

CBO PAPERS

OPTIONS FOR EXTENDING
MEDICARE'S PAYMENT RATES
AND COVERING THE UNINSURED

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PREFACE

This paper is in response to a request from the Subcommittee on Health of the House Committee on Ways and Means for an analysis of the potential changes in national health expenditures that would result from extending Medicare's payment rates universally and covering the uninsured under Medicare. The paper provides illustrations of two types of health care systems. One is a universal health care system in which there would be only one payer for all services. The other would impose Medicare's payment rates on all private and public insurers. In keeping with CBO's mandate to provide objective and impartial analysis, this study does not contain recommendations.

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SUMMARY

Access to health care in the United States depends in large part on health insurance coverage. Those individuals who are covered by Medicare or private health insurance can obtain physician and hospital services more readily than Medicaid recipients or the uninsured.

One way to improve access to care for those who are less advantaged would be to extend Medicare's payment rates for physician and hospital services to the entire population, and to cover the presently uninsured. The effect of this extension on national health spending would depend on the payment level for physician and hospital services of Medicare relative to other payers, changes in the use of health care services, and the potential savings on administrative costs that restructuring the health insurance system would achieve. Medicare's payment rates could be extended and the uninsured covered in either an all-payer or single-payer system.

Under an all-payer plan, the only change in the health insurance system would be to have the federal government regulate the payment rates. The present health insurance structure of private and public payers would remain, but all payers would be required to reimburse physicians and hospitals at Medicare's rates. The benefit packages under private insurance plans, Medicaid, and Medicare would be the same as they are now; thus, private insurance companies could still offer a variety of benefit plans. The uninsured are assumed to be covered by Medicare for physician and hospital services.

Under a single-payer plan, the government would pay for all health care services. There would be only one benefit package. It would be assumed to be actuarially equivalent to the average coverage that private insurance plans and Medicare currently provide. The universal plan would also cover the uninsured.

Adopting either payment plan would require significant changes in the current health care system. Both would allow, but not ensure, greater control over health care costs, since the government would set the payment rates for all patients. Difficult choices would be required, however, because while lower rates might contain costs, they could also impair access and quality of care.

While an all-payer plan would not alter the structure of the current health insurance system, a single-payer plan would require fundamental changes. The role of the private insurance industry would be greatly reduced--possibly even eliminated--and government would become the main insurer for everyone. Consumers would be unable to choose their basic benefit packages. The method used to finance the universal health plan could cause a redistribution of resources.

The Congressional Budget Office (CBO) has used illustrative all-payer and single-payer systems to estimate the potential changes in national expenditures for physician and hospital services and in administrative costs resulting from extending

Medicare's payment rates to the entire population and covering the uninsured. The paper shows ranges of these changes in national health expenditures, because the assumptions used to calculate the changes are uncertain.

These calculations, which are in 1989 dollars, are not cost estimates of specific plans. The cost estimates that the CBO prepares for specific legislative proposals require much more detail about the characteristics of the proposal and how it would be carried out. The examples in this paper are intended to show the relative magnitudes of the changes that might occur. If a specific plan were proposed, the cost estimates might be significantly different from the numbers shown here because the law's provisions might differ substantially from the paper's assumptions.

TOTAL CHANGE IN HEALTH CARE SPENDING

Extending Medicare's payment rates universally through single-payer or all-payer systems while covering the uninsured would increase spending for physician and hospital services, but lower administrative costs. Although payment rates for privately insured people would fall if their services were reimbursed at Medicare's payment rates, the increased costs of covering the uninsured and of raising Medicaid rates to Medicare levels would more than offset these savings for physician and hospital services. Savings on administrative costs could be substantial, however.

The net change in health care spending in the illustrative calculations would be between -\$8 billion and \$34.4 billion in an all-payer system, representing between -1.3 percent and 5.7 percent of national health expenditures in 1989. The change in a single-payer system would be between -\$45 billion and \$9.9 billion, representing between -7.4 percent and 1.6 percent of national health spending (see Summary Table).

These calculations are based on assumptions about:

- o The difference between the Medicare and private insurance payment rates for physician and hospital services;
- o The amount of current cost-shifting onto the private sector for care of the uninsured;
- o The amount by which the uninsured would increase their use of services if they became insured;
- o The degree of change in the use of health care services by current Medicaid recipients and the privately insured resulting from paying for services provided to them at Medicare's rates; and
- o The potential amount of savings on administrative costs that would occur if either of the two systems were adopted.

SUMMARY TABLE. ILLUSTRATIVE CHANGES IN NATIONAL HEALTH EXPENDITURES
(In billions of 1989 dollars)

	Physician and Hospital Services	Providers' Administration ^{a/}	Program Administration	All Other	Total
Actual Spending	187.7	105.6	35.3	381.1	604.1
All-Payer System					
Estimated Spending at Medicare Rates	194.4 to 224.2	93.3 to 105.6	35.5 to 35.8	378.5	596.1 to 638.5
Change	6.7 to 36.5	-12.3 to 0	0.2 to 0.5	-2.6	-8.0 to 34.4 ^{b/}
Single-Payer System					
Estimated Spending at Medicare Rates	194.4 to 224.2	81.1 to 105.6	10.7 to 11.3	378.5	559.1 to 614.0
Change	6.7 to 36.5	-24.5 to 0	-24.6 to -24.0	-2.6	-45.0 to 9.9 ^{c/}

SOURCE: Congressional Budget Office tabulations based on Tables 5, 6, 7, and 8, and data from the Health Care Financing Administration.

NOTE: For details on what is included in each cell, see Tables 5, 6, 7, and 8.

- a. This spending is not added in to obtain the total, since providers' administration is included in physician and hospital services. The change in spending on providers' administration must be subtracted to obtain total spending at Medicare's rates.
 - b. The percentage change is between -1.3 percent and 5.7 percent.
 - c. The percentage change is between -7.4 percent and 1.6 percent.
-

In addition, it is assumed that no balance billing (that is, physicians' charges above the amounts on which Medicare or private insurers base their payments) or insurance to supplement the universal plan in a single-payer system would be allowed. The universal plan would include coverage for the kinds of services typically included in private insurance plans, including physician and hospital services and prescription drugs. Thus, disallowing supplementary policies would mainly prohibit insurance that would pay deductibles or copayments. However, the government could choose to pay them for low-income individuals.

CHANGE IN SPENDING FOR PHYSICIAN AND HOSPITAL SERVICES

In the illustrations, if Medicare's payment rates were paid for all physician and hospital services, including those provided to the currently uninsured, health care spending for physician and hospital services would increase by between \$6.7 billion and \$36.5 billion, representing between 1.1 percent and 6.0 percent of national health expenditures (see Summary Table). Spending for physician services would rise by between \$0.2 billion and \$6.9 billion, while spending for hospital services would increase more; between \$6.5 billion and \$29.6 billion.

According to estimates, Medicare pays, on average, 30 percent less than the submitted bill and 16 percent less than the private insurance charge for physician services, and between 5 percent and 13 percent less than the private sector for hospital services. In contrast, Medicare pays between 30 percent and 50 percent more than Medicaid for physician and hospital services.

While these differences would translate into spending reductions of between \$9.9 billion and \$16.6 billion for those who currently have private insurance, covering the uninsured and Medicaid recipients under Medicare's payment rates would increase spending. Covering the uninsured under Medicare's payment rates would cost between \$11.5 billion and \$25.0 billion, and raising Medicaid payment rates to Medicare levels would cost between \$11.8 billion and \$21.4 billion.

CHANGE IN ADMINISTRATIVE COSTS

Unifying and coordinating the health care system in either an all-payer or single-payer plan could reduce administrative costs, even when the additional administrative costs of covering the uninsured are taken into account. Illustrative calculations show that the change in administrative costs if an all-payer system were adopted would be between -\$12.1 billion and \$0.5 billion, representing between -2.0 percent and 0.1 percent of national health expenditures in 1989. If a single-payer system were adopted, the change could be between -\$49.1 billion and -\$24 billion, representing between -8.1 percent and -4.0 percent of national health spending. These changes in administrative costs are the sum of the changes in providers' administration and program administrative costs.

