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MEDICARE AND THE HEALTH COSTS OF OLDER AMERICANS: THE EXTENT AND EFFECTS OF COST SHARING

AN INFORMATION PAPER

PREPARED FOR USE BY THE

SPECIAL COMMITTEE ON AGING
UNITED STATES SENATE

APRIL 1984

This document has been printed for information purposes. It does not offer findings or recommendations by this committee

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PREFACE

Medicare's costs have been rising rapidly since the enactment of the program in 1965, and are currently growing at four times the inflation rate. Medicare has paid a steadily increasing share of the health care costs of the elderly; nonetheless, the elderly still pay a substantial part of that bill directly and are spending an increasing percent of their incomes for health care. The elderly now spend, on average, as large a share of their incomes for health care as they did before the enactment of medicare. For the low-income medicare beneficiary not also covered under medicaid, the share of income spent on health care is particularly high.

Congress has enacted a number of medicare savings measures over the last few years, some of which have increased cost sharing by the elderly under the medicare program. As a result of the continuing need to slow the rates of growth in medicare and to improve the long-term financial health of the program, Congress is considering other medicare spending reductions, including proposals which increase the elderly's share of their health care costs.

The committee is concerned about the heavy financial burden already being borne by the elderly for their health care. The committee has prepared this staff information print to provide Congress with additional information about medicare coverage and the extent and effect of cost sharing by the aged. This information print has been prepared by Ann Langley, a former professional staff member of the committee. The committee and the author are indebted to many people for their assistance in preparing this paper, and wish to particularly thank Dan Walden and the staff at the National Center for Health Services Research for their contributions.

JOHN HEINZ,
Chairman.
JOHN GLENN,
Ranking Minority Member.

EXECUTIVE SUMMARY

The size and growth of costs under the medicare program have prompted increasing scrutiny of the issue of health costs generally. Projections for revenue shortfalls in the hospital insurance trust fund within the next decade have added pressure to control medicare expenditures. Inevitably, increased beneficiary cost sharing will be among proposals considered to gain revenues and/or control costs. Such proposed increases in medicare cost sharing must be evaluated in light of the level of protection the current program provides, the effect of such changes on controlling the program's rapid growth, and the effect on beneficiaries.

Medicare currently pays less than half (45 percent) of older American's health care bill. The program pays more for services it was designed to cover (74 percent of hospital expenses and 55 percent of physician expenses), but cost sharing liability for covered services is also significant. Medicare related liability for those who used services averaged $816 per person in 1982. This liability includes deductibles, coinsurance, and physician charges in excess of what medicare considers reasonable in the case of unassigned claims. The largest liability is from part B (physician and outpatient) services. Although not all the health care costs not paid by medicare are borne directly by elderly individuals, they do pay a substantial amount out-of-pocket. Out-of-pocket payments represent the second largest source of payment for the elderly's health care expenses (29 percent), an estimated $1,575 per person in 1984. As medical costs continue to outstrip the growth in an older person's income, out-of-pocket health costs will consume an ever increasing share of that income. On average, out-of-pocket health costs equal 15 percent of per capita income in 1984 for Americans 65 and older, the same percent as in 1966 before the medicare program was fully implemented.

Future cost-sharing increases are not likely to have much impact on the rate of growth in medicare expenditures. Although increased cost sharing associated with use of services (deductibles and coinsurance) may reduce the number of physician visits and even hospital admissions, increased use of services has contributed little to the growth of medicare or total personal health care expenditures to date. The main reason for such growth has been the rising cost of care. For example, four-fifths of the increase in hospital expenditures in excess of general inflation from 1971 to 1981 were due to increased hospital prices and intensity of services, reflecting in part continuing technological advances. Only 2 percent of the growth in hospital costs under medicare is due to increased admissions. Per capita, physician office visits by both the elderly and persons under age 65 have actually declined slightly since

1974. Although physician reimbursements continue to grow faster than hospital reimbursements (19 percent compared to 14 percent between calendar years 1976 and 1983), the steadily rising price and intensity of hospital services (two-thirds of program benefit payments) remains medicare's most pressing fiscal problem. A recent Rand Corporation study on the effects of cost sharing showed that more cost sharing on hospital services did not make any difference in the expense per case. Whatever its merits or demerits, increased cost sharing may lower costs by somewhat decreasing use, but it will not slow the trend of growth.

Added cost sharing does more than reduce demand, of course; it also shifts costs to those using services. Looking at the average increase per beneficiary doesn't adequately describe the impact of more cost sharing. The elderly are not a homogeneous group. They have marked differences in health status and ability to pay for medical care.

In 1982, 77 percent of aged enrollees used only 6 percent of all medicare-reimbursed services. Thirty-nine percent used no reimbursed services at all. On the other hand, 9 percent of aged enrollees accounted for 79 percent of all reimbursed services. Clearly, the great majority of medicare reimbursed services are used by persons who need extensive care. Aged enrollees with high medical costs are more likely to be older and poorer, with a terminal or chronic illness and higher medical costs over time. One major reason that the elderly as a group use more medical services than younger age groups is their much higher rate of mortality. Expenses for terminally ill enrollees in the last year of life equal 30 percent of medicare reimbursements.

The elderly's ability to pay for health care depends on income and other forms of insurance as well as health status. Two studies—the 1977 National Medical Care Expenditure Survey (NMCES) and the 1980 National Medical Care Utilization and Expenditure Survey (NMCUES)—looked at the noninstitutionalized elderly's use of services and expenditures by income group and insurance coverage. Medicare's share of personal health care expenditures for the noninstitutionalized elderly is significantly higher than for the total elderly population, while medicaid and out-of-pocket contributions are lower. This is largely because over 90 percent of nursing home costs are paid by medicaid or out-of-pocket. When only the noninstitutional elderly were considered, medicare paid between 55 to 59 percent of personal health expenditures in 1981, according to NMCES projections and estimates from medicare program statistics. Out-of-pocket payments remained the second largest source of payment after medicare, paying between 18 to 23 percent of expenditures, based on the surveys and medicare estimates.

According to NMCES and the U.S. Census Bureau, one in four persons over age 65 are poor or near poor today, with family income less that 125 percent of poverty. The surveys both found that per capita health care expenditures were highest for those with the lowest incomes and declined steadily as incomes increased except for the highest income group, those with family incomes over four times poverty. Out-of-pocket expenditures (excluding premiums) increased as a percentage of total expenditures as income increased, but out-of-pocket expenditures as a percent of income

showed a dramatically different picture. While the poor/near poor paid 14.1 percent of their income for health care, those in the highest income group paid an average of only 1 percent.

Per capita health care expenditures and out-of-pocket expenditures differed by insurance coverage as well, with those covered by medicare and medicaid having the highest expenditures, followed by those with medicare and private insurance and those with only medicare. NMCUES and NMCES found that out-of-pocket payments accounted for 4 to 7 percent of expenditures respectively for those with both medicare and medicaid, 20 to 23 percent for those with both medicare and private insurance, and 29 to 30 for those with medicare only.

Overall, the surveys found that 65 percent of the noninstitutionalized elderly had some form of private insurance to supplement medicare; 10 to 11 percent were covered by medicaid and medicare; 2 percent were covered by medicaid, medicare and private insurance; and 20 to 21 percent were covered by medicare only. The percentage of elderly covered by private insurance differed across income groups, with 50 percent of the poor/near poor having private insurance compared to 78 percent of the high income elderly. Only one-quarter of the poor and near poor were covered by medicaid; another quarter had only medicare coverage and were thus significantly at risk for out-of-pocket expenses. Cost sharing for the elderly poor/near poor (excluding premiums) equaled 6.5 percent of health expenditures for those with both medicare and medicaid coverage, 23 percent for those with both medicare and private insurance, and 32 percent for those with only medicare.

While NMCES found that those covered by both medicare and medicaid were generally sicker, no difference in health status was found between those with both medicare and private coverage and those with medicare only. Yet, the elderly poor/near poor with only medicare used significantly fewer services than those who also had private coverage. The number of physician visits, for example, for those with only medicare coverage was 4.2 per year compared to 6.5 for those with both medicare and private coverage. The 4.2 figure was about the same as that for all persons aged 25 to 54, a group presumably much healthier than the elderly poor. Given the already low use of health services by the elderly poor/near poor with only medicare coverage, it would clearly be difficult for most older people with lower incomes to absorb additional out-of-pocket expenditures from increased cost sharing.

Although private insurance can serve to insulate medicare beneficiaries from the effects of cost sharing, private benefit coverage is far from uniform, with the most expensive plans providing the most comprehensive coverage. In general, private plans supplement medicare coverage for already covered services rather than extending coverage to other services. For example, 90 percent of private Medicare supplemental policies cover inpatient hospital services, while 50 to 60 percent cover physician office visits. Only 4 to 9 percent cover dental services. The average premium in 1981 fell in the range of $250 to $550, but some were as high as $1,174. NMCES found that persons most likely to have the most comprehensive private insurance coverage were younger, healthier, and wealthier than the average person over 65.

Outlining reforms to control the growth of medicare is beyond the scope of this paper, but clearly the challenge is how both to hold down costs and to protect enrollee access to care. While increased beneficiary cost sharing can reduce Federal medicare expenditures, there are three major limitations to its use. First, medicare beneficiaries already pay substantial out-of-pocket costs. Second, cost sharing increases are not likely to have an impact on the rate of growth in medicare expenditures. And third, cost sharing today imposes a disproportionate burden on those least able to afford it—the oldest, the poorest, and the sickest.

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MEDICARE AND THE HEALTH COSTS OF OLDER AMERICANS: THE EXTENT AND EFFECTS OF COST SHARING

Part 1

INTRODUCTION

Medicare was enacted in 1965 as a means of providing protection for the elderly from the costs of health care. There is no question that medicare has, in fact, provided this protection to many older Americans and, in doing so, has become the single largest purchaser of health care in the world. From a program spending $7.1 billion in 1970, it has grown to $58.8 billion in 1983.[1]

Medicare is comprised of two programs—hospital insurance (HI) which pays for inpatient hospital care, stays in skilled nursing facilities, and home health services, and supplementary medical insurance (SMI), which pays for all other services covered by medicare, principally physician services. In 1983, 27 million aged and 3 million disabled participated in the medicare program, 29.3 million in HI and 28.2 million in SMI.[2]

The 17.4 percent average annual increase in medicare outlays between 1970 to 1983 [3] has made medicare one of the largest and fastest growing areas of the Federal budget, equaling 7.4 percent of total Federal outlays in fiscal year 1983.[4] According to the Congressional Budget Office, medicare outlays are projected to reach $107 billion by 1988, increasing at an average annual rate of 13.2 percent from 1984 to 1988. With this rate of increase, medicare's share of total Federal outlays will reach 8.7 percent by 1988.

The size and growth of the medicare program in a time of large Federal budget deficits have made the program a target for budgetary cutbacks. Projections for revenue shortfalls in the hospital insurance trust fund within the next decade have added pressure to control medicare expenditures. Inevitably, increased beneficiary cost sharing will be among proposals considered to gain revenues and/or reduce the growth of expenditures. Any reforms should consider the current medicare program, the reasons for its growth, how much protection it provides, the services used and who uses them, and current beneficiary out-of-pocket costs. The following paper examines these issues.

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[1] Health Care Financing Administration. Office of the Actuary.

[2] Health Care Financing Administration. Bureau of Data Management and Strategy.

[3] Health Care Financing Administration. Office of the Actuary.

