1.3	15.2
1980	8.0	7.4	8.0	0.9	0.6	0.5	2.0	4.5	3.6	13.1	1.3	1.0	15.4
1985	5.3	4.0	4.8	0.9	0.5	1.0	1.5	7.0	5.1	11.3	1.5	0.6	13.4
1990	6.0	4.0	5.0	0.8	0.4	0.5	1.0	6.0	4.2	10.4	1.1	0.3	11.8
1995	5.8	4.0	4.8	0.7	0.3	0.5	0.5	5.0	3.5	9.3	0.8	0.2	10.3
2000	5.8	4.0	4.8	0.6	0.2	.5	0.5	5.0	3.6	9.2	0.3	0.1	9.6

¹ Percent increase in year indicated over previous year.² Based on data from the American Hospital Association through 1977.³ Weighted average of the individual components, with adjustments for the effects of compounding. The weightings are based on the proportions of aggregate inpatient hospital costs which are for pay-

roll and for nonpayroll expenses. The adjustments for the effects of compounding are necessary to compensate for the fact that the various components actually are multiplicative, rather than additive as illustrated in this table.

⁴ Includes hospital costs for all patients.

TABLE A2.—RELATIONSHIP BETWEEN INCREASES IN TOTAL HI PROGRAM COSTS AND INCREASES IN TAXABLE PAYROLL ¹

[In percent]

Calendar year	HI benefit costs				HI admin- istrative costs ³	Total HI program costs ³	HI taxable payroll	Ratio of costs to payroll ⁴
	Inpatient hospital ²	Skilled nursing facility ³	Home health agency ³	Weighted average				
1979.....	15.8	16.3	25.9	16.1	3.5	15.7	16.6	-0.8
1980.....	15.9	16.4	19.6	16.0	10.2	15.9	10.8	4.6
1985.....	13.7	11.2	11.3	13.5	7.1	13.4	7.1	5.9
1990.....	11.9	9.1	9.1	11.8	7.3	11.7	6.8	4.6
1995.....	10.3	8.6	8.7	10.3	6.6	10.2	6.6	3.4
2000.....	9.6	8.0	8.1	9.5	6.1	9.5	6.6	2.7

¹ Percent increase in year indicated over previous year.² This column differs slightly from the last column of table A1, since table A1 includes all persons eligible for HI protection while this table excludes noninsured persons.³ Costs attributable to insured beneficiaries only. Benefits and administrative costs for noninsured persons are financed through general revenue transfers and premium payments rather than through payroll taxes.⁴ Percent increase in the ratio of program expenditures to taxable payroll. This is equivalent to the differential between the increase in program costs and the increase in taxable payroll.

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

TABLE A3.—SUMMARY OF ALTERNATIVE COST PROJECTIONS FOR THE HOSPITAL INSURANCE PROGRAM

[In percent]

Calendar year	Increases in aggregate inpatient hospital costs ¹			Changes in the relationship between costs and payroll ²			Expenditures as a percent of taxable payroll	
	Average wages	CPI	Volume and intensity	Total	Program costs ³	Taxable payroll		Ratio of costs to payroll
Alternative I:								
1979.....	8.3	9.3	3.5	12.6	15.7	16.6	-0.8	2.03
1980.....	8.6	7.3	4.9	13.1	15.9	11.3	4.1	2.11
1985.....	5.0	3.0	4.9	9.0	11.3	6.6	4.4	2.59
1990.....	5.5	3.0	2.5	6.7	8.2	5.3	2.8	3.06
1995.....	5.4	3.0	1.7	5.7	6.8	5.1	1.6	3.40
2000.....	5.2	3.0	1.7	5.7	6.3	5.3	.9	3.58
Alternative II:								
1979.....	8.3	9.4	3.5	12.6	15.7	16.6	-.8	2.03
1980.....	8.0	7.4	5.1	13.1	15.9	10.8	4.6	2.12
1985.....	5.3	4.0	6.5	11.3	13.4	7.1	5.9	2.73
1990.....	6.0	4.0	5.4	10.4	11.7	6.8	4.6	3.51
1995.....	5.8	4.0	4.5	9.3	10.2	6.6	3.4	4.27
2000.....	5.8	4.0	4.4	9.2	9.5	6.6	2.7	4.92
Alternative III:								
1979.....	9.2	10.3	2.6	12.6	15.7	16.9	-1.0	2.03
1980.....	8.7	8.9	4.0	13.1	15.9	8.9	6.4	2.15
1985.....	7.2	6.0	8.4	15.2	17.3	8.8	7.8	2.94
1990.....	7.5	6.0	7.3	14.1	15.4	8.4	6.5	4.13
1995.....	7.4	6.0	6.4	13.0	13.8	8.1	5.3	5.50
2000.....	7.2	6.0	6.0	12.6	12.9	7.9	4.7	6.98

¹ Percent increase in the year indicated over the previous year. Includes hospital costs for all patients.² Percent increase in the year indicated over the previous year.³ Includes cost attributable to insured beneficiaries only.

Note: Taxable payroll is adjusted to take into account the lower contribution rates on self-employment income, on tips, and on multiple-employer "excess wages" as compared with the combined employer-employee rate.

**APPENDIX B.—DETERMINATION AND ANNOUNCEMENT OF THE INPATIENT
HOSPITAL DEDUCTIBLE FOR 1979¹**

Under the authority in section 1813(b) (2) of the Social Security Act (42 U.S.C. 1395e(b) (2)), I have determined and hereby announce that the Medicare inpatient hospital deductible for 1979 shall be \$160.