In calculating how much spending would change if an all-payer system were adopted, it is assumed that there would be no savings on program administration and insurance overhead, since the system of private and public insurers would be unchanged. In fact, covering the uninsured would increase program administration costs. Uniform payment rates could yield a savings on the administrative costs of providers, though, since handling claims would be standardized and the costs of collecting bad debts would be smaller. As much as \$12.3 billion could be saved (see Summary Table).

Under a single-payer system, savings could be achieved in program administration and insurance overhead, as well as in administration by providers. Savings of about \$24 billion would be generated on program administration, and savings on the administrative costs of providers could total \$24.5 billion, but obtaining these savings would require lowering physician payments (see Summary Table).

Unifying the health care system under a single-payer plan could reduce administrative costs by eliminating the expenses associated with determining eligibility, marketing insurance plans, and assessing risk to determine premiums. Providers could reduce their administrative costs because the filing of claims and the collection of bad debts would be simplified. The savings could be larger than in an all-payer system, because in a single-payer system providers would only have to keep track of one set of reimbursement rules.

OTHER CONSIDERATIONS

Extending Medicare's payment rates universally would affect the government's ability to control health care costs and the revenues of providers.

All-payer or single-payer systems would allow greater control over the growth of health care costs, since the government would determine the growth in payment rates. However, there would be a trade-off between costs on the one hand and access to and quality of care on the other. Setting the payment rates too low could cause hospitals to close or reduce the quality of their care. However, physicians might increase the volume of services to offset the drop in revenues. In this case, controls on use might be needed to prevent such increases.

The effect on the revenues of providers would depend on the relative amounts of increased revenues from covering the uninsured and raising Medicaid reimbursement rates and the decreased revenues from lowering payment rates for the privately insured. According to estimates, physicians' and hospitals' revenues would rise, on average, under a universal extension of Medicare's payment rates, as would the volume of services they would provide. This estimated increase in the revenue of physicians probably does not fully take into account the assumed elimination of balance billing.

Subtracting current balance billing amounts from health spending is difficult, because there is little reliable data about it in the private sector. The maximum revenue loss per physician would probably be about \$19,000, or 12 percent of his or her average income. Such a loss could cause physicians to increase the volume of services provided to offset the reduction in income.

Some hospitals could experience revenue reductions, however, if revenues from their current privately insured patients fell more than revenues would rise from treating more of the currently uninsured and Medicaid recipients. Hospitals that now treat relatively few of the uninsured or Medicaid recipients might be willing to treat more patients from these groups if uniform payment rates were adopted.

CHAPTER I

INTRODUCTION

If Medicare's payment rates for physician and hospital services were extended to the entire population and the uninsured were provided coverage for these services, the United States health care system could be substantially affected. Extending Medicare's payment rates for physician and hospital services to the entire population would affect both spending and administrative costs, as would adding new coverage for the uninsured.

Centralizing the health care system by making the federal government the single payer for health care services would have an even greater effect on administrative costs. The magnitudes of the spending changes would depend on Medicare's payment levels for physician and hospital services versus rates paid by other buyers of these services; on changes in administrative costs resulting from a coordinated health care system; and on changes in the quantity of services used by the uninsured, Medicaid recipients, and people who are privately insured.

The Congressional Budget Office has explored the possible effects of two methods of extending Medicare's payment rates for physician and hospital services and covering the uninsured. Under an all-payer system, the uninsured would be covered by Medicare for physician and hospital services and all payers would be required to use Medicare's payment rates for physician and hospital services. Private health insurance companies would continue to provide the bulk of health care payments, but their payment rates for physician and hospital services would be regulated by the federal government. Balance billing (that is, physicians' charges above the amounts on which Medicare or private insurance base their payments) would be prohibited. Private insurance companies would still be able to offer their own benefit packages. Medicaid would continue as a joint federal/state program with physician and hospital payment rates set at Medicare levels.

Under a single-payer system, the federal government would pay for all health care services. Not only would Medicare's reimbursement levels be extended to all physician and hospital services, but the federal government would administer all covered health care services. If such a universal health plan were adopted, the benefit package would have to be specified. This option assumes that the universal plan would be actuarially equivalent to the average benefits currently provided under private plans and Medicare. It is also assumed that balance billing and supplementary insurance for covered services would be prohibited. However, the government could choose to pay the deductibles and copayments for low-income individuals.

Under either an all-payer or a single-payer system, the government could keep the growth in health care costs at any desired level, since it would set the payment rates for health care services provided to all patients. However, a trade-off would occur between cost containment on the one hand and access and quality of

care on the other. While lower rates would achieve cost containment, they could cause hospitals and physicians to provide fewer services or lower quality care.

While an all-payer system would maintain the current structure of the health care system, a single-payer system would require fundamental changes. Since government would become the main payer for health care services, the role of the private insurance industry would be greatly reduced, and possibly eliminated. Health care consumers would not be able to choose their health care plans, as many in the private sector now do. Adopting a single-payer health care system could also cause a redistribution of resources, but the nature of the redistribution would depend on the specific methods used to finance the new universal health plan.

Calculations are provided illustrating the potential changes in national health expenditures as a result of adopting an all-payer system or a single-payer system in which the uninsured would be covered for physician and hospital services. These calculations are based on many assumptions: relative payment rates under Medicare, Medicaid, and private insurance; changes in use that could result from changes in payment rates for Medicaid and private insurance and from covering the uninsured; the current extent of cost-shifting onto the private sector for care provided to the uninsured; and potential reductions in administrative costs as a result of restructuring the health care system. Some of these assumptions are based on past studies, but others are arbitrary because data are lacking.

These examples of the potential effects of changes in the system are not comparable to the Congressional Budget Office's cost estimates of specific legislative proposals. Cost estimates require much more specificity about the details of the proposal and how it would be put in place. These calculations are meant to provide information on the magnitude and range of the effects on national health spending of adopting an all-payer or a single-payer system and providing coverage to the uninsured.

MEDICARE'S CURRENT REIMBURSEMENT POLICIES

Medicare's physician payment rates are currently based on past charges, with limits imposed by the Congress on rate increases. Beginning in 1992, however, physicians will be paid under a new Medicare fee schedule. Hospitals are reimbursed under Medicare with a pre-set amount per discharge that depends on the patient's diagnosis and characteristics of the hospital in which care is provided.

Reimbursement for Physician Services

Currently, reimbursement rates for physician services provided under Medicare are determined using the customary, prevailing, and reasonable methodology (CPR). Payment is the lesser of the actual, customary, and prevailing charges. The actual, or submitted, charge is the amount that the physician submits to Medicare for a service. The customary charge is the fiftieth percentile of charges the physician

made the previous year for a particular service. The prevailing charge is the seventy-fifth percentile of customary charges among all physicians providing the service in a geographic area the Medicare carrier determines, or the 1973 prevailing charge updated to the current year, whichever is lower.

The resulting Medicare payment is the allowed charge. Medicare typically pays 80 percent of that charge above a \$100 annual deductible amount. The enrollee is responsible for the deductible and 20 percent of allowed charges above it. In addition, the enrollee is responsible for any balance billing amount. Physicians can "accept assignment" on any claims, which means that they agree to accept the Medicare allowed charge as payment in full. In this case, there is no balance billing. Physicians who sign a participation agreement agree to accept all Medicare claims on assignment for a specified period of time (typically a year). They are referred to as participating physicians; those who do not sign are called nonparticipants.

Under the Omnibus Budget Reconciliation Act (OBRA) of 1989, however, the Congress adopted a new system for reimbursing physicians under Medicare. Phasing in of the Medicare fee schedule (MFS) will begin in 1992, and will be completed by 1996. Fees will be adjusted for geographic differences in physicians' costs. Fee schedule amounts for nonparticipating physicians will be 95 percent of those for participants. The new payment plan also includes limits on balance billing. These limits will be phased in so that, by 1993, submitted charges by nonparticipating physicians' will be capped at 115 percent of their fee schedule amounts.