[4] Fiscal year 1985 U.S. budget.

Part 2

MEDICARE'S SHARE

Although medicare's share of the elderly's health bill has been steadily increasing since 1970, the program still pays less than half the elderly's personal health care expenses.

TABLE 1.—TOTAL PERSONAL HEALTH CARE EXPENDITURES FOR THE AGED

[Dollars in millions]

	Total	Medicare	Medicare percent of total
Year:			
1965	$8,869		
1970	17,270	$6,198	35.3
1976	37,674	16,313	43.3
1977	43,303	19,140	44.2
1978	49,366	21,770	44.1
1980	68,400	30,800	45.0
1981	83,200	37,700	45.2

Source: Fisher, Charles R. Differences by Age Groups in Health Care Spending. Health Care Review, Volume 1, No. 4 (spring 1980); and estimated 1980 and 1981 data supplied by the Health Care Financing Administration.

This doesn't mean that medicare pays the same for all services. Medicare pays a higher percentage of the bill for services it was designed to cover. As can be seen in table 2 below, medicare pays a substantially higher portion of the hospital and doctor bill than it does for nursing home services, or drugs and eyeglasses.

TABLE 2.—AMOUNT OF PERSONAL HEALTH CARE EXPENDITURES FOR PERSONS AGE 65 AND OVER BY TYPE OF EXPENDITURE AND CHANNEL OF PAYMENT FOR CALENDAR YEAR 1981

[In billions]

Type of expenditure	Total	Private	Public			
			Total	Medicare	Medicaid	Other public
Total	$83.2	$30.0	$53.2	$37.7	$11.4	$4.1
Hospital care	36.6	5.3	31.3	27.1	1.3	2.9
Physicians' services	15.6	6.6	9.0	8.5	.4	.1
Dentists' services	2.4	2.3	.1		.1	(1)
Other professional services	2.0	1.2	.8	.7	.1	(1)
Drugs and medical sundries	5.1	4.2	.9		.8	.1
Eyeglasses and appliances	1.0	.6	.4	.4		(1)
Nursing home care	19.4	9.6	9.8	.4	8.7	.7
Other health services	1.0	.1	.9	.5	.1	.3

[1] Less than $50 million.

Source: Health Care Financing Administration, unpublished.

A. HOSPITAL SERVICES

As seen in table 3, medicare paid 74 percent on average of an older person's $1,381 hospital bill in 1981. This share of the average bill paid by medicare has remained essentially the same since 1976.

TABLE 3.—OVERALL AND MEDICARE PER CAPITA HOSPITAL EXPENDITURES FOR THE AGED

	Total hospital	Medicare hospital	Medicare as a percent of total
Year:			
1965	$176		
1970	349	$216	70
1976	703	523	74
1977	795	594	75
1978	869	648	75
1981	1,381	1,022	74

Source: Health Care Financing Administration.

The structure of the current medicare hospital benefit is responsible for the strength of medicare's hospital coverage. Medicare pays the full cost of hospital care in a benefit period until the 60th day for most beneficiaries who use hospital services, except for a deductible based on the average national cost of a hospital day (currently $356). Since only 1 percent of medicare beneficiaries use more than 60 days, total average hospital out-of-pocket expenditures are small.[5]

B. PHYSICIAN SERVICES

Medicare paid only 55 percent of the total physician bill, however, in 1981. This, too, has remained essentially the same since 1976.

TABLE 4.—OVERALL AND MEDICARE PER CAPITA PHYSICIAN EXPENDITURES FOR THE AGED

	Total physician	Medicare physician	Medicare as a percent of total
Year:			
1965	$93		
1970	150	$85	57
1976	280	150	54
1977	321	174	54
1978	366	203	56
1981	589	321	55

Source: Health Care Financing Administration.

There are two main reasons why medicare coverage of physician services has not been as effective as that of hospital services. First, under the best of circumstances, medicare only pays 80 percent of "reasonable" charges for physician services, less the annual deductible (currently $75). The beneficiary pays a 20-percent coinsurance. Second, physicians do not have to accept what medicare will pay,

[5] U.S. Congressional Budget Office. Changing the Structure of Medicare Benefits: Issues and Options.

based on reasonable charges as determined by law and regulation, as payment in full.

The assignment rate (the percent of claims where physicians will accept medicare payment in full and not bill the beneficiary for more than 20 percent coinsurance) has remained just above 50 percent since 1974.[6] [7] In the remaining cases, the beneficiary is liable for any difference between the actual charge and medicare's reasonable charge. On average, this difference has risen from 13.6 percent of the total amount of a claim in 1974 to 24.1 percent in 1982.[8] In 1978, over three-quarters of the aged population who received medicare payments for physician services had some liability from unassigned claims.[9]

Clearly, the quality of medicare's coverage for physician services varies since it depends heavily on whether their physicians accept assignment. An estimated 18 to 19 percent of physicians always accept assignment, 28 to 30 percent never accept assignment, and the remaining 52 to 53 percent make their decisions on a case by case basis.[10] Assignment rates are generally highest in the East and lowest in the West, ranging from 66.9 percent in the New England region to 30.5 percent in the Pacific Northwest (Washington, Oregon, Idaho, and Alaska).[11] Surgeons accept assignment more frequently than internists and general practitioners; assignment rates for inpatient services are generally higher than for ambulatory services. Physicians are also more likely to accept assignment for disabled than aged enrollees (62.2 compared to 47.1 percent of services assigned).[12]

C. HEALTH COSTS NOT PAID BY MEDICARE

The major sources of health care costs for the elderly not paid by medicare include cost sharing for medicare covered services, premiums, and uncovered services.

(a) Cost sharing for medicare covered services.—This includes the hospital deductible (currently $356), copayments on hospital and nursing home services,[13] and a $75 per calendar year initial deductible and 20 percent coinsurance on physician and outpatient services. The hospital and nursing home deductible and copayment amounts are automatically increased each year. It also includes, in the case of unassigned claims, any

[6] Urban Institute. A 1975 California study by the Institute showed that the voluntary assignment rate was actually significantly lower when medicare/medicaid claims for which assignment is considered mandatory were removed.

[7] U.S. Congress. Senate. Committee on Finance. House. Committee on Ways and Means and Committee on Energy and Commerce. Background Data on Physician Reimbursement Under Medicare. Joint Committee Print, 98th Cong., 1st Sess. Washington, U.S. Gov. Print. Off., 1983. pp. 20–21. (Hereinafter cited as Joint Committee Print. Background Data on Physician Reimbursement Under Medicare.)

[8] Joint Committee Print. Background Data on Physician Reimbursement Under Medicare. p. 32.

[9] Ibid., p. 59.

[10] Ibid., p. 26.

[11] Ibid., p. 21.

[12] Ibid., pp. 25–26.

[13] For hospital services, a coinsurance equal to one-fourth of the deductible is imposed from days 61 to 90 in a benefit period. If more than 90 days are required, a beneficiary may elect to draw upon a 60-day lifetime reserve. A coinsurance equal to one-half of the deductible is imposed for each reserve day. For nursing home services, a daily coinsurance equal to one-eighth the hospital deductible is imposed after the first 20 days.

physician charges in excess of what medicare determines as reasonable.

(b) Premiums.—Although not included in total personal health care expenditures, beneficiaries also pay a monthly premium for medicare coverage for physician services. The premium increases automatically each year and is currently $14.60 per month.

(c) Uncovered services.—Since medicare essentially covers acute care, many services remain outside its scope of benefits. For example, preventive measures (with the exception of pneumococcal vaccine), outpatient drugs, eyeglasses, and basic dental services are not covered. In addition, the hospital benefit is limited to 90 days in a benefit period plus 60 lifetime reserve days; the nursing home benefit is limited to 100 days; and home health and nursing home benefits are limited to those who required skilled care.

D. MEDICARE COST SHARING LIABILITY

Average beneficiary cost sharing liability for medicare covered services was $679 in 1981 and $816 in 1982 for those who used services. The largest liability was from part B (SMI) services, somewhat understated since expenditures by beneficiaries who didn't meet the deductible were not included. The part B liability does not include expenditures due to unassigned claims, which HCFA estimated to be $2.9 billion in 1982—an amount almost equal to the liability from part B coinsurance ($3.2 billion) and almost twice as much as liability from the part B deductible ($1.47 billion).

Per user liability increased 20 percent between 1981 and 1982. Part B liability increased 16 percent, and part A HI liability increased 26 percent. This is partly due to provisions in the Omnibus Budget Reconiliation Act of 1981 which increased the part B deductible from $60 to $75 and doubled the increase in the part A hospital deductible.

TABLE 5.—MEDICARE COST-SHARING LIABILITY PER BENEFICIARY AND PER USER, CALENDAR YEARS 1981 AND 1982

	1981		1982	
	Per beneficiary	Per user	Per beneficiary	Per user
Part A [1]	$71	$300	$93	$377
Part B [2]	246	379	298	439
Total	317	679	391	816

[1] Does not include cost sharing beyond the 150th day.
[2] Does not include liability for those who did not meet the deductible.
Source: Health Care Financing Administration. Office of the Actuary. January 1984.

E. OTHER PAYERS

All costs not paid by medicare are not, of course, borne directly by the beneficiaries. As seen in the table below, medicaid paid 13.7 percent of health care payments in 1981. Private payments accounted for 36.1 percent. In 1977, the Health Care Financing Administration estimated that direct out-of-pocket payments account-

ed for 29 percent of total private payments, while private insurance accounted for about 7 percent.

TABLE 6.—SHARE OF PAYMENTS FOR HEALTH CARE FOR THE ELDERLY BY SOURCE OF PAYER

[Source of funds per capita]

	Total	Percent private	Percent medicare	Percent medicaid	Percent other public
Year:					
1965	$472	70.1			29.9
1970	854	38.8	41.4	11.0	9.2
1976	1,624	35.5	43.3	15.0	6.2
1977	1,821	36.1	44.2	13.9	5.9
1978	2,026	36.9	44.1	13.4	5.6
1981	3,140	36.1	45.2	13.7	4.9

Source: Health Care Financing Administration.

1. Private Insurance

Four out of five aged beneficiaries have other health care coverage to supplement medicare. About two-thirds have private insurance, and another 13 percent are also covered by medicaid.

Private insurance, however, usualy covers the coinsurance and deductibles associated with medicare covered services—not uncovered services—and coverage varies. For example, approximately 9 out of 10 aged medicare beneficiaries with private insurance were covered by their private insurance for charges related to hospital stays; about 50 percent for charges related to ambulatory physician visits, and about 9 percent for dental care charges. Physician charges in excess of medicare's reasonable charges in the case of unassigned claims and nursing home costs associated with chronic care are rarely covered. So, like medicare, private insurance's protection against out-of-pocket costs varies by service.

The additional protection provided by private insurance is at least somewhat offset by its cost. 1983 premiums for Prudential's mid-level policies ranged from $246 to $465 a year, while its comprehensive medical supplemental policy annual premium was $828. According to Blue Cross/Blue Shield, the vast majority of its policies fall in the $240 to $420 a year range, with policies with more comprehensive coverage ranging as high as $1,174 a year.

Data from the 1977 National Medical Care Expenditure Survey (NMCES) showed that 64 percent of aged beneficiaries with private insurance had coverage from only nongroup plans and were responsible for almost all (98.2 percent) of their premium cost.

Thirty-six percent of those with private insurance had coverage by at least one group plan and paid 36.4 percent of the premium. The employer paid 58.1 percent.