Section 1813 of the Social Security Act provides for an inpatient hospital deductible and certain coinsurance amounts to be deducted from the amount payable for inpatient hospital services and post-hospital extended care services furnished an individual during a spell of illness. Section 1813(b) (2) of the act requires the Secretary to determine and publish, between July 1 and October 1 of each year, the amount of the inpatient hospital deductible for the following calendar year.

Under a formula in the law, the deductible for calendar year 1979 must be equal to \$40 multiplied by the ratio of: (1) the current average rate for a day of inpatient hospital services for calendar year 1977 to (2) the average daily rate for such services in 1966. The amount so determined is rounded to the nearest multiple of \$4. The average daily rates are determined by the Secretary based on the amounts paid on behalf of insured individuals to the hospitals participating in the Medicare program plus the amounts withheld because of the deductible and coinsurance provisions.

Because the applicable coinsurance amounts in section 1813 of the Social Security Act are fixed percentages of the inpatient deductible for services furnished in the same spell of illness, the increase in the deductible has the effect of also increasing the amount of coinsurance the Medicare beneficiary must pay. Thus, for spells of illness beginning in 1979, the daily coinsurance for the 61st through 90th days of hospitalization (one-fourth of the inpatient hospital deductible) will be \$40; the daily coinsurance for lifetime reserve days (one-half the inpatient hospital deductible) will be \$80; and the daily coinsurance for the 21st through the 100th days of extended care services (one-eighth of the inpatient hospital deductible) will be \$20.

The data used to make the necessary computations of the current average daily rate for calendar years 1966 and 1977 are derived from individual inpatient hospital bills that are recorded for all beneficiaries in the records of the program. These records show, for each bill, the number of inpatient days of care and the interim cost (the sum of interim reimbursement, deductible, and coinsurance). Tabulations are prepared which summarize the data from these bills by the year in which the care was provided. The resulting average interim daily rate accurately reflects interim costs on an accrual basis.

In order to properly reflect the change in the average daily hospital cost under the program, the average interim cost (as shown in the tabulations) must be adjusted for the effect of final cost settlements made with each provider of services after the end of its accounting year to adjust the reimbursement to that provider from the amount paid during that year on an interim basis to the actual full cost of providing covered services to beneficiaries. To the extent that the ratio of final cost to interim cost for 1977 differs from the ratio of

¹ This statement was published in the Federal Register for Sept. 29, 1978 (vol. 43, No. 190, p. 44891.)

final cost to interim cost for 1966, the increase in average interim daily costs will not coincide with the increase in actual cost that has occurred.

The current average interim daily rate for inpatient hospital services for calendar year 1977, based on tabulated interim costs, is \$155.26; the corresponding amount for 1966 is \$37.92. These averages are based on approximately 93 million days of hospitalization in 1977 and 30 million days in 1966 (last 6 months of the year). The ratio of final cost to interim cost is approximately 1.035 for 1977 and 1.055 for 1966. Thus, the inpatient hospital deductible is $\$40 \times [(155.26 \times 1.035) / (37.92 \times 1.055)] = \160.67 , which is rounded to \$160.

Dated: September 25, 1978.

JOSEPH A. CALIFANO, Jr.,
Secretary.

APPENDIX C.—DETERMINATION AND ANNOUNCEMENT OF THE HOSPITAL INSURANCE MONTHLY PREMIUM RATE FOR THE UNINSURED AGED, FOR THE 12-MONTH PERIOD BEGINNING JULY 1, 1979¹

Under the authority in section 1818(d)(2) of the Social Security Act (42 U.S.C. 1395i-2(d)(2)), I have determined that the monthly hospital insurance premium for the uninsured aged for the 12 months beginning July 1, 1979, is \$69.

Section 1818 of the Social Security Act provides for voluntary enrollment in the hospital insurance program (Part A of Medicare), subject to payment of a monthly premium, by certain uninsured persons age 65 and older who do not otherwise meet the requirements for entitlement to hospital insurance. (Insured persons need pay no hospital insurance premiums.)

Section 1818(d)(2) of the act requires the Secretary to determine and publish, during the last quarter of each calendar year, the amount of the monthly Part A premium for voluntary enrollment for the 12-month period beginning with the following July 1. That section also requires that, for the period beginning July 1, 1979, the premium must be \$33 multiplied by the ratio of (1) the 1979 inpatient hospital deductible to (2) the 1973 inpatient hospital deductible, rounded to the nearest multiple of \$1 or, if midway between multiples of \$1, to the next higher multiple of \$1.

Under section 1813(b)(2) of the act, the 1979 inpatient hospital deductible was determined to be \$160. (See 43 F.R. 44891, September 29, 1978.) The 1973 deductible was actuarially determined to be \$76, although the 1973 deductible was actually promulgated to be only \$72 to comply with a ruling of the Cost of Living Council. (See 37 F.R. 21402, October 11, 1972.) The monthly premium for the 12-month period ending June 30, 1980, has been calculated using the \$76 deductible for 1973, since this appears to satisfy more closely the intent of the law. Thus, the monthly hospital insurance premium is $\$33 \times (160/76) = \69.47 , which is rounded to \$69.

Dated: December 21, 1978.

JOSEPH A. CALIFANO, Jr.,
Secretary.

¹ This statement was published in the Federal Register for Dec. 29, 1978 (vol. 43, No. 251, p. 61010).