Reimbursement for Hospital Services

The Social Security Amendments of 1983 established the prospective payment system (PPS) for reimbursing hospitals for inpatient care under Medicare. Under this system, a hospital is reimbursed with a preset amount per discharge based on the patient's classification in a diagnosis-related group (DRG). The PPS system was applied to hospitals with their first cost reporting period beginning on or after October 1, 1983. For the first four years of the program, the PPS payment was based on a combination of the hospital's own costs in a past base year and a blend of regional and national standardized payments. Beginning with the fifth year, payments are based entirely on national standardized amounts. Adjustments are made for location in urban versus rural areas, the indirect costs of hospital medical education programs, area wages, unusually long or costly cases, and a high proportion of low-income patients. Certain types of hospitals, including psychiatric and children's hospitals, and certain types of hospital units, including rehabilitation and psychiatric units in acute care hospitals, are exempt from the PPS program.

CHAPTER II

FACTORS AFFECTING THE CHANGE IN

NATIONAL HEALTH EXPENDITURES

If Medicare's payment rates for physician and hospital services were extended in either an all-payer or single-payer system and the uninsured were provided coverage, the following factors would be among those determining the effect on national spending for health services:

- o Medicare's payment rates versus those for Medicaid and private insurance;
- o The current cost of caring for the uninsured;
- o Changes in the volume of services provided;
- o The amount spent on supplementary insurance;
- o The extent of balance billing for physician services;
- o The methods used to expand Medicare's payment rates; and
- o The effect on cost containment efforts.

Because payment rates would constitute the critical factor, all of these factors would have the same effects on national expenditures for health services under either a single-payer or an all-payer system. However, savings on administrative costs would differ in the two systems.

COMPARING PAYMENT RATES UNDER MEDICARE, MEDICAID, AND PRIVATE INSURANCE

On average, Medicare pays more per service than Medicaid but less than private insurance. Thus, if Medicare's payment rates were extended to Medicaid recipients and privately insured individuals, there would be opposing effects on national health spending. If Medicare's payment rates for physician and hospital services were extended to Medicaid recipients, national health expenditures would rise. If Medicare's rates were extended to the privately insured, expenditures would fall. The increase in national health spending would reflect the differences between the payment rates for Medicare and these other payers.

COST OF CARING FOR THE CURRENTLY UNINSURED

Two factors are critical in determining the change in national health expenditures that would result from extending Medicare's payment rates for physician and hospital services to the uninsured.

First, under the present system, the average uninsured patient pays hospitals and physicians little or nothing. Either the patient is not billed for services, or is billed for the treatment but pays only part or none of the charges. State and local governments subsidize hospitals for care provided to the uninsured, but a substantial portion of these charges remain unpaid.

Second, health care providers do not necessarily absorb the costs of unsponsored care (that is, the amount of unpaid charges remaining after state and local government subsidies). Hospitals and physicians may increase their charges to the privately insured, thereby shifting the costs of caring for the uninsured onto the private sector. The ability of providers to shift costs depends on the willingness of private insurance companies and privately insured individuals to pay the higher charges. To the extent that providers do shift costs to the private sector, national health expenditures would not rise if Medicare's payment rates were extended to the uninsured. In other words, national health spending already includes charges for care to the uninsured that are shifted to other payers.

CHANGES IN THE VOLUME OF SERVICES

If payment rates for the uninsured, Medicaid recipients, and the privately insured were changed, the volume of medical services provided to these groups would also change. Medicaid recipients and the uninsured are likely to obtain more services, but the effect on the privately insured is uncertain.

The uninsured use less health care than demographically comparable individuals who have health insurance. They often wait until serious medical conditions occur and then go to hospital emergency departments for treatment. Thus, they receive fewer services in physicians' offices. The uninsured are also hospitalized less often and their lengths of stay are shorter than those of the insured. If the uninsured were covered, they would most likely use medical services as often and as long as the insured. This increased use would add to national health expenditures. However, once the uninsured were able to avail themselves of treatment in physicians' offices, they might reduce their use of more expensive hospital emergency departments and outpatient departments, providing some offsetting savings.

Raising Medicaid reimbursement rates to Medicare levels would increase the use of health care services by Medicaid recipients. This increase would occur because only 75 percent of physicians are willing to treat Medicaid patients, while nearly all physicians treat Medicare enrollees. This relatively low participation rate on the part of physicians in the Medicaid program results partly from the low fees paid physicians for treating Medicaid recipients; evidence also indicates that hospitals discourage physicians from admitting Medicaid patients. At higher payment levels, both physicians and hospitals would probably be more willing to treat current Medicaid recipients. The resulting increase in use would raise national health care spending.

Whether the volume of services the privately insured and Medicare enrollees use would change depends on alterations in the benefit structure of their insurance. In the options discussed here, the assumption is that the actuarial value of the universal health plan's benefit package would be equivalent to the average benefits that private plans and Medicare currently provide. Medicare benefits fall at about the median for private insurance plans. Premiums for the median private plan are \$1,577 for single coverage and \$3,431 for family coverage. Actuaries have estimated that a private plan for the nonelderly that duplicated Medicare's current provisions would cost \$1,502 for single coverage and \$3,308 for family coverage. Even though the actuarial value of the universal plan used in these illustrations would be the same as the typical private plan and Medicare, changes that would occur in the benefit package for some individuals could induce them to use a different volume of services. The illustrative options assume that such changes would amount to zero, on average.

SUPPLEMENTARY INSURANCE

Under either an all-payer system or a single-payer system, individuals might want to purchase supplementary insurance, as Medicare enrollees currently do. Under an all-payer system, which would leave current insurance benefits unchanged, those with private insurance might want supplementary insurance to cover their deductible amounts and copayments and any uncovered services. However, whether such a supplementary insurance market would arise, since none exists now, is questionable. Neither the currently uninsured nor Medicaid recipients would be likely to demand additional insurance, since most could probably not afford it.

Under a single-payer system, which could substantially change the benefit and cost-sharing structure of some private insurance policies, some individuals might want supplementary insurance, especially if no catastrophic cap were included. Allowing supplementary insurance would increase national spending for health services, since better coverage increases the use of health care services. In the illustrations discussed here, the assumption is that such supplementary insurance would be prohibited, but the government could pay the deductibles and copayments for low-income people.

BALANCE BILLING FOR PHYSICIAN SERVICES

Changes in balance billing from adopting universal payment rates could also affect national health spending. Medicare currently limits the amount of balance billing for physician services to 140 percent of allowed charges for certain primary care services and 125 percent of allowed charges for all other services. These percentages will be reduced to 115 percent over the next two years.

Nationally, the cost of extending Medicare's payment rates to those who currently have private insurance would depend on the amount of balance billing they pay now versus what they would pay under Medicare payment levels. The amount

of balance billing could be higher with Medicare payment rates, since Medicare payment rates are lower than private insurance rates. National health expenditures could also rise as a result of balance billing for current Medicaid recipients or the uninsured, although these groups might not be able to afford to pay the balance of their bills.

If balance billing were permitted, physicians might prefer to treat higher-income patients. However, the incentives under Medicare to accept the plan's allowed charges as payment in full, such as higher allowed charges for participating physicians, might lead many physicians to forgo balance billing. Thus, even if balance billing were permitted, the actual amount collected might not be very large. Moreover, if balance billing were voluntarily forgone or not permitted, physicians' incomes would be limited to receipts from Medicare's allowed charges, but that would not necessarily mean that physicians' incomes would fall. Revenue from current Medicaid recipients and the uninsured would rise, and these increases could offset the reduction in allowed charges for the privately insured and the elimination of balance billing. The illustrations discussed here assume that balance billing would not be permitted.

ADJUSTING MEDICARE'S PAYMENT RATES

If Medicare's payment rates were extended to the entire population, adjustments would have to be made for patients who are not covered by Medicare. For example, because the PPS payment rates were developed using costs for only Medicare patients, they would have to be recalculated using costs for all patients. The illustrations discussed assume that such adjustments would keep Medicare spending for current enrollees at its current level.

IMPACT ON COST CONTAINMENT EFFORTS

Establishing uniform payment rates for physician and hospital services would allow, but not ensure, greater control over future health care costs. This increased control could happen regardless of whether Medicare's rates or some other reimbursement levels were made universal. The reason is that the government could allow as much or as little increases in rates as would be consistent with desired levels of spending for these services.