2. Out-of-Pocket Costs

Despite the increase in medicare's share of the elderly's health care bill, the elderly pay a substantial portion of that bill out-of-pocket and spend an increasing amount of their incomes for health care.

In 1977, the Health Care Financing Administration estimated that direct out-of-pocket payments accounted for 29.1 percent of total payments, the highest source of payment after medicare. When the per capita costs of insurance premiums are added, the elderly's out-of-pocket health costs equaled 11.8 percent of their average income.

If the share of direct out-of-pocket costs remained the same in 1981, and there is little evidence to indicat that it did not, the elderly's out-of-pocket health costs would have equaled 13.6 percent of their income. As the increase in medical costs continue to outstrip the growth of income, out-of-pocket costs will continue to consume a larger share of the elderly's resources. As the table below shows, estimated per capita out-of-pocket costs in 1984 will equal 15 percent of an older person's average income, the same as in 1966 before medicare was fully implemented.

TABLE 7.—OUT-OF-POCKET COSTS AS A PERCENT OF INCOME

	Out of pocket	Personal income [1]	Percent of income
Year:			
1966	$300	$2,000	15
1977	690	5,592	12
1981	1,187	8,639	14
1984	[2]1,575	10,615	15

[1] Personal income in this table equals the mean annual income of unrelated individuals age 65 and over.
[2] This figure includes premium and deductible changes since 1981.

Source: Fisher, Charles R. Differences by Age Groups in Health Care Spending. Health Care Financing Review, v. 1, No. 4, spring 1980; and estimates supplied by Health Care Financing Administration. U.S. Bureau of the Census; and the American Association of Retired Persons.

Like medicare's share of payments per service, out-of-pocket payments and payments from other payers vary by services. As the chart below shows, out-of-pocket expenditures were only 4.6 percent of total hospital payments in 1977, but represented a quarter of physician payments and three-fifths of payments for all other services.

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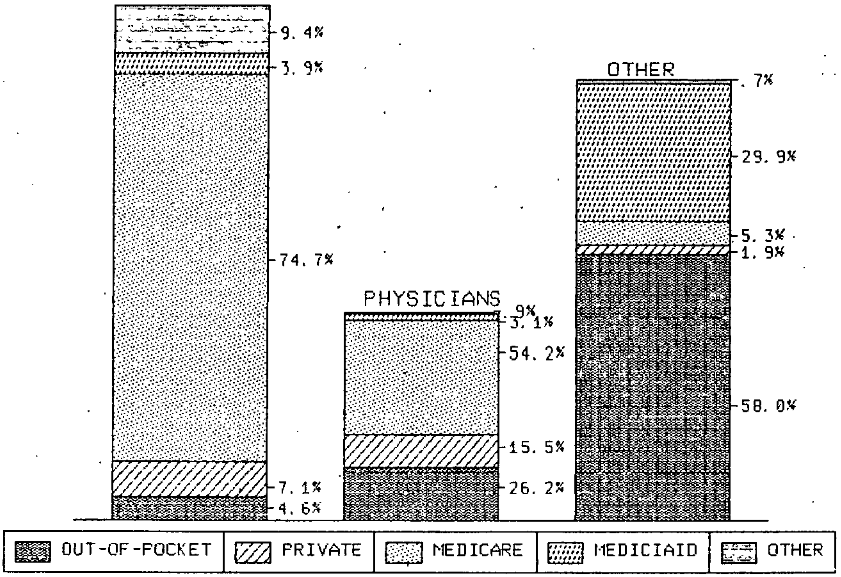
CHART 1



Source: Health Care Financing Review, Spring, 1980

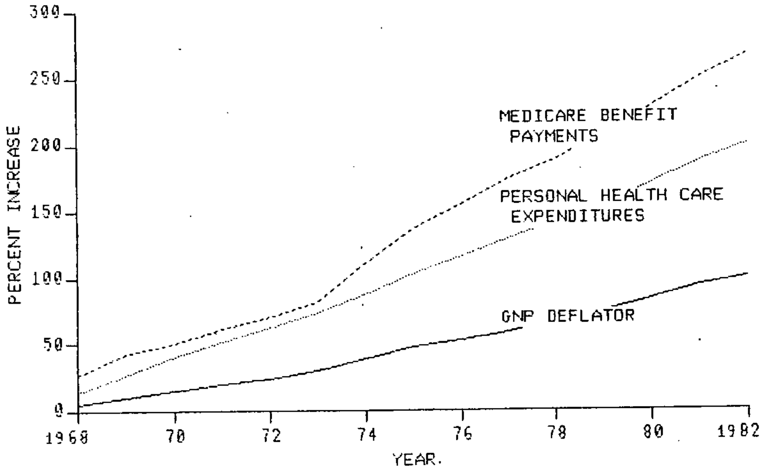
Part 3

GROWTH OF MEDICARE

Between 1970 and 1982, medicare outlays increased at an annual average rate of 17.7 percent, more than 2½ times the annual average rate of inflation and one-third more than the growth of national personal health care expenditures.

CHART 2

COMPARISON OF CUMULATIVE PERCENT OF ANNUAL INCREASE OF HEALTH CARE EXPENDITURES AND INFLATION 1967-1982



Source: Health Care Financing Administration, Division of National Cost Estimates

Although the aging of the population is a contributing factor, the main cause of medicare's rapid growth is the rising trend of the cost of care. Hospital and physician services account for the great majority of medicare reimbursement (65 and 25 percent of benefit payments respectively in calendar year 1983).[14] And, as the data below shows, the main cause of the increases in these medicare services is the increased expense and intensity of the service provided, not increased service use or enrollment. These major factors driving the cost of medicare drive the cost of the entire care system.

[14] Health Care Financing Administration, Office of the Actuary.

A. HOSPITAL SERVICES

Hospital services represent almost two-thirds of medicare reimbursements. The major reason for the rapid increase in hospital prices nationally and in the medicare program is the rapid increase in the cost per day of hospital services, not the increased aging of the population or increased admissions.

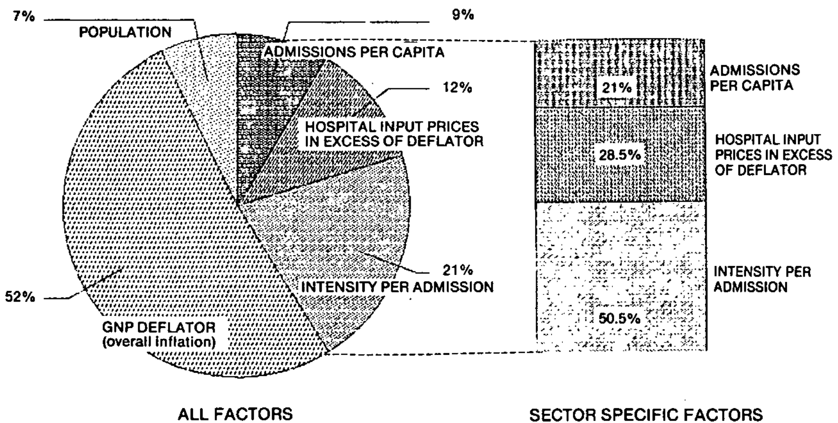
According to recent estimates by the Congressional Budget Office, based on data from the American Hospital Association, national inpatient hospital expenses increased at an average annual rate of 14.7 percent from 1970 through calendar year 1983. The hosptial market basket, or hospital input prices, accounted for 60 percent of the increase, increased intensity accounted for 23 percent, and admissions accounted for only 15 percent.

The Congressional Budget Office found that intensity, which refers to hospital costs not attributed to inflation or increased use, has grown as a factor contributing to hospital increases. Growth in intensity averaged 3.1 percent a year between 1970 and 1981. Since 1981, however, the Congressional Budget Office found that this increase has been much higher—a 4.6 percent annual rate.[15]

The Health Care Financing Administration, in determining factors contibuting to the growth in expenditures for community hospital inpatient care from 1971 to 1981, broke out the contributions that were hosptial sector specific as opposed to general inflation and increased population. As the chart below shows, hospital prices in excess of inflation and increased intensity of services per admission accounted for four-fifths of increased costs specific to the demand and supply of health care.

CHART 3

FACTORS ACCOUNTING FOR GROWTH IN EXPENDITURES FOR COMMUNITY HOSPITAL IN-PATIENT CARE, 1971-1981



Source: Health Care Financing Administration Review, March 1983

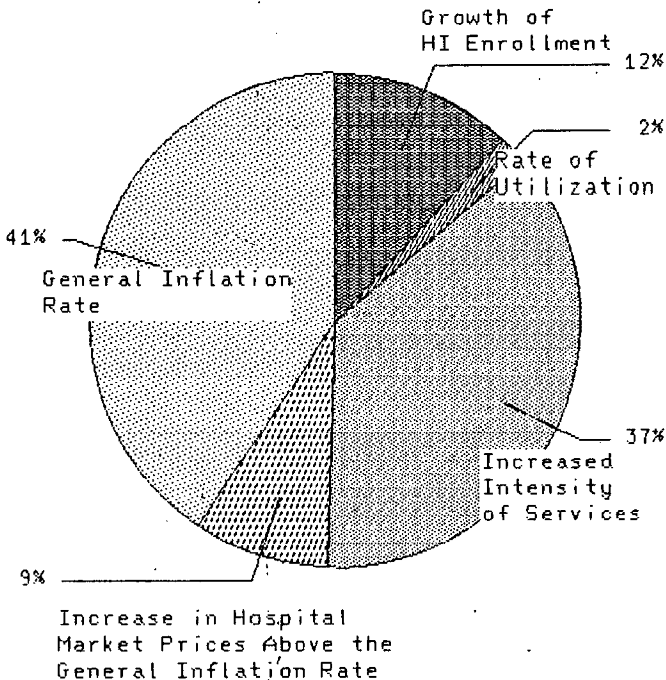
[15] U.S. Congressional Budget Office. Memo to Senate Budget Committee, July 1983.

The following chart and table illustrate sources of increased reimbursement for short-stay hosptial services to aged medicare enrollees from 1967 to 1978, and compare medicare aged to AHA national figures over the same period.

The most important difference between the aged medicare population and the general population is that during the period from 1967 to 1978, the number of aged medicare enrollees increased at a rate double that of the Nation as a whole. Although the increase in the utilization rate of the aged during this time contributed only a small portion of increased expenditures, when combined with the rapidly increasing numbers of aged persons, a significant increase in hospitalizations resulted.

CHART 4

SOURCES OF INCREASED REIMBURSEMENT FOR SHORT-STAY HOSPITAL SERVICES TO AGED MEDICARE ENROLLEES, 1967-1978



Source: HCFA, Office of Research and Demonstrations, 1983

TABLE 8.—SOURCES OF INCREASED REIMBURSEMENT FOR SHORT-STAY HOSPITAL SERVICES TO AGED MEDICARE ENROLLEES, 1967–78

[In percent]

	Medicare-aged		AHA national	
Utilization rate	+1.9		+4.1	
Discharge rate		+13.9		+9.5
ALOS		−12.0		−5.4
Enrollment	+12.0		+6.2	
Reimbursement per covered day	+86.1		+89.7	
General inflation		+40.5		+44.5
Hospital market basket above general inflation		+9.1		+10.1
Residual (intensity)		+36.5		+35.1
Total	100.0		100.0	

Source: Health Care Financing Administration.

B. PHYSICIAN SERVICES

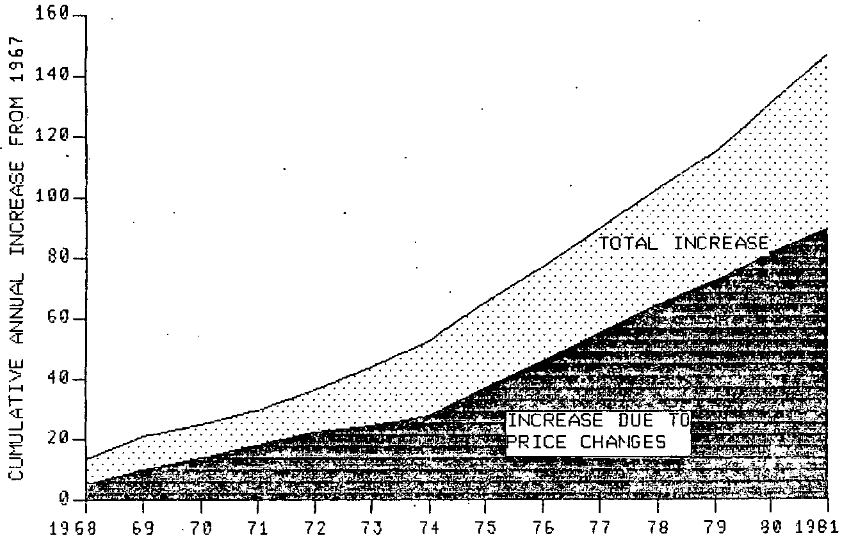
Over one-half of the increase in physician expenditures per enrollee through 1981 has been due to the inflation in physician fees. Since 1950, physician fees have risen more rapidly than the economy as a whole—increasing 492.6 percent compared to 301 percent for nonmedical care prices (medical care prices as a whole rose 512.1 percent).[16]

According to the board of trustees of the Federal Supplementary Medical Insurance Trust Fund, the total increase in recognized charges per aged enrollee between June 30, 1980 to 1981 was 16.2 percent. Of this, 8.4 percent was attributable to price changes. The remaining 7.8 percent was attributable to other factors. These residual factors have been steadily increasing as a percent of recognized charges per enrollee since 1975.

[16] Federal Supplementary Medical Insurance Trust Fund. Annual report of the board of trustees, 1983.

CHART 5

PRICE CHANGES AS A COMPONENT OF INCREASES IN CHARGES FOR PHYSICIAN SERVICES 1967-1980



Source: 1983 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund

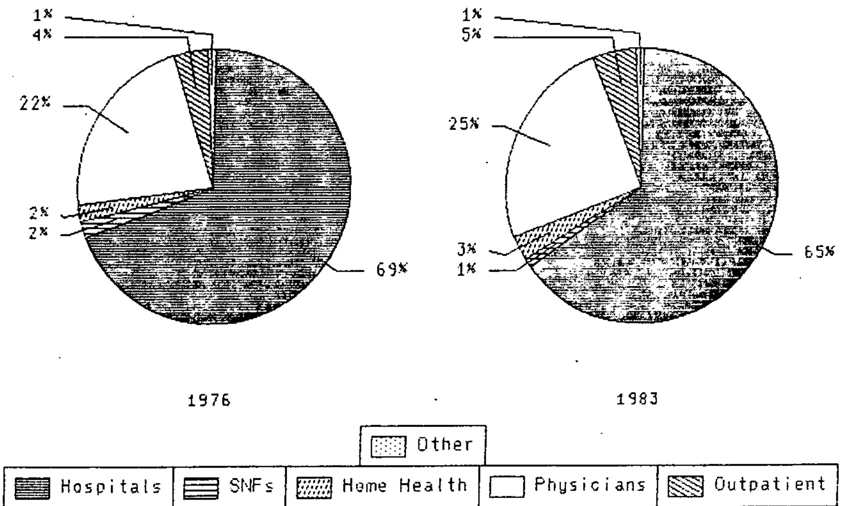
Residual factors include increased intensity of services per enrollee, increased use of specialists, changes in billing practices, and more expensive procedures. They do not include increased visits to physicians by beneficiaries. While the number of physician bills paid by the SMI program per thousand aged enrollees increased 152 percent between 1970 and 1980,[17] the number of visits to physicians per year changed very little for those over or under age 65 during the same period. Since 1974, annual physician visits per person actually declined slightly.

C. DISTRIBUTION OF THE MEDICARE DOLLAR

The balance between part A and part B services has been shifting slightly as medicare physician reimbursements continue to grow at a higher rate than those for hospital reimbursements. Reimbursements for hospital services declined from 69 to 65 percent of program benefit payments, while reimbursements for physician services increased from 22 to 25 percent from calendar year 1976 to 1983.

CHART 6

WHERE THE MEDICARE DOLLAR GOES



Source: Health Care Financing Administration, Office of the Actuary

The fastest growing medicare reimbursements between 1976 and 1983 were for outpatient hospital and home health services, which grew 323 and 376 percent respectively. Hospital reimbursements increased 191 percent and physician reimbursements increased 255

[17] Etheredge, Lynn M., and Jeffrey C. Merrill. Medicare: Paying the Physician. Center for Health Policy Studies, School of Medicine, Georgetown University, 1983.

percent over the same period, growing at an average annual rate of 13.6 percent and 19.2 percent respectively. While physician reimbursements have generally increased faster than hospital reimbursements since 1976, the wide difference in the rate of increase is largely the result of a 9.6 percent increase in hospital reimbursements from 1976 to 1977 and a drop to 9.8 percent between 1982 and 1983, after limits imposed by the Tax Equity and Fiscal Responsibility Act of 1982. The average annual hospital reimbursement rate of increase between 1977 and 1982 was 17.6 percent.[18]

[18] Health Care Financing Administration. Office of the Actuary.

Part 4

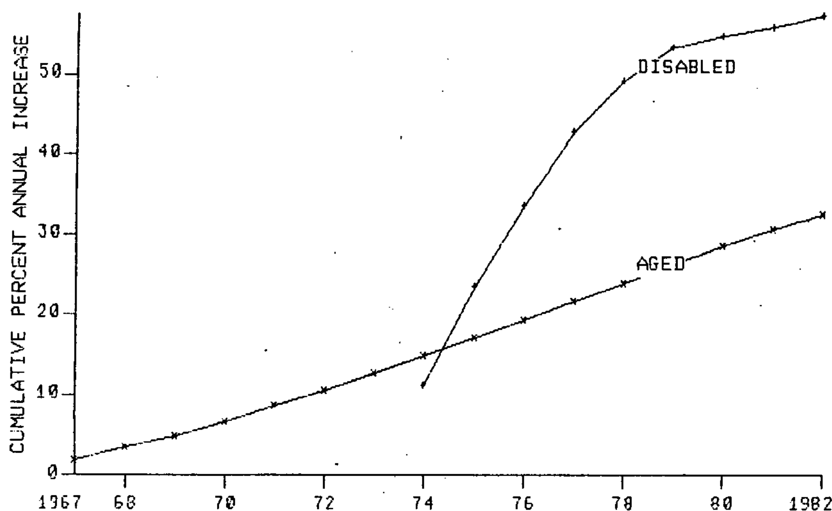
THE MEDICARE BENEFICIARY

In 1983, 27 million aged and 2.9 disabled persons were enrolled in the medicare program. Aged enrollees grew in numbers at a steady average annual rate of increase of 2.1 percent between 1966 and 1982.[19]

The disabled enrollee population grew at an average annual rate of 6.4 percent between 1974 and 1982. As can be seen from the chart below, the major growth in the disabled population occurred between the inception of medicare coverage for the disabled in 1974 to 1978. After 1978, with more stringent eligibility reviews, the average annual rate of increase dropped to 1.9 percent. The disabled population accounted for 10 percent of the population and 11.4 percent of expenditures in 1976 as compared to 10.8 percent of the population and 13.4 percent of expenditures in 1981.[20]

CHART 7

CUMULATIVE RATE OF GROWTH FOR AGED AND DISABLED ENROLLEES 1967-1980



Source: Health Care Financing Administration, Bureau of Data Management and Statistics, February 1983

[19] Health Care Financing Administration. Bureau of Data Management and Strategy. Annual medicare program statistics.
[20] Ibid.

Given the nature of the program, it is not surprising that the disabled population is predominantly male and incurs high medicare reimbursements for medical services, $3,431 per person with expenses in 1982 compared to $2,439 for aged beneficiaries.[21]

Although the end stage renal disease population is small, it is the most expensive and fastest growing medicare group, increasing 300 percent from 1974 to 1981, or from 0.1 to 0.3 percent of the total medicare population. Like the disabled population overall, the annual rate of increase of the ESRD population has dropped since 1974 from 51.4 percent between 1974 and 1975 to 4.5 percent between 1981 and 1982.[22]

Aged enrollees currently represent almost 90 percent of all medicare enrollees and 87 percent of medicare expenditures. Because of the availability of data and the predominance of aged enrollees, the following description of medicare beneficiaries and their use of services and health expenditures will be confined to the medicare population age 65 and older.

A. THE OVER-65 MEDICARE BENEFICIARY

The aged medicare beneficiary population has become slightly older, more representative of minorities, and more female since the program began.

In 1982, the median age of aged enrollees was 73.2 years. The number of enrollees age 75 and older increased from 37 to 41 percent between 1966 to 1982. Those age 85 years and over showed the largest rate of increase since medicare began, increasing from 8.6 to 9.9 of the total enrollee population.

Sixty percent of aged enrollees were woman, a slight increase from 59.3 percent in 1976. 8.9 percent were of races other than white in 1982, compared to 8.4 percent in 1976.[23]

As a group, the elderly enrollees are not well-to-do. Accordingly the Health Care Financing Administration, 3½ to 4 million (13 to 15 percent) of aged enrollees are covered by medicaid as well as medicare. U.S. Census Bureau statistics show that one in four older Americans (6.1 million in 1982) are poor or near poor, with incomes less than 125 percent of poverty.

B. USE OF SERVICES

In 1982, 23 percent of all aged medicare enrollees used medicare reimbursed hospital services, 60 percent used reimbursed physician services, 26 percent used outpatient hospital services, 4 percent used home health services, and less than 1 percent used skilled nursing facility services.

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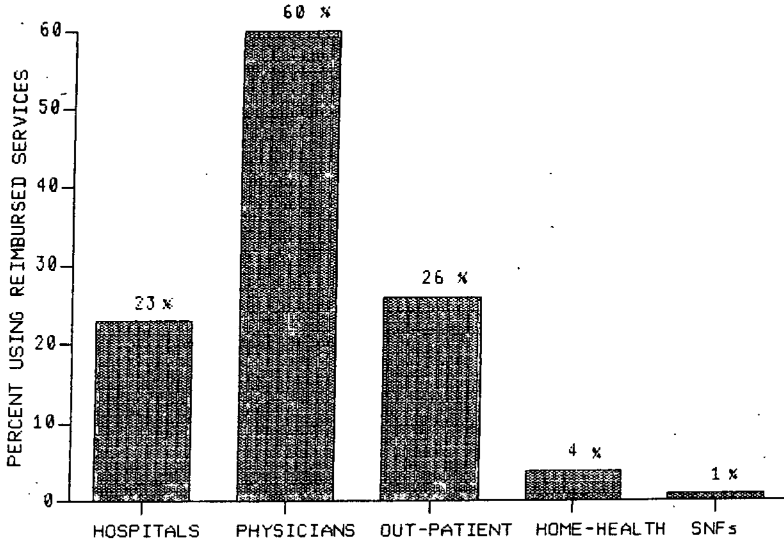
[21] Ibid.
[22] Ibid.
[23] Ibid.