Two issues would have to be taken into account, however. First, setting the reimbursement rates too low could impair access and quality of care by causing some hospitals to close. Second, without controls on use, the volume of services might increase, in part because physicians might attempt to offset losses in revenues resulting from controls on their fees.

Other countries with all-payer or single-payer systems combine uniform payment rates with review processes on use in which profiles of health care providers are used to identify those whose patterns deviate from the norm. In this

way, they can limit the growth of volume in response to changes in payment levels. Canada monitors the number of patients physicians see, the number of referrals to specialists, and the use of specified procedures. In British Columbia, a committee that can recommend penalties reviews physicians with statistical profiles more than two standard deviations from the average for the physicians' peer group (defined by specialty and geographic area). In West Germany, physicians are similarly monitored and can be penalized for engaging in practices that deviate from the average. Medicare's volume performance standards, which will be introduced along with the new fee schedule in 1992, have the potential to retard the growth in payments for physician services, depending on how strict the targets are compared with what would happen without them.

CHAPTER III

ILLUSTRATIVE CHANGE IN NATIONAL

HEALTH EXPENDITURES

If an all-payer or a single-payer system were adopted and the uninsured were provided coverage under the new system, the level of national health expenditures would be affected. Detailed estimates of these effects would require a complex analytic effort and much more specificity about the details and operational characteristics of each proposal. It is possible, however, to develop illustrative examples of the effects of an all-payer or a single-payer system that would extend Medicare's payment rates for physician and hospital services to the entire population and provide insurance coverage for the services to the currently uninsured.

The results of these illustrative examples, which are in 1989 dollars, vary depending on assumptions made about the following factors:

- o Medicare's payment levels relative to other payers;
- o The change in the quantity of services the currently uninsured use;
- o Changes in the quantities of services the privately insured and Medicaid recipients consume;
- o The savings in administrative costs that could be obtained; and
- o The extent to which the costs of providing care to the uninsured are currently shifted to other payers.

Three alternative sets of illustrative calculations are shown because the magnitudes of the above factors are uncertain. Previous studies that have estimated the magnitudes of the factors obtained different results. The three alternative sets of calculations include assumptions that vary according to the estimates of the previous studies.

The implications of uniform rates would be the same whether they were part of a program that covered the uninsured under Medicare for physician and hospital services and imposed Medicare's rates on all public and private payers, or whether the government paid for all health care services and paid physicians and hospitals at Medicare levels. Administrative costs, however, would differ depending on whether an all-payer system or a single-payer system would be put in place.

COMPARING MEDICARE, MEDICAID, AND PRIVATE INSURANCE PAYMENT RATES

The best estimates suggest that Medicare pays, on average, 30 percent less than the actual fee for physician services and 16 percent less than the average private

insurance price. Also, according to estimates, Medicare pays between 5 percent and 13 percent less than the private sector for hospital services.

Comparing Payment Rates For Physician Services

The weighted average percentage reduction on submitted charges was 30 percent, which was made up of a 31 percent reduction on assigned claims and a 25 percent reduction on unassigned claims (see Table 1). This reduction accurately measures Medicare's savings only to the extent that submitted charges are what physicians would attempt to collect without Medicare's constraints.

A study that compared Medicare and Blue Shield fees for an intermediate office visit using data from 1984 to 1985 provides evidence about the difference between Medicare and private insurance reimbursement levels.¹ Medicare fees averaged 16 percent lower than Blue Shield fees (see Table 2). Physicians signing the Medicare participation agreement were allowed an average Medicare fee of \$22.08 compared with \$25.87 for Blue Shield, implying a 15 percent Medicare savings compared with the Blue Shield price. Medicare allowed nonparticipants \$20.47, compared with \$24.77 for Blue Shield, yielding Medicare savings of 17 percent. However, it is not known to what extent Blue Shield is representative of other third-party payers, whether more recent data would substantiate these findings, or whether an intermediate office visit is a typical service in this context.

In addition, the current difference may be higher than 16 percent. Medicare's payment rates for physician services have risen less since 1984 than the costs of providing these services, while the increase in private insurance payments may have risen at least as fast as costs.

Comparing Payment Rates For Hospital Services

Although no studies have directly compared Medicare hospital reimbursement rates with hospital charges to other payers, a comparison of Medicare and private insurance payments can be estimated by contrasting hospital margins for Medicare and privately insured patients. (The hospital margin is defined as revenues minus costs, divided by revenues.) The difference between Medicare and private sector payments for hospital services is calculated as the percentage by which private sector payments would have to be lowered to make the private sector margin equal to the Medicare margin.

This paper makes two different comparisons for hospital services, assuming different Medicare margins. One is the 1988 Medicare inpatient margin of 1.4 percent, and the other is the value the Prospective Payment Assessment Commission

1. J. Mitchell and others, "To Sign or Not To Sign: Physician Participation in Medicare, 1984" (Center for Health Economics Research, April 1987).

(ProPAC) projected for 1990, namely -2.5 percent. The latter margin, which reflects current losses on Medicare patients, could only be attained under a universal expansion of Medicare payment rates if hospitals operated more efficiently and reduced their costs. If payments would not cover hospitals' necessary costs, some hospitals might close, and access to care might be impaired.

While data are available on the total patient, Medicare, and Medicaid margins, data on the margin for privately insured patients are not. The private insurance margin is estimated from information on all patients, Medicare enrollees, Medicaid recipients, and the uninsured. A margin of -28 percent is assumed for Medicaid patients and the uninsured combined.² Once the private insurance margin is obtained, it is used in conjunction with the Medicare margin to estimate the difference between private insurance and Medicare payments for hospital services.

Assuming a Medicare margin of 1.4 percent, Medicare hospital payments are 5 percent lower than private sector payments (see Table 3); that is, private sector payments to hospitals would have to be 5 percent lower to reduce the private sector margin to the Medicare margin. If the Medicare margin is assumed to be -2.5 percent, the difference is 13 percent.

ILLUSTRATIVE CHANGE IN SPENDING FOR PHYSICIAN AND HOSPITAL SERVICES

Estimates show that if Medicare's payment rates for physician and hospital services became universal in either an all-payer system or a single-payer system, national health expenditures for physician and hospital services would rise by between \$6.7 billion and \$36.5 billion, representing between 1.1 percent and 6 percent of national health expenditures. Three different calculations are presented, each making a different set of assumptions.

The three alternatives share some assumptions. All assume that Medicare's allowed charges for physician services are 30 percent lower than actual charges, and 16 percent lower than private insurance rates (see Table 4). Physicians are assumed to respond to a decrease in their reimbursement rates by increasing the volume of services to offset 50 percent of the corresponding decrease in their income. Balance billing and insurance supplementing the universal health plan are assumed to be prohibited.

The three alternatives reflect different assumptions about the following factors:

- o The current extent of cost shifting for care to the uninsured;

2. This margin of -28 percent is based on the Medicaid payment-to-cost ratio, obtained from Dr. Irene Frazier, American Hospital Association, personal communication.

- o Medicare's payment rates for physician and hospital services compared with private insurance rates;
- o The difference in payment rates between Medicare and Medicaid;
- o The amount by which the uninsured would increase their use of health care services if they became insured;
- o The amount by which Medicaid recipients would increase their use of services if Medicaid's payment rates were increased; and
- o The amount of savings that could be obtained on providers' administration if an all-payer system were put in place or if the government became the single payer for these services.

Illustrative Change in Spending for Physician Services

If Medicare's payment rates for physician services were applied to everyone, including the uninsured, spending for physician services would rise between \$0.2 billion and \$6.9 billion, representing between 0.03 percent and 1.1 percent of national health expenditures.

The Uninsured. According to calculations made for this illustration, national health expenditures would rise by between \$3.2 billion and \$8.7 billion if Medicare's payment rates for physician services were extended to the uninsured (see Table 5). Different assumptions about the increase in health care use if the uninsured became insured account for the difference between Alternatives 1 and 2. The estimate for Alternative 3 is lower because half of unsponsored care is assumed to be recovered currently through higher rates charged to private insurers.