CHART 8

AGED MEDICARE ENROLLEES USING SELECTED REIMBURSED SERVICES AS A PERCENT OF ALL PERSONS EVER ENROLLED IN 1981



Source: HCFA, Annual Medicare Program Statistics, March 1984

Use of services and expenditures for health care increase with age. In 1982, medicare enrollees served per thousand increased from 600 per thousand for ages 65 to 74 to 691 per thousand for ages 75 to 84 and 733 for ages 85 and over. Medicare reimbursement per person served also increased with age from $2,172 for those age 65 to 74 to $2,705 for ages 75 to 84 and $2,960 for those 85 and over.

While more female enrollees used HI and/or SMI services than male enrollees (662 compared to 611 per thousand), male enrollees who used services had higher per capita medicare reimbursements ($2,717 compared to $2,267).

Similarly, more whites used services than enrollees of other races (648 compared to 586 per thousand). However, medicare reimbursements for those of other races were higher per capita than reimbursements for whites ($2,739 compared to $2,415).[24]

1. Use of Hospital Services

Six and one-third million aged beneficiaries used reimbursed hospital services in 1982, with an average of about 1.5 stays per person.[25]

[24] Ibid.
[25] Ibid.

According to the National Center for Health Care Statistics, persons over the age of 65 used almost two and one-half times the number of hospital days as those under 65 in 1981. Persons age 75 to 84 used three and one-half times the number of days, and persons age 85 and over used over four times the number of days as those under 65.

Although increasing price per day is the major reason for rising hospital costs, growth in hospital admissions has contributed too. According to NCHS, the rate of hospitalization for the over-65 population has risen steadily between 1967 to 1980, with the number of discharges per 1,000 persons increasing 40 percent. This has almost been offset, however, by a 23 percent decline in average length of stay over the same period, from 14.1 to 10.7 days. The result is that days of care per 1,000 population only increased 6 percent between 1967 to 1980. However, for other age groups, days of care actually decreased over the same period.

CHART 9

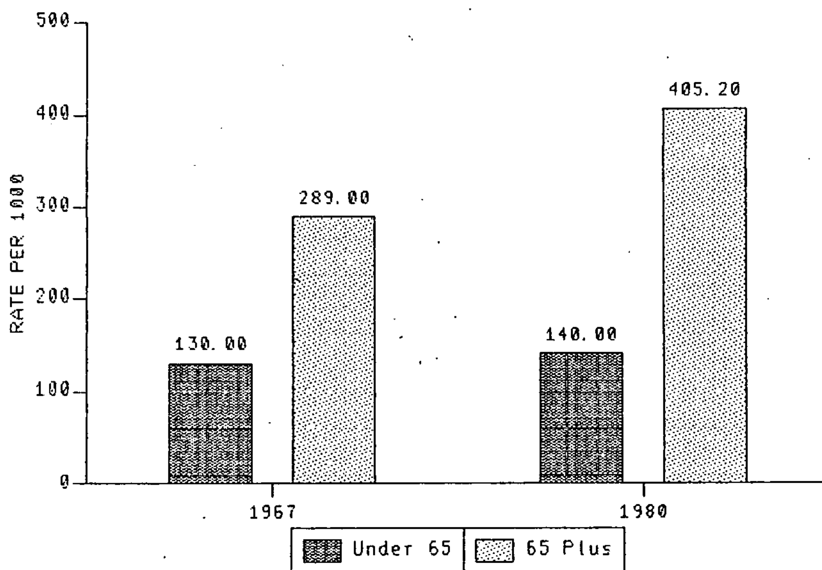


CHART 10

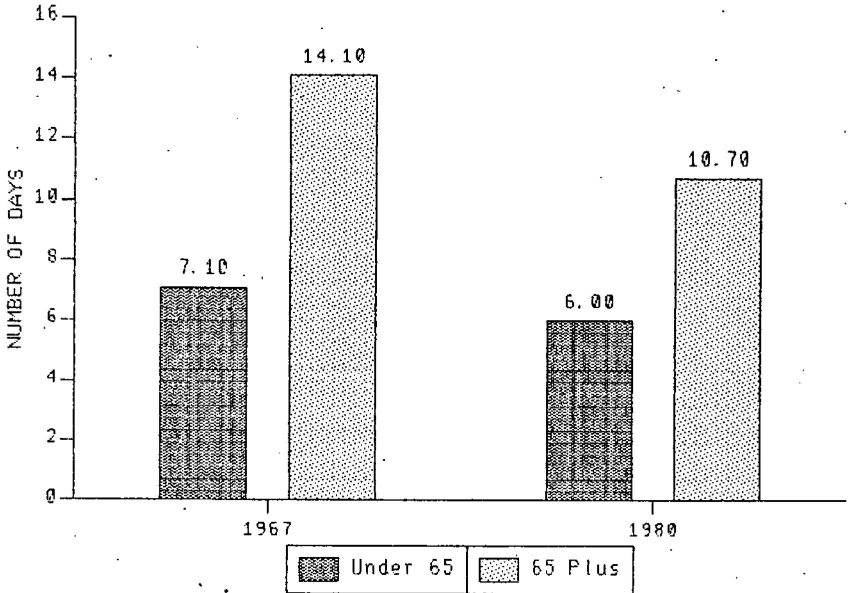
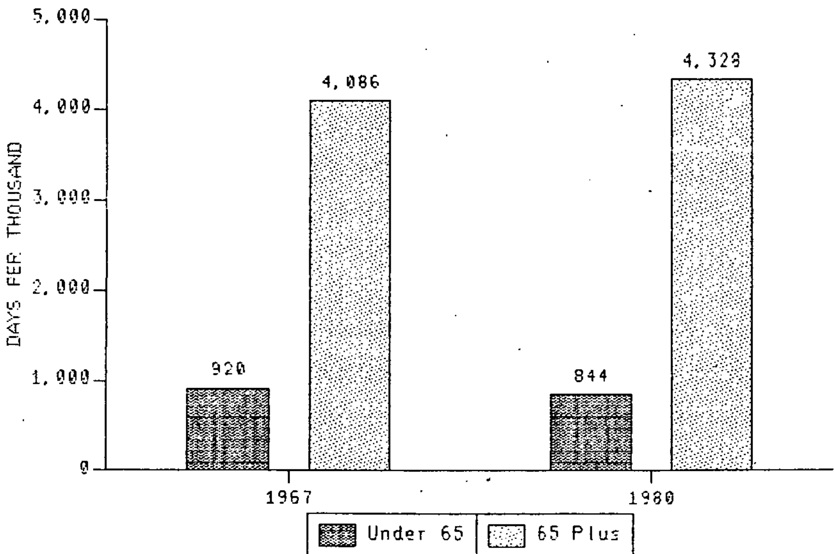


CHART 11



According to medicare data, about 70 percent of the increase in the discharge rate for persons age 65 and over represented growth in the proportion of older persons hospitalized in a year. Twenty-five percent represented increases in the number of discharges per person. The net effect of demographic changes on the discharge rate appears to have been small, since the increase in the discharge rate remained essentially the same even after being adjusted for increases in the median age and the proportion of nonwhites and women. NCHS and medicare data on trends in the discharge rate by age and on trends in the user rate by age suggest that the greatest growth rate in hospitalizations occurred for persons between the ages of 45 to 74.[26]

Just as the overall hospitalization rate has been growing at a faster pace for persons aged 65 and over than for the rest of the population, so the incidence of surgeries has been increasing faster for the aged. Persons aged 65 and over experience a 58 percent increase in the rate of operations as compared with a 24 percent increase for persons under age 65 from 1965 to 1977.[27]

The increase in surgery may be due in part to technological advances that make surgery safer and more effective, as well as older persons' increased expectations for a longer, healthier life. One notable example of the effect of technological advances on the surgical rate is extraction of lens (cataract). The incidence of this surgery has more than doubled as the complexity of the surgery has been reduced. Improvements have also contributed to the decline in average length of stay for a lens extraction from 10 to 3.5 days from 1965 to 1981.[28]

2. Use of Physician Services

Use of physician services for all ages and the over-65 population has changed very little for per capita physician visits since 1970, and has actually declined since 1972.

TABLE 9.—NUMBER OF PER CAPITA PHYSICIAN VISITS BY AGE, 1970–81

	1970	1972	1974	1976	1978	1980	1981
All ages	4.6	5.0	4.9	4.9	4.8	4.8	4.6
65 to 70	6.0	6.6	6.9	6.9	6.2	6.4	6.3
75+	6.7	7.4	6.5	6.8	6.4	6.5	6.4

Source: National Center for Health Statistics.

The difference in ambulatory physician use between age groups is not as great as for hospital services. Compared to younger patients, however, the elderly have more return visits for the same problem, and are twice as likely as younger patients to have a chronic condition.[29]

Allowed charges for physician services in hospitals increased from 56 to 61 percent of all allowed physician charges between 1971–77, and remained at about 60 percent in 1981, according to medicare program statistics.

[26] Lubitz, James, and Ronald Deacon. The Rise in the Incidence of Hospitalizations for the Aged, 1967 to 1979. Health Care Financing Review. March 1982, v. 3, November 3. pp. 26–28.
[27] Ibid., p. 31.
[28] National Center for Health Statistics.
[29] Ibid.

Part 5

BEHIND THE AVERAGES

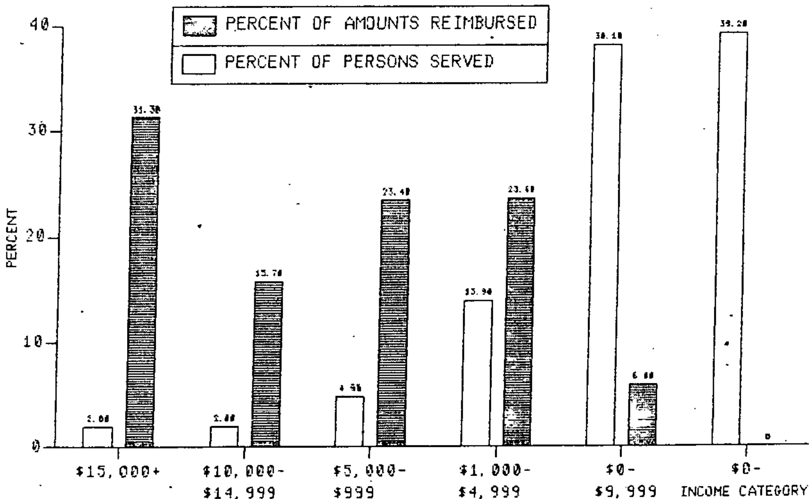
To really examine the effects of cost sharing on beneficiaries—both in use of and access to services, it's necessary to look behind the averages to the differences in beneficiary use of services, income, and insurance coverage.

A. USERS OF SERVICES

In 1982, 77 percent of aged beneficiaries used 6 percent of all reimbursed services; 39 percent used no reimbursed services at all. On the other hand, 9 percent of the aged beneficiaries accounted for 70 percent of all reimbursements for the aged, while almost one out of three medicare dollars (31 percent) spent for the elderly went for the 2 percent of the elderly medicare population with the highest expenditures, $15,000 and over.

CHART 12

PERCENT DISTRIBUTION OF AGED BENEFICIARIES AND AMOUNTS REIMBURSED UNDER HI AND/OR SMI BY AMOUNTS REIMBURSED
1982



Source: Annual Medicare Program Statistics, HCFA, March, 1984

The percent of the aged using no reimbursed services has been dropping over the years, largely due to the part B deductible which has been relatively fixed, $50 annually from 1966 through 1972 and

$60 from 1973 through 1981. In 1982, with an increase in the part B deductible from $60 to $75, the number of aged beneficiaries using no reimbursed services increased slightly from 38 percent in 1981 to 39.2 percent in 1982. However, there has been little change overall in the distribution of reimbursements. Basically, the medicare program protects who it was intended to protect—sick people with high medical costs.

B. CHARACTERISTICS OF USERS WITH HIGH REIMBURSEMENTS

According to CBO and the medicare history sample, aged enrollees incurring large costs are more likely to be older and have less income. Almost all users with high costs had at least one hospital stay, and 5 percent had a total of 60 days or more in a hospital in 1978.[30]

Noninstitutionalized high users are not more likely to have medicaid or private insurance coverage to supplement medicare. Increased cost sharing for such persons could increase their out-of-pocket liability substantially.

Data shows that enrollees with high reimbursements tend to be those who have had high reimbursements in previous years, indicating that these aged enrollees include those with chronic illnesses as well as those with prolonged terminal illnesses.

1. Use and Costs of Medicare Services in the Last Year of Life

The terminally ill account for a disproportionate number of high cost beneficiaries, and intensity of use of services increases nearer to the time of death. A recent study by the Health Care Financing Administration using 1978 and 1977 data found that terminally ill enrollees in their last year of life comprised 5.2 percent of medicare enrollment, and accounted for 28.2 percent of program expenditures. Reimbursement for the last 180 days of life equaled 21 percent of total medicare expenses, and reimbursements in just the last 30 days were 8 percent of total medicare expenditures. Reimbursements for hospital services for descedants equaled almost one-third of all hospital reimbursements for the aged. Clearly, a major reason that the elderly use more hospital services than younger age groups is their increased mortality, not simply the effect of age per se.

Terminally ill enrollees have higher use rates and reimbursements in both the last year and second to last year of life than the nonterminally ill. Medicare per capita expenditures for enrollees in their last year were 6.2 times that spent for survivors in 1978. In the second to last year of life (1977), the difference was still 2.3 times as great.[31] Unlike trends found in the medicare program in general, use and reimbursement declines past age 80 for the terminally ill in their last year of life.

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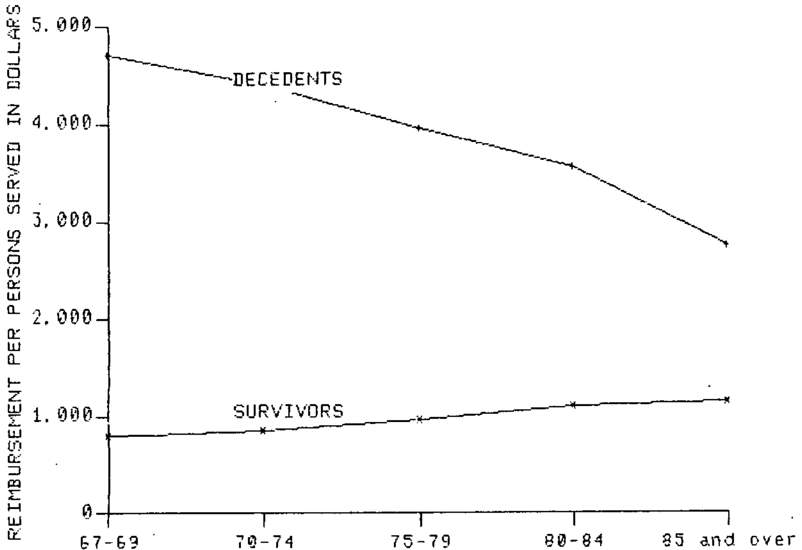
[30] CBO, Changing the Structure of Medicare Benefits, p. 32.

[31] Lubitz, James and Ronald Prihoda. Use and Costs of Medicare Services in the Last Year of Life. Health, United States. U.S. Dept. of Health and Human Services. Prepublication copy, 1983, pp. 143–145.

CHART 13



Lower reimbursements may be explained by the fact that physicians may be less likely to apply large amounts of costly treatments to very old persons whom physicians may feel have poor chances of survival. It is possible that nursing home care, for which medicare pays only a small part, may substitute for hospital care to some degree. However, the decline in reimbursements for decedents past age 80 may also be explained by the potentially shorter time between onset of illness and death for older decedents.

2. The Dually Eligible

From 3½ to 4 million medicare beneficiaries are also covered by medicaid—about 13 to 15 percent of the medicare population.

A HCFA study on the dually entitled using 1978 data found that the dually entitled differed substantially by demographic characteristics from the rest of the aged medicare population. Almost 36 percent of the group were 80 years and over, compared to only 20 percent among the other medicare beneficiaries. nonwhites were a proportionately larger percentage, comprising 24 percent of the group. And more than 70 percent of the dually entitled were women.

Although reimbursements per user did not differ much between the dually entitled population and other medicare beneficiaries, the proportion of users of medicare services was much higher among

the dually eligible. Medicare/medicaid beneficiaries used 50 percent more inpatient hospital services, 30 percent more physician services, and over two times more health services and skilled nursing facility services than other medicare beneficiaries. This resulted in far greater average reimbursements per enrollee among the medicare/medicaid group, even when standardized for age differences. This parallels findings observed in the medicare program regarding younger and older beneficiaries. The average reimbursement per user is similar for every age group; the major difference is in the proportion of users. It is the probability of illness and use of services that differs. Once sick, the intensity of services is relatively the same.

Higher utilization rates for the dually eligible reflect, in part, their excess mortality. The death rate, standarized for age, for the dually eligible was 1.5 times that for other medicare beneficiaries. The greatest difference in mortality rates for the two groups was found in the youngest (65 to 69) age group.[32]

C. ABILITY TO PAY: INCOME AND INSURANCE COVERAGE

Since medicare pays only about half of the elderly's health care expenses, the adequacy of this coverage clearly depends on the beneficiary's income and/or other forms of health care coverage.

Two studies—the 1977 National Medical Care Expenditure Survey (NMCES) supported by the National Center for Health Services Research and the 1980 National Medical Care Utilization and Expenditure Survey (NMCUES) supported by the Health Care Financing Administration and the National Center for Health Statistics—looked at the elderly's use of services and expenditures by income group and insurance coverage. Although NMCUES analyses are still being prepared, preliminary reports confirm many of the NMCES general findings.

The studies look only at the noninstitutionalized elderly. Although nursing home costs are often catastrophic for the one in four older persons who will at some time use these services, expenditures for the noninstitutionalized are more reflective of the average medicare beneficiary. Since over 90 percent of nursing home costs are paid by medicaid and/or out-of-pocket, excluding these costs significantly raises medicare's average share of expenditures and lowers medicaid and out-of-pocket contributions.

If expenditures for the institutionalized elderly are excluded, medicare's share of personal health expenditures increased from 45 percent to 52 to 58 percent in 1977, according to NMCES and estimates for the noninstitutionalized elderly derived from medicare program statistics. Private payments have slightly increased their share of payments while medicaid and other sources of payments have declined. In 1981, estimates from medicare program statistics show that medicare paid 59 percent of health expenditures for the noninstitutionalized elderly, private payments equaled 32 percent,

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[32] McMillan, Alma, Penelope Pine, Marian Gornick, and Ronald Prihoda. A Study of the "Crossover Population": Aged Persons Entitled to Both Medicare and Medicaid. Draft paper. Health Care Financing Administration. Office of Research and Office of Statistics and Data Management. February 1983.

and medicaid equaled 4 percent. 1980 NMCUES data found medicare's share of health costs for this population to be 59 percent too.

Out-of-pocket costs also drop from 29 percent when expenditures for the noninstitutionalized elderly are excluded, but still remain the second largest source of payment after medicare. According to NMCES and estimates provided by the Health Care Financing Administration, the noninstitutionalized elderly paid 22 to 23 percent of their health care expenses out-of-pocket in 1977. NMCUES found, in 1980, that the elderly paid 18.3 percent of their health care bill out-of-pocket.[33]

1. Expenditures and Out-of-Pocket Expenditures by Income Group

As seen in table 10 below, one in four persons over age 65 are poor or near poor (incomes less than 1.25 times poverty). Another 24 percent are in the low income category (incomes less than two times poverty). Thirty percent are classified as middle income (incomes less than four times poverty) and the remaining 20 percent are in the high income category (incomes over four times poverty).[34] U.S. Census Bureau statistics show that the percentage of elderly who are poor/near poor has remained relatively constant over time, at 24.5 percent in 1977, 25 percent in 1981, and 24 percent in 1982, the latest year for which data are available.

Per capita health care expenditures for the noninstitutionalized elderly were $2,042 in 1981 dollars according to NMCES, compared to an estimated $2,252 in 1981 from medicare program statistics. NMCES found that health expenditures were highest for those with the lowest incomes, and declined steadily as income increased except for a rise for those in the high income category. The 1980 NMCUES data showed a similar trend with the exception of higher expenses for those with high incomes. According to NMCUES, per capita expenditures for poor/near poor, low income, middle income, and high income were $1,920, $1,721, $1,644, and $1,996, respectively. Those with the highest per capita expenditures in both surveys were the near poor, those with incomes of 100 to 124 percent of poverty.

TABLE 10.—EXPENDITURES AND OUT-OF-POCKET EXPENDITURES BY INCOME GROUP

[In 1981 dollars]

Income	Per capita expenditures	Per capita out of pocket	Per person out of pocket for those with expense
Poor/near poor (26 percent)	$2,404	$479	$555
Low income (24 percent)	2,153	486	551
Middle income (30 percent)	1,933	461	532
High income (20 percent)	2,006	532	606

Source: National Medical Care Expenditure Survey. NCHSR. 1977.

[33] These differences are within the range of error and are not statistically significant. Staff do not believe that they represent any change in out-of-pocket expenditures.

[34] U.S. Census Bureau. In 1981, the poverty level was $4,620 for a single person, $5,917 for a two-person household, and $9,287 for a family of four. The 1983 poverty levels were $5,060, $6,480, and $10,180 respectively.

Source of payment also changes by income group. Although NMCES found that medicare paid about the same share for the poor/near poor and high income groups, 54 percent in 1977; private insurance increased from 7 to 14 percent, and medicaid decreased from 13 to 1 percent.

Out-of-pocket expenditures (excluding premiums) increased as a percentage of total expenditures as income increased, from 20 percent for the poor/near poor to 26 percent for the high income group. Out-of-pocket expenditures as a prcentage of income, however, showed a dramatically different picture. While out-of-pocket expenditures equaled 6 percent of income for all noninstitutionalized elderly, the poor/near poor paid 14.1 percent of their income for health care. Those in the highest income group paid an average of less than 1 percent.

TABLE 11.—OUT-OF-POCKET EXPENDITURES AS A PERCENT OF TOTAL PER CAPITA HEALTH EXPENDITURES AND INCOME BY INCOME GROUP

Income	Out of pocket as a percent of total expenditures	Out of pocket as a percent of income
Poor/near poor	20	14.1
Low income	22	4.3
Middle income	24	2.4
High income	26	1.2

Source: National Medical Care Expenditure Survey. NCHSR. 1977.