If Medicare were expanded to cover the uninsured, national health expenditures would rise because most of the bills for treating the uninsured apparently are now unpaid. According to one estimate, physicians provided \$8 billion of unsponsored care to the uninsured through charity care and bad debts.³ Physicians might recover some of these charges by shifting them onto privately insured patients, but the amount of such cost shifting is unknown. The examples use two assumptions about the extent of cost shifting for care now provided to the uninsured. Alternatives 1 and 2 assume that none of the costs for this care is now shifted onto the private sector, and Alternative 3 assumes that half of these costs are shifted.

Not only would health spending rise because payments would be made for care that is now unsponsored, but also because the currently uninsured would increase their use of medical services if they became insured. One study shows that

3. David Emmons, American Medical Association, personal communication.

if the uninsured were covered by a typical private health insurance plan, physician visits would rise 28 percent.⁴ Another study shows that the increase could be about twice this amount.⁵ The three alternative calculations of the change in spending under a Medicare expansion assume different increases in the use of health care for the uninsured. Alternative 1 assumes that spending on physician services by the currently uninsured would rise 56 percent if Medicare were extended to them. Alternative 2 assumes the increase would be 42 percent, and alternative 3 assumes a 28 percent rise.

Medicaid Recipients. In the illustrative calculations, spending on physician services for those currently covered by Medicaid would increase by between \$1.9 billion and \$3.4 billion, if Medicare's payment rates were used for services provided to them (see Table 5). Actual Medicaid spending on physician services was \$4.2 billion in 1989. At Medicare's payment rates, spending would be between \$6.1 billion and \$7.6 billion. The differences in estimated spending at Medicare's rates stem from the different assumptions about the ratio of Medicaid's to Medicare's payment rates and about the increase in the use of physician services.

Extending Medicare's payment rates to those who are currently covered by Medicaid would increase the payment rates for physician services. A recent study reported that the average ratio of Medicare to Medicaid fees is about 1.4 to 1.⁶ To account for possible error in this estimate, each alternative assumes a different ratio of Medicare to Medicaid payment rates: 1.5 for Alternative 1, 1.4 for Alternative 2, and 1.3 for Alternative 3.

Raising reimbursement rates for Medicaid recipients is expected to increase the volume of medical services that they receive. Currently, only 75 percent of physicians participate in the Medicaid program, compared with nearly 100 percent for the Medicare program. The lower Medicaid participation rate is partly the result of the low fees currently paid for Medicaid services. Raising Medicaid's fees would probably enhance the willingness of physicians to treat current Medicaid recipients, thereby increasing the volume of physician services.

If Medicare's payment rates were extended to Medicaid recipients, the increase in their use of physician services is assumed to be 35 percent of the increase assumed for the uninsured. Thus, Alternative 1 assumes that if Medicare's payment rates were used to reimburse physicians for Medicaid services, recipients would use 20 percent more physician services than they do now. Alternative 2

4. Congressional Research Service, Cost and Effects of Extending Health Insurance Coverage (October 1988).

5. S. Long and J. Rodgers, "The Effects of Being Uninsured on Health Care Service Use: Estimates from the Survey of Income and Program Participation" (paper presented at the American Economic Association meeting, December 1989).

6. Physician Payment Review Commission, Annual Report (April 1991).

assumes that the increase would be 15 percent, and Alternative 3 assumes a 10 percent rise.

Raising physician reimbursement rates for Medicaid recipients might generate some savings for their care in emergency rooms and hospital outpatient departments. Two studies found that the level of physician fees under Medicaid and the use of alternative sources of care by Medicaid recipients were inversely related.⁷ The illustrative calculations, however, do not include any reduction in health spending to account for less use of emergency rooms and hospital outpatient departments.

The Privately Insured. Expenditures for physician services to the privately insured would fall by between \$4.9 billion and \$5.2 billion if Medicare's payment rates were extended to them (see Table 5). Because Medicare's rates are about 16 percent lower than private insurance rates, extending Medicare's payment rates to those who currently have private insurance would lower national health expenditures.

Actual spending for physician services by the privately insured was \$65.3 billion in 1989.⁸ Alternative 3 shows this amount to be \$61.3 billion, because \$4 billion is assumed to have actually represented shifted costs for care provided to the uninsured. At Medicare's rates, spending would be either \$60.1 billion (Alternatives 1 and 2) or \$56.4 billion (Alternative 3). The entire difference in estimated spending at Medicare's rates is the result of different assumptions about the extent of current cost-shifting onto private insurance for care to the uninsured.

Total. Spending on physician services for the uninsured, Medicaid recipients and the privately insured combined is estimated to increase by between \$0.2 billion and \$6.9 billion, if Medicare's payment rates were used for all physician services, including those for the currently uninsured (see Table 5). These amounts would represent between 0.03 percent and 1.1 percent of national health expenditures.

Actual spending for physician services in 1989 was \$69.5 billion. At Medicare's payment rates, reimbursements to physicians would be between \$69.7 billion and \$76.4 billion. While expenditures for the uninsured and Medicaid recipients would rise, this increase would be partially offset by a reduction in spending on physician care for the privately insured. Under all three alternatives, expenditures for the uninsured would increase more than spending for Medicaid recipients.

7. Joel W. Cohen, "Medicaid Policy and the Substitution of Hospital Outpatient Care for Physician Care," Health Services Research, vol. 24, no. 1 (April 1989); Stephen H. Long, Russell F. Settle, and Bruce C. Stuart, "Reimbursement and Access to Physicians' Services Under Medicaid," Journal of Health Economics, vol. 5 (1986).

8. Actual spending is based on the Health Care Financing Administration's national health expenditure accounts. It is composed of private insurance premiums plus out-of-pocket costs minus Medicare enrollees' out-of-pocket payments and Medigap premiums.

Illustrative Change in Spending for Hospital Services

If Medicare's payment rates were used to pay for all hospital services, including those provided to the currently uninsured, spending for hospital services would increase by between \$6.5 billion and \$29.6 billion, representing between 1.1 percent and 4.9 percent of national health expenditures.

The Uninsured. In the illustrations, covering the uninsured under Medicare's payment rates would increase spending on hospital services by between \$8.3 billion and \$16.3 billion (see Table 6). Spending at Medicare's rates would be between \$13.7 billion and \$18.5 billion. The estimates depend on assumptions about the difference between Medicare's payment rates and actual charges for hospital services, the increase in hospital services for the uninsured if they became insured, and the extent to which costs for hospital care to the uninsured are currently shifted onto the private sector.

In 1989, uncompensated hospital care to the uninsured totaled \$8.5 billion. Uncompensated care represents the cost of unpaid care. Actual charges for this care would have been higher, \$11.9 billion. Of these charges, hospitals received \$2.2 billion in sponsored care from state and local governments.⁹ Hospitals may also have shifted some of the costs for care to the uninsured onto private insurers. Alternatives 1 and 2 assume no cost-shifting, while Alternative 3 assumes that half of the difference between costs and sponsored care is currently shifted onto the private sector.

The uninsured are hospitalized far less and spend fewer days in the hospital than the insured. If Medicare coverage were extended to them, it is assumed that their hospital use would increase to the level of those insured who have similar demographic characteristics. One study shows that the uninsured would use 32 percent more hospital services under a typical private insurance plan.¹⁰ Another study indicates that the increase could be much higher.¹¹ Alternative 1 assumes that spending on hospital services for the currently uninsured would rise by 64 percent, if Medicare's payment rates were extended to them. Alternative 2 assumes an increase in hospital spending of 48 percent, and Alternative 3 assumes an increase of 32 percent.

Medicaid Recipients. Extending Medicare's payment rates to those who currently receive Medicaid benefits would increase hospital spending by between \$9.9 billion and \$18 billion, in the illustrations (see Table 6). Medicaid expenditures for hospital

9. These data on uncompensated care and state/local government contributions for care of the uninsured were obtained from an American Hospital Association survey of hospitals as reported by Dr. Irene Frazier, American Hospital Association, personal communication.

10. Congressional Research Service, Costs and Effects of Extending Health Insurance Coverage.

11. S. Long and J. Rodgers, "The Effects of Being Uninsured on Health Care Service Use: Estimates from the Survey of Income and Program Participation."

services totaled \$22.9 billion, and this amount would rise to between \$32.8 billion and \$40.9 billion with Medicare's payment rates.