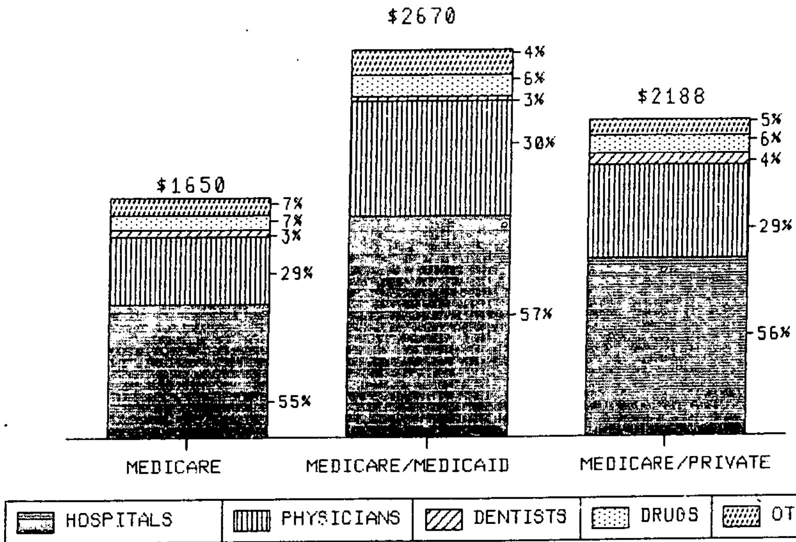
2. Expenditures by Insurance Coverage

Per capita health care expenditures and out-of-pocket expenditures differ by insurance coverage. Both NMCES and NMCUES found that expenditures were highest for those with medicare and medicaid, next highest for those with medicare and private insurance, and least for those with medicare only (see chart 14 below).

According to NMCES, in 1977, those with medicare and medicaid paid only 7 percent of their expenses out-of-pocket, while those with medicare and private insurance paid 23 percent, and those with only medicare coverage paid 30 percent. NMCUES found similar results in 1980 with just over 4 percent of expenses out-of-pocket for those with medicare and medicaid, 20 percent for those with medicare and private insurance, and over 29 percent for those with only medicare. Actual dollars out-of-pocket were about the same for those with medicare only and those who supplemented their medicare coverage with private insurance.

CHART 14

HEALTH CARE UTILIZATION BY SOURCE OF PAYMENT AND SERVICE
1981 DOLLARS



Source: National Medical Care Survey, 1977

According to NMCES, in 1977, 65.2 percent of the noninstitutional elderly were covered by both medicare and private insurance, 20.4 percent had medicare coverage only, and 10.6 percent were covered by medicare and medicaid, 1.4 percent had medicare/medicaid/private, and the remaining 2.4 percent were either uninsured or held other public coverage and medicare with or without private insurance. NMCUES in 1980 confirmed these results finding 21 percent with medicare only, 65 percent with medicare and private health insurance, 10 percent with medicare and medicaid, 2.5 percent with medicare/medicaid/private, and 1 percent other.

The percentage of the elderly covered by private insurance varies substantially across income groups, with 50 percent of the poor/near poor having private insurance, compared with 78 percent of the high income elderly. The poor/near poor are much more likely to have other forms of public insurance, particularly medicaid, then those with high incomes; but they are also more likely to have only medicare coverage with no supplementation.

TABLE 12.—INSURANCE COVERAGE AND PER CAPITA EXPENDITURES BY INCOME GROUP

[In 1981 dollars]

Income	Insurance coverage	Per capita expenditures
Poor/near poor	Medicare only (24 percent)	$1,659.
Do	Medicare/private (50 percent)	2,537
Do	Medicare/medicaid (25 percent)	2,627
Low income	Medicare only (24 percent)	1,846
Do	Medicare/private (66 percent)	2,120
Do	Medicare/medicaid (9 percent)	3,263
Middle income	Medicare only (17 percent)	1,630
Do	Medicare/private (75 percent)	1,999
Do	Medicare/medicaid (5 percent)	2,766
High income	Medicare only (14 percent)	1,295
Do	Medicare/private (78 percent)	2,234
Do	Medicare/medicaid (3 percent)	1,035

Source: National Medical Care Expenditure Survey. NCHSR. 1977.

As stated previously, there does not appear to be any difference in insurance coverage for high users of care.

3. The Elderly Poor

Despite the common belief that medicaid picks up the gap between the total medical bill and medicare for the elderly poor, only one-quarter of the poor and near poor are covered by medicaid. Another quarter are covered by medicare only. Those not covered by medicaid are significantly at risk for out-of-pocket expenses.

NMCES found that over 6 million older persons had incomes less than 125 percent of poverty in 1977.[35] Approximately one-half, over 3 million, had private insurance coverage to supplement medicare. About 1.5 million had medicaid, and another 1.4 million had only medicare.

Those with medicare only coverage were more likely to be over 75, nonwhite, male, and living with a spouse (see table 13 below). Those with both medicare and medicaid were generally sicker, but there was no difference in health status between those with private insurance and those who depend on medicare only (see table 14 below).

TABLE 13.—DEMOGRAPHIC CHARACTERISTICS OF THE POOR AND NEAR-POOR ELDERLY [1] BY INSURANCE COVERAGE

	Total population	Percent female	Percent nonwhite	Percent age 75+	Percent married living with spouse
Madicare only	1,364,000	62.6	21.0	50.2	36.4
Medicare and medicaid	1,484,000	74.8	33.9	45.3	20.3
Private and CHAMPUS	3,031,000	77.7	5.4	46.2	28.3

[1] Those with incomes less than 125 percent of poverty line.

Source: National Medical Care Expenditure Survey. NCHSR. 1977.

[35] U.S. Census Bureau. In 1982, 10 million persons over age 65 had family incomes below 125 percent of poverty.

TABLE 14.—HEALTH STATUS OF THE POOR AND NEAR-POOR ELDERLY BY INSURANCE COVERAGE

	Percent with fair or poor perceived health status	Percent limited in activity	Percent with 8 or more bed days	Percent with any of the 3
Medicare only	37.4	31.9	24.5	60.6
Medicare and medicaid	50.5	45.3	39.3	77.3
Private and other	33.0	30.5	27.5	60.3

Source: National Medical Care Expenditure Survey. NCHSR. 1977.

Despite the lack of difference in health status, the elderly poor with no private coverage to supplement medicare used significantly fewer services than those with such coverage. Those who were covered by medicare average only 4.2 physician visits a year, compared to 7 visits for those with medicare and medicaid and 6.5 visits for those with medicare and private insurance. The number of physician visits for those with medicare only coverage was about the same as that for all persons between the ages of 25 and 54, a group presumably much healthier that the elderly poor. The differences in the number of visits remained about the same after holding constant for health status, age and sex.

Similar differences were also seen with the use of prescription drugs and the probability of a hospital stay. Those with medicare and medicaid filled an average of more than 15 prescriptions a year, with 8.7 for medicare only and 12 for medicare and private insurance. Over 22 percent of those with medicaid or private insurance to supplement their medicare coverage had a hospital stay in 1977, compared to 18 percent of those covered by medicare only.

TABLE 15.—UTILIZATION OF HEALTH SERVICES BY THE POOR AND NEAR-POOR ELDERLY BY TYPE OF INSURANCE COVERAGE

	Mean number physician visits	Mean number prescription drugs	Percent with hospital stay
Medicare only	4.2	8.7	18.0
Medicare and medicaid	7.0	15.3	23.3
Private and other	6.5	12.2	22.0

Source: National Medical Care Expenditure Survey. NCHSR. 1977.

Cost sharing raises serious problems for the poor and low income elderly in particular. As seen in table 16 below, the poor elderly—with the exception of those receiving medicaid—already face considerable out-of-pocket medical costs. Those with only medicare coverage paid about 32 percent of their average annual medical expenses out-of-pocket in 1977, compared to approximately 6.5 percent for those with medicaid and 23 percent for those with private insurance. This may account for the comparatively low levels of utilization of health services by the medicare only group. The poor elderly with private insurance do not appear to be similarly deprived of health services, but their ability to obtain health care carries a heavy financial cost when private insurance premium payments are added. Absorbing additional out-of-pocket expenses from

increased cost sharing through premiums or copayments will clearly be difficult for older people with lower incomes, regardless if whether they have just medicare or private supplementation.

TABLE 16.—OUT-OF-POCKET EXPENSE BY THE POOR AND NEAR-POOR ELDERLY BY TYPE OF INSURANCE COVERAGE, 1977 AND 1981

Insurance coverage	Mean out-of-pocket expense	
	1977	1981 (estimated)
Medicare only	$290	$522
Medicare and medicaid	97	175
Medicare and private	329	592

Source: National Medical Care Expenditure Survey. NCHSR. 1977.

4. PRIVATE INSURANCE

Since the number of aged medicare beneficiaries covered by medicaid or other public programs in addition to medicare is relatively small (13 percent), the actual burden of out-of-pocket expenses for most beneficiaries is determined by whether they have any private insurance in addition to medicare and what benefits their private insurance provides.

In 1967, 45.5 percent of medicare beneficiaries had private insurance. In 1972, the number had grown to 53.2 percent. In 1977, the number was about 67 percent and remained the same in 1980.[36]

Although most private insurance coverage supplementing medicare was obtained directly from insurers, about one-third of privately insured medicare beneficiaries had group insurance, most of which was employment related. Of the 67 percent of the population with medicare and private insurance, 17 percent (or 11 percent of all aged medicare benéficiaries) had more than one private insurance plan and 3 percent had more than two plans.[37]

Private insurance was more common for younger, healthier medicare beneficiaries with higher incomes. Private insurance was more common among whites, and both private and group insurance were more common among the employed. In general, private insurance was more common in the Northeast and North Central regions of the country, while group insurance was more often found among persons living in SMSA's than less urbanized areas and was more common among males than females.

Private insurance can serve to insulate individuals from the effects of cost sharing, including incentives to reduce unnecessary service use. The scope of benefits provided by private insurance is far from uniform, however, varying the most by premium price. In general, NMCES found that private insurance supplementing medicare nearly always included coverage of hospital care, and roughly 90 percent of privately insured medicare enrollees also had cover-

[36] Cafferata, Gail Lee. National Health Care Expenditures Study, Private Health Insurance Coverage of the Medicare Population. National Center for Health Services Research. November 1983; and the National Medical Care Utilizational and Expenditure Survey.

[37] Cafferata, Gail Lee. National Health Care Expenditures Study, Private Health Insurance Coverage of the Medicare Population.

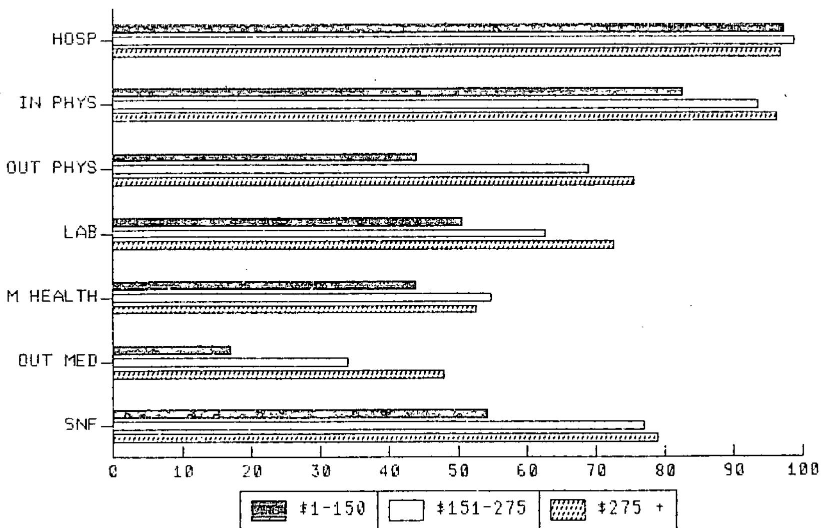
age of inpatient physician services, including medical and surgery services. Approximately 60 percent of the elderly with private insurance were covered for dental care. Nursing home coverage typically only supplements medicare's coverage and is limited to those requiring skilled care. Findings from the 1981 NMCUES showed a similar picture, with approximately 9 out of 10 aged medicare beneficiaries with private insurance having coverage by that insurance for charges related to hospital stays; about 50 percent for charges related to ambulatory physician visits, and about 9 percent for dental care charges. Although 90 percent had supplementary coverage for inpatient services, only 25 percent had any "catastrophic coverage," i.e., coverage beyond medicare's limit on hospital days per spell of illness.