Different assumptions about the ratio of Medicare to Medicaid payments for hospital services and about the increase in hospital use resulting from the higher payments generate the different estimates. Little information is available to use in determining how much Medicaid spending would rise if Medicare payment rates for hospital services were required. A payment-to-cost ratio of 78 percent for Medicaid patients implies that hospital payments would have to be increased 28 percent to make the Medicaid margin equal to zero. Since it is uncertain whether making the Medicaid margin equal to zero would equate Medicaid's and Medicare's payment rates, three different ratios of Medicare to Medicaid hospital payments are used: 1.5 for Alternative 1, 1.4 for Alternative 2, and 1.3 for Alternative 3.

Some evidence indicates that hospitals may discourage physicians from admitting Medicaid patients.¹² Improving the reimbursement for Medicaid patients would increase their use of hospital services. Medicaid recipients are assumed to increase their use of hospital services by 30 percent of the increase estimated for the uninsured. Thus, Alternative 1 assumes that hospital spending rises 19 percent as a result of the increase in the use of hospital services. Alternative 2 assumes a 14 percent increase in hospital spending, and Alternative 3 assumes a 10 percent rise.

The Privately Insured. In the illustrations, expenditures on hospital services for the privately insured would fall by \$4.7 billion to \$11.7 billion if Medicare's payment rates were extended to them (see Table 6).¹³ Spending at Medicare's rates would be between \$78.2 billion and \$88.4 billion. The difference in the estimates is almost entirely the result of the assumptions about the difference between Medicare and private insurance payment rates for hospital services. Alternatives 1 and 2 assume a 5 percent difference, and Alternative 3 assumes a 13 percent difference. Alternative 3 also assumes that private payers currently pay \$3.2 billion for the costs of care to the uninsured that is shifted to them. This factor makes relatively little difference, however, in the estimated change in spending.

Total. Expenditures for hospital care for the uninsured, Medicaid recipients, and the privately insured combined are estimated to rise between \$6.5 billion and \$29.6 billion under universal Medicare payment rates, including covering the uninsured (see Table 6). These amounts would represent an increase in national health expenditures of between 1.1 percent and 4.9 percent.

Spending for hospital services for these three groups totaled \$118.2 billion. Under universal Medicare payment rates, this spending would rise to between \$124.7

12. Congressional Research Service, Medicaid Source Book: Background Data and Analysis (November 1988).

13. Actual hospital spending on the privately insured is calculated in the same manner as actual spending for physician services (see footnote 9).

billion and \$147.8 billion. Increased expenditures for the uninsured and Medicaid recipients would more than offset the savings from lower payment rates for the privately insured. These illustrations suggest that the increased hospital payments for the uninsured and Medicaid recipients would be about the same.

Effect on Providers' Revenues

The universal extension of Medicare's payment rates would certainly affect the revenues of physicians and hospitals. Whether the change would be an increase or a decrease would depend on the effects of increased revenue from the currently uninsured and Medicaid recipients and decreased revenue for services provided to those who currently have private insurance. In either case, however, more services would be provided.

Physicians. The effect on physicians' revenues of extending Medicare's payment rates would depend on the following factors: the difference in payment rates between Medicare and other payers, changes in use that would occur as a result of changes in payment rates for these other payers, revenue from treating the currently uninsured, and any change in balance billing amounts. In the illustrative calculations, physicians' revenues rise between \$0.2 billion and \$6.9 billion when Medicare reimbursement rates are applied to all patients, including the uninsured (see Table 5).

Changes in the assumptions behind these numbers would yield different results. The calculations may be the most sensitive to the manner in which balance billing was treated. Because of the lack of good information on balance billing in the private sector, balance billing amounts could not be entirely subtracted from national health spending. The maximum balance billing in the private sector is composed of the difference between usual and allowed charges. For an office visit, this differential is estimated to be 16 percent. If this differential were the same for all services, the maximum amount of balance bills would have been \$9 billion in 1989. Balance billing under Medicare was \$2.2 billion. Thus, total balance billing may have been no more than \$11.2 billion.

If balance billing were eliminated, physicians' incomes would then fall by no more than this amount. On a per-physician basis, the reduction would be at most \$19,000, or 12 percent, on average. However, some specialty groups who use more balance billing would experience larger reductions.

Such reductions in physicians' incomes might have several effects. First, without controls on use, physicians would probably increase the volume of services provided. Studies of the Medicare program have shown that physicians increase volume sufficiently to offset at least half of any income decline resulting from a fee reduction.¹⁴ If this occurred, the decline in physicians' incomes would be cut in

14. Congressional Budget Office, "Physician Payment Reform Under Medicare" (April 1990).

half, to an average of 6 percent, but then national health expenditures would rise more.

With controls on use, physicians might not be able to increase volumes this much. In this case, a long-run effect of the decline in income could be a decrease in the supply of physician services. However, even with an 12 percent decline, physicians' average income would still be \$137,000, still over five times higher than the average U.S. income, and higher than physicians' incomes in other industrialized countries. Barring substantially better career alternatives, the supply of physicians might not be adversely affected even by such a decrease in their average income.

Hospitals. In the illustrations, hospitals' revenues would rise by between \$6.5 billion and \$29.6 billion if Medicare's payment rates were extended to all payers and coverage were provided to the uninsured (see Table 6). These increases in revenue would come from increases in payment rates for the currently uninsured and Medicaid recipients, and from volume increases for these two groups. While payment rates for those who currently have private insurance would fall, the increase in revenue from the other two groups would more than offset this decline, on average.

The average hospital's revenues might rise if uniform payment rates were adopted. Revenues would increase for hospitals that currently treat relatively more uninsured and Medicaid patients because the payment rates would be higher for these groups. However, the revenues of hospitals that treat relatively more of the privately insured could rise or fall, depending on the increases in revenue from providing more services to the uninsured and Medicaid recipients and the decreases from treating the privately insured. Hospitals that treat relatively fewer of the uninsured and Medicaid recipients would be willing to provide more services to them if uniform payment rates were adopted.

Hospitals that lose revenue might be able to offset the loss by changing their methods of operation. First, hospitals could operate more efficiently.¹⁵ Second, hospitals might shift services to outpatient settings, if it is more profitable.¹⁶ However, one option that is currently available to hospitals would not be possible if Medicare's payment rates were extended universally. Hospitals would not be able to shift costs from one payer to another, because all payers would be paying the same rate for the same service.

15. Jack Hadley, Stephen Zuckerman, and Judith Feder, "Profits and Fiscal Pressure in the Prospective Payment System: Their Impacts on Hospitals," Inquiry, vol. 26, no. 3 (Fall 1989).

16. Prospective Payment Assessment Commission, Medicare Prospective Payment and the American Health Care System, Report to the Congress, June 1990; Menke, Terri, "Impacts of PPS on Medicare Part B Expenditures and Utilization for Hospital Episodes of Care," Inquiry, vol. 27, no. 2 (Summer 1990); Janet B. Mitchell, Gerard Wedig, and Jerry Cromwell, "The Medicare Physician Fee Freeze: What Really Happened?" Health Affairs, vol. 8, no. 1 (Spring 1989).

ILLUSTRATIVE EFFECTS ON ADMINISTRATIVE COSTS

Under the illustrative alternatives, administrative costs might fall by as much as \$12.1 billion if the United States adopted an all-payer health care system and provided insurance coverage for the uninsured, and by between \$24 billion and \$49.1 billion if a single-payer system were adopted. Capturing these reductions would, however, require paying providers less than Medicare's current reimbursement rate.

All-Payer System

Under an all-payer system for physician and hospital services, with coverage provided to the uninsured, administrative costs could be reduced by requiring all payers to pay the same rates, no matter whether such rates were set at Medicare's levels or some others. The important point is that each publicly financed program and each private insurance company would pay the same rate for the same service. Such savings could total \$12.1 billion, representing 2 percent of national health spending (see Table 7).