As the charts below show, coverage does vary among plans, with the more expensive plans providing the most coverage. Because of lower administrative costs and high employer contributions, persons with group insurance are typically able to purchase more insurance than are persons with nongroup insurance. Elderly medicare beneficiaries with group coverage were more likely to have coverage of outpatient health services including diagnostic services, physician office visits, and prescribed medicines than were persons who purchased their insurance directly from insurers. They were also more likely to have full coverage of expenses associated with a long hospital stay, and better coverage for inpatient and ambulatory physician services, where those with group insurance were less often restricted to the medicare allowable charge.

CHART 15

DIFFERENCES BETWEEN COVERAGE OF SELECTED HEALTH SERVICES FOR NONGROUP PLANS BY AMOUNT OF PREMIUM

1977



Source: National Medical Care Expenditure Survey, NCHSR, 1977

CHART 16

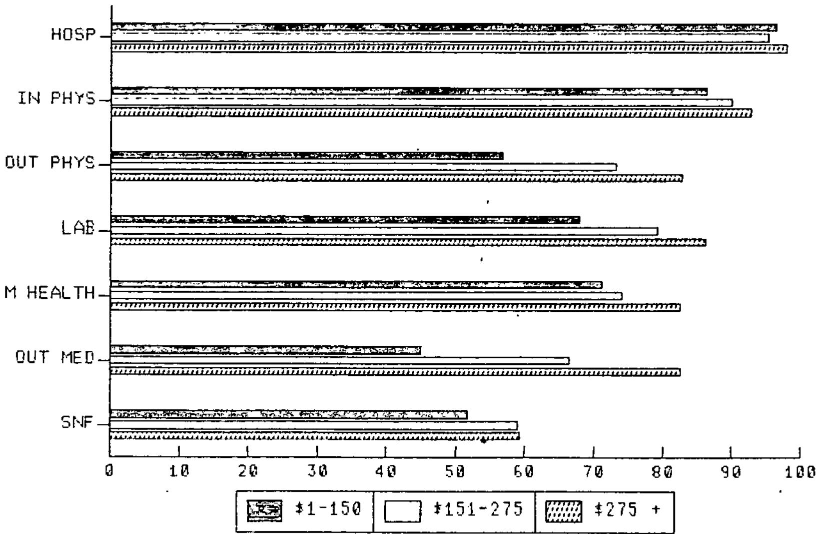
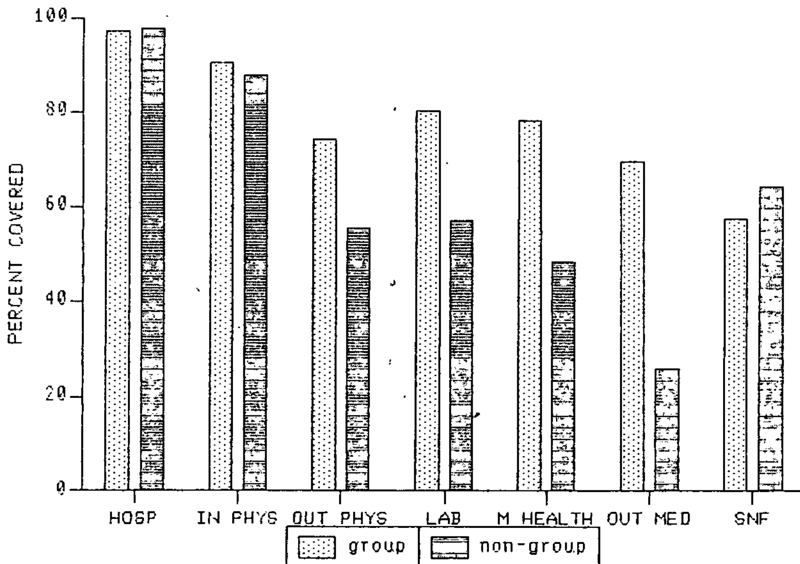


CHART 17



In 1977, according to NMCES, the mean annual premium for private health insurance was $304 per primary insured person (an estimated $492 in 1982). The insured paid about 65 percent of this on average, current and former employers paid 31.9 percent, and the balance was paid by others such as labor unions. Medicare beneficiaries insured under group policies had total annual premiums more than twice those of persons with nongroup insurance ($537 in comparison with $201, or $870 versus $326 in 1982) but employers paid 58.1 percent of this expense on average. Thus the out-of-pocket cost of private insurance for persons with group and nongroup insurance was comparable. Reflecting current and past levels of labor force participation, insurance premiums and the proportion paid by the employer were generally higher among men, persons under 75 years of age, the employed, and persons with higher incomes.

Part 6

STUDIES ON THE EFFECTS OF COST SHARING FOR THE NONELDERLY POPULATION

The effects of increased cost sharing have not been demonstrated for the elderly. However, cost sharing in the form of deductibles and coinsurance has been shown to decrease both services use and total expenditures for the under 65 population.

THE RAND STUDY

In the most comprehensive study to date, the Rand Corporation found that the amount of cost sharing affects both the number of people using medical services and the number of ambulatory visits per user. In the Rand study, similar families were assigned to different insurance plans where coinsurance rates varied from zero to 95 percent. A maximum cap on family liability was set at $1,000 (equivalent to about $2,000 in 1984 dollars) or 5, 10, or 15 percent of income (based on sliding income scale) whichever was lower.

The Rand study found that total expenditures for health care varied significantly by type of coverage. At the extreme, total expenditures for families facing 95 percent coinsurance were one-third less than those for families with free care. Expenditures for ambulatory (physician) services were also lower. Much of the difference in ambulatory expenditures was attributable to the amount of care used as defined by number of visits, rather than to any variations in the cost per visit. For hospital services, only the rate of hospital admissions was sensitive to the type of plan; expenditures once in the hospital showed little variation. In addition, the study found that persons with high coinsurance for ambulatory services but free hospital care had fewer hospital admissions than those with free care overall. Rather than higher copayments on ambulatory services causing more use of inpatient services, they resulted in fewer physician visits and less hospitalization. This supports the importance of the role of the physician in initiating hospitalization for the patient.

The Rand study found no significant difference in the percent of reduced use of services and expenditures across income groups, undoubtedly due to the fact that cost sharing was income-related and capped. The study also found, on average, little short-term difference in health status as a result of decreased service use with one exception. Average blood pressure for low-income persons with high blood pressure who received free care was 3 millimeters lower than that for a similar population with cost sharing. Any long-term effects on health status remain to be seen.

The Rand study did not include the over 65 population, however; and its findings may not be easily generalized to medicare benefici-

aries. The elderly differ from younger adults, having a much greater incidence of chronic and terminal illness and significantly different patterns of service use. In addition, 80 percent of the elderly have other insurance coverage. For the 65 percent with private insurance, increased cost sharing will probably translate into higher private insurance premiums rather than greater cost sharing associated with service use. Furthermore, the elderly already have a substantial amount of cost sharing, particularly those with only medicare coverage and those with physicians who do not routinely take assignment. It is unclear to what extent additional copayments would reduce use for those already facing sizable deductibles and out-of-pockets payments if limits on cost sharing are used to protect sicker and poorer enrollees.

Part 7

CONCLUSION

Outlining reforms to control the growth of medicare is beyond the scope of this paper, but any effective reform will have to slow the rapid rate of increase of all health care costs. The challenge is how both to hold down costs and protect enrollee access to care. While increased beneficiary cost sharing can reduce Federal medicare expenditures, there are three major limitations to its use. First, medicare beneficiaries already pay substantial out-of-pocket costs. Second, cost sharing increases are not likely to have an impact on the rate of growth in medicare expenditures. And third, cost sharing today imposes a disproportionate burden on those least able to afford it—the oldest, the poorest, and the sickest.

In general, the elderly already have significant out-of-pocket costs—paying 29 percent of their medical bill ($1,182 per capita), or 13.6 percent of their income for health care in 1981. Even excluding long-term care, noninstitutionalized aged enrollees paid about 20 percent of their medical bill out-of-pocket. Cost sharing liability for medicare covered services alone equaled $679 per capita in 1981 and $816 in 1982 for those who used services.

Although increased cost sharing associated with use of services (deductibles and coinsurance) may reduce the number of physician visits and even hospital admissions, increased use of services has contributed little to the growth of medicare or total personal health care expenditures. The main reason for such growth has been the rising cost of care. Four-fifths of the increase in hospital expenditures in excess of general inflation from 1971 to 1981 were due to increased hospital prices and intensity of services, reflecting on part continuing technological advances. Only 2 percent of the growth in hospital costs under medicare has been due to increased admissions. Per capita physicians office visits by the elderly and persons under age 65 have actually declined slightly since 1974.

Increased cost sharing has not been shown to have an impact on medicare's most pressing problem, the steadily rising price and intensity of hospital services. The Rand study on the effects of cost sharing showed that more cost sharing, at least that with a catastrophic cap on out-of-pocket expenses, did not make any difference in the expense per case. Whatever its merits or demerits, cost sharing, by decreasing use, can mean that costs may be somewhat lower; but it will not slow the trend of growth.

Added cost sharing does more than just reduce demand, of course; it also shifts costs to those using services. Looking at the average increase per beneficiary doesn't adequately describe the impact of more cost sharing. The elderly are not a homogeneous population; they have marked differences in health status and ability to pay for medical care. Most medicare dollars are spent for the

few who are sick. Nine percent of elderly enrollees accounted for 70 percent of medicare reimbursements for aged enrollees in 1981. These enrollees were more likely to be older, poor, and chronically or terminally ill.

Cost sharing related to utilization falls the hardest on the sickest and those with lower incomes, particularly those covered by only medicare. The impact of out-of-pocket expenses varies dramatically by income group. The poor/near poor elderly paid 14 percent of their income out-of-pocket for health care in 1977, while those in the highest income group paid an average of only 1 percent. Use of private insurance to suplement medicare's coverage varies by income group, not health status. Twenty-four percent of the poor and low-income elderly (half of all the elderly) have medicare coverage only compared to 14 percent of those elderly with high income. Only one out of four poor aged enrollees, those with incomes below poverty, is also covered by medicaid. The over 1 million poor/near poor elderly with only medicare coverage already face considerable hardship and use substantially fewer medical services. While many elderly with lower incomes struggle to pay increasingly higher private insurance premiums (an average of $250 to $550 in 1983), those most likely to have the most comprehensive private insurance are younger, healthier, and wealthier beneficiaries. They will be the least likely to feel the burden of increased cost sharing.

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