Most, if not all, of the potential savings would be on hospital administration and physicians' overhead. The handling of claims could be standardized, so that providers could use uniform claims forms for all payers. Since everyone would have insurance coverage, the costs that providers' incur in collecting bad debts would decrease. The savings would not be as large as under a single-payer system, however, because providers would still engage in marketing and would still have to keep track of which payers covered each patient. An all-payer system could be streamlined by establishing a centralized administration system like the one proposed in New York's UNY-Care system, whereby providers would submit all claims to a central administrative body that would collect funds from public and private payers and distribute money to providers. For purposes of the illustration, the assumption is that any savings on providers' administrative costs under an all-payer system would be half as large as those under a single-payer system.

Little, if any, savings would be expected in the administrative costs of payers under an all-payer system. A proliferation of private insurance companies plus the publicly financed programs would still take place. Private insurance companies would still market their products. Claims administration would not be any simpler than it is now for payers, since the only difference would be the rates paid. Thus, the illustration assumes no savings on program administration and insurance overhead under an all-payer system, and instead assumes increased costs attributable to the larger number of people involved.

Single-Payer System

Total potential administrative savings from adopting a single-payer system include savings on program administration and insurance overhead, as well as those on

hospital administration and physicians' overhead.¹⁷ The particular reimbursement levels would not affect the potential amount of administrative savings, since these would accrue from a unified and coordinated health system. In the illustrations, these savings are estimated to be between \$24 billion and \$49.1 billion in 1989, representing between 4 percent and 8.1 percent of national health expenditures (see Table 8). In 1989, total administrative costs were \$140.9 billion. Under a single-payer system, administrative costs would decrease to between \$91.8 billion and \$116.9 billion.

In 1989, Medicare's administrative costs were \$2.3 billion, or 2.3 percent of total benefits of \$99.8 billion. The administrative costs for Medicaid were 5.2 percent of total benefits, while insurance overhead represented 15.5 percent of benefit payments for private insurance plans.¹⁸ Hence, a unified health care system offers a potential for savings on program administration and insurance overhead costs.

Savings on program administration and insurance overhead would result from the consolidation of the numerous private insurance plans and government health programs into one reimbursement system. Under a universal health plan, determining eligibility would involve no costs, since essentially everyone would be covered. Private insurance companies would avoid the costs for marketing and for assessing risk to calculate premiums. Paying claims would be simplified because only one set of reimbursement rules would apply.

Actual 1989 program administration and insurance overhead were \$35.3 billion. If program administration represented 2 percent of personal health expenditures, as it does now for Medicare, national health expenditures could be reduced by about \$24 billion (see Table 8).

In addition to savings on program administration and insurance overhead, the cost of providers' administration offers potential savings. Applying the same reimbursement methodology to all patients would simplify the filing of claims and reduce expenditures for collecting bad debts.

Estimates based on one study indicate that the cost of providers' administration could be reduced from 19.9 percent to 15.1 percent of personal health expenditures if the United States adopted a national health insurance plan similar to Canada's.¹⁹ The estimate of the savings on hospital administration costs is not directly applicable to the case of a single-payer system in the United States, however,

17. Savings on nursing home administration are also included, because an all-payer or a single-payer system could reduce the administrative costs of all health care providers. The savings on hospital administration and physicians' overhead would account for most of the total savings.

18. Office of National Cost Estimates, Health Care Financing Administration.

19. D. Himmelstein and S. Woolhandler, "Cost Without Benefit: Administrative Waste in U.S. Health Care," The New England Journal of Medicine (February 13, 1986).

because some costs eliminated in the Canadian system might remain in the United States--such as costs for tracking hospital use at the individual patient level and marketing by hospitals. The assumption is that single-payer systems would yield at most half of the estimated savings on hospital administration.

Reducing payment levels to health care providers would have to achieve these latter savings. The ability of the government to extract the full amount of the potential savings on the administrative costs of providers is uncertain, however, because it would require that providers reduce their administrative costs by the full amount and that the government lower payment levels accordingly. Because of the uncertainty about the potential savings on provider administrative costs, the illustrations use different assumptions about the extent of the savings. Alternative 1 assumes that none of the potential reduction in providers' administrative costs would be saved. Alternative 2 assumes that half of the calculated savings would be attained, and Alternative 3 assumes all the savings would occur.

Actual spending on providers' administration was \$105.6 billion (see Table 8). Under a single-payer system, this spending could fall to as low as \$81.1 billion.

ILLUSTRATIVE CHANGE IN NATIONAL HEALTH EXPENDITURES

In the illustrations, if Medicare's rates were paid for all physician and hospital services in an all-payer system, national health expenditures would change by between -\$8 billion and \$34.4 billion. In a single-payer system, the change would be between -\$45 billion and \$9.9 billion.

All-Payer System

If uniform rates for hospital and physician services were paid by all payers, and the uninsured were also covered by these rates, national health expenditures could change substantially. The illustrative examples, reflecting differing assumptions, indicate that the change in national health expenditures would fall in the range of -\$8 billion to \$34.4 billion (see Table 9). These amounts would represent between -1.3 percent and 5.7 percent of national health expenditures. The change in national health spending would be almost entirely the result of a change in physician and hospital reimbursement, including the costs to these providers of administration. The illustrative examples assume that the administrative costs of public programs and private insurance overhead would increase slightly because of the larger number of insured persons.

Single-Payer System

The total change in national health expenditures that might occur from adopting a single-payer health care system that covered the entire population and under which physicians and hospitals were paid at Medicare's rates would be the sum of the

increase in spending on physician and hospital services and the savings on administrative costs. In the illustrations, physician and hospital spending, including providers' administration, would change by between -\$17.8 billion and \$36.5 billion from adopting such a system. The savings on program administration and insurance overhead might be about \$24 billion. Thus, the total change in spending would be between -\$45 billion and \$9.9 billion, representing between -7.4 percent and 1.6 percent of national health expenditures (see Table 10).

APPENDIXES

APPENDIX A

CHANGE IN SPENDING FOR

PHYSICIAN SERVICES

This appendix shows the calculations of the change in national health spending for physician services under the illustrations that extend Medicare's payment rates to everyone, including the uninsured.

COMPARING MEDICARE'S RATES AND ACTUAL CHARGES

Submitted charges on assigned claims totaled \$43,600 million and the reduction of these charges on assigned claims was 31.2 percent in 1989. Allowed charges were then: $(1 - .312) (\$43,600) = \$29,997$ million. Similarly, submitted charges on unassigned claims of \$8,800 million and a reduction of 25.1 percent imply that allowed charges on unassigned claims totaled \$6,591 million. Then total submitted charges were \$43,600 million + \$8,800 million = \$52,400 million, and allowed charges were \$29,997 million + \$6,591 million = \$36,588 million. The overall reduction rate was then:

$$(\$52,400 - \$36,588) / \$52,400 = .302, \text{ or approximately 30 percent.}$$

COMPARING MEDICARE AND PRIVATE INSURANCE RATES

The Blue Shield charge for an office visit was \$25.87 for participating physicians and \$24.77 for nonparticipants in 1984-1985. Using the percentage of Medicare charges represented by participants and nonparticipants as weights, the overall Blue Shield charge was:

$$(\$25.87) (.66) + (\$24.77) (.34) = \$25.50.$$

The Medicare charge for an office visit was \$22.08 for participants and \$20.47 for nonparticipants, implying an average of:

$$(\$22.08) (.66) + (\$20.47) (.34) = \$21.53.$$

The difference between Medicare and private insurance charges is then:

$$(\$25.50 - \$21.53) / \$25.50 = .156, \text{ or approximately 16 percent.}$$

ESTIMATED SPENDING AT MEDICARE'S RATES

Estimated spending at Medicare's rates for the uninsured is based on the 1988 amount of uncompensated physician care. Uncompensated care for physician services includes all charity care (\$5.8 billion), and 68 percent of bad debt (2.2 billion) for a total of \$8 billion. This 68 percent figure was obtained by assuming

that it equaled the percentage of hospital bad debts that were estimated to be for the uninsured.

Spending at Medicare's rates is obtained by first applying the Medicare reduction on actual charges of 30 percent:

$$(1-.3) (\$8 \text{ billion}) = \$5.6 \text{ billion.}$$

Volume increases are then applied. Under the assumptions of Alternative 1, spending increases by 56 percent. Thus, spending rises by 56 percent of \$5.6 billion:

$$\$5.6 \text{ billion} + .56 (\$5.6 \text{ billion}) = \$8.7 \text{ billion.}$$

Applying the different assumptions about the volume increases under Alternatives 2 and 3 gives estimated spending at Medicare rates of \$8 billion under Alternative 2 and \$7.2 billion under Alternative 3.

Actual Medicaid spending for physician services was \$4.2 billion in 1989. Medicare's payment rates are assumed to be 50 percent higher than Medicaid rates under Alternative 1, 40 percent higher under Alternative 2, and 30 percent higher under Alternative 3. Thus, under Alternative 1, spending at Medicare's rates would be:

$$(1+.5) (\$4.2 \text{ billion}) = \$6.3 \text{ billion.}$$

Applying the Alternative 1 increase in use of 20 percent gives:

$$\$6.3 \text{ billion} + .20 (\$6.3 \text{ billion}) = \$7.6 \text{ billion.}$$

Similarly, spending at Medicare's rates is \$6.8 billion under Alternative 2 and \$6.1 billion under Alternative 3.

Spending at Medicare's rates for the privately insured is obtained by applying the difference between Medicare's rates and private insurance rates of 16 percent, and then applying a response in the volume of services provided by physicians. Actual spending for physician services was \$65.3 billion under Alternatives 1 and 2 and \$61.3 billion under Alternative 3. Spending before the volume response would be:

$$(1-.16) (\$65.3 \text{ billion}) = \$54.9 \text{ billion for Alternatives 1 and 2; and}$$

$$(1-.16) (\$61.3 \text{ billion}) = \$51.5 \text{ billion for Alternative 3.}$$

Physicians are assumed to increase their volume of services in response to a decrease in payment rates such that half of their income decline is offset. Thus, spending at Medicare's rates with the volume response would be:

$\$54.9 \text{ billion} + (\$65.3 \text{ billion} - \$54.9 \text{ billion}) (.5) = \60.1 billion for Alternatives 1 and 2; and

$\$51.5 \text{ billion} + (\$61.3 \text{ billion} - \$51.5 \text{ billion}) (.5) = \56.4 billion for Alternative 3.

APPENDIX B

CHANGES IN SPENDING FOR HOSPITAL SERVICES

This appendix shows the calculations of the change in national health spending for hospital services under the illustrations in which Medicare's payment rates are paid for all hospital services, including those for the currently uninsured.

COMPARING MEDICARE AND PRIVATE INSURANCE RATES

The difference between Medicare's payment rates and private insurance rates for hospital services is calculated as the percentage by which private sector payments would have to decrease to make the private sector margin equal the Medicare margin. Since the Medicare hospital margin has changed significantly in the last few years, two different discounts are calculated, using Medicare margins of 1.4 percent and -2.5 percent.

The private sector margin is solved from the following equation:

$$(\text{Mcr marg})(\text{Mcr share})+(\text{Mcd marg})(\text{Mcd share})+(\text{Pr marg})(\text{Pr share})=\text{Tot marg},$$

where Mcr marg = Medicare margin,
Mcr share = Medicare share of hospital revenue,
Mcd marg = Margin for the uninsured and Medicaid recipients,
Mcd share = Medicaid/uninsured share of hospital revenue,
Pr marg = Margin for privately insured patients,
Pr share = Private insurance share of hospital revenue, and
Tot marg = Total hospital margin.

Plugging values into this equation using the Medicare margin of 1.4 percent gives:

$$(.014) (.358)+(-.28) (.136)+(\text{Pr marg}) (.506) = 0,$$

which implies:

$$\text{Pr marg} = 6.5 \text{ percent.}$$

To find the level of private sector payments that would make the private margin equal to 1.4 percent, solve the following equation:

$$\text{Medicare margin} = (\text{private revenue} - \text{private cost})/\text{private revenue.}$$

First find the level of private sector costs:

$$(\text{private revenue} - \text{private cost})/\text{private revenue} = \text{private margin, or}$$

$$(\$93.1 \text{ billion} - \text{private cost})/\$93.1 \text{ billion} = .065,$$

$$\text{private cost} = \$87.0 \text{ billion.}$$

Then private revenue to make the private sector margin equal 1.4 percent is:

$$.014 = (\text{private revenue} - \$87.0 \text{ billion})/\text{private revenue},$$

which implies:

$$\text{private revenue} = \$88.2 \text{ billion.}$$

The difference between Medicare's and private insurance rates for hospital services is then:

$$(\$93.1 \text{ billion} - \$88.2 \text{ billion})/\$93.1 \text{ billion} = 5 \text{ percent.}$$

Following the same procedure, but using a Medicare margin of -2.5 percent, gives a Medicare discount of 13 percent. The only other difference between this case and the first one is that \$3.2 billion of the private insurance spending on hospital care is assumed to be cost shifting for care of the uninsured. This assumption slightly alters the hospital revenue shares.

ESTIMATED SPENDING AT MEDICARE'S RATES

Total uncompensated care costs for hospital services totaled \$11.1 billion in 1989. However, not all of this was for the uninsured. One study found that charity care accounted for 27.4 percent of uncompensated care and bad debts made up the rest. Of bad debts, 68 percent was for the uninsured.¹ It is assumed that all charity care is for the uninsured. Applying these percentages to the 1989 data gives uncompensated hospital care for the uninsured:

$$(\$11.1 \text{ billion}) (.274) + (\$11.1 \text{ billion}) (1-.274) (.68) = \$8.5 \text{ billion.}$$

Applying a charge/cost ratio of 1.405 yields charges for care to the uninsured of \$11.9 billion.

Spending at Medicare's rates is estimated by first applying the difference between Medicare's and private sector payments to charges for hospital care to the uninsured. Then, an increase in use is assumed. Under Alternative 1, the difference in payment rates is assumed to be 5 percent. Applying this difference gives spending without the increase in use of:

1. Gloria J. Bazzoli, "Health Care for the Indigent: Overview of Critical Issues," Health Services Research, vol. 21, no. 3 (August 1986).

$$(1-.05) (\$11.9 \text{ billion}) = \$11.3 \text{ billion.}$$

Use is assumed to increase spending by 64 percent under Alternative 1. Thus, spending at Medicare's rates would be:

$$(1+.64) (\$11.3 \text{ billion}) = \$18.5 \text{ billion.}$$

Similarly, spending at Medicare rates would be \$16.7 billion under the assumptions of Alternative 2 and \$13.7 billion under Alternative 3.

Actual spending on hospital services for Medicaid recipients was \$22.9 billion in 1989. Medicare's hospital payment rates are assumed to be 50 percent higher than Medicaid rates under Alternative 1, 40 percent higher under Alternative 2, and 30 percent higher under Alternative 3. Without any increase in use, Medicaid spending under Alternative 1 would be:

$$(1+.5) (\$22.9 \text{ billion}) = \$34.4 \text{ billion.}$$

An increase in use is added to this amount. Under Alternative 1, a 19 percent increase in spending is assumed:

$$(1+.19) (\$34.4 \text{ billion}) = \$40.9 \text{ billion.}$$

Similarly, under the assumptions of Alternative 2, spending at Medicare rates would be \$36.6 billion, and under Alternative 3 it would be \$32.8 billion.

Actual spending on hospital services for the privately insured was \$93.1 billion in 1989. Under Alternative 3, \$3.2 billion of this is assumed to be for care to the uninsured, so actual spending is shown as \$89.9 billion. Spending at Medicare's rates is obtained by applying the difference between Medicare's and private sector hospital rates. Under Alternatives 1 and 2, the difference is 5 percent, so spending at Medicare's rates would be:

$$(1-.05) (\$93.1 \text{ billion}) = \$88.4 \text{ billion.}$$

Similarly, spending at Medicare's rates is estimated to be \$78.2 billion under Alternative 3.

APPENDIX C

SAVINGS ON ADMINISTRATIVE COSTS

This appendix shows the calculations of the potential savings on administrative costs that might occur if an all-payer system or a single-payer system were adopted.

CHANGE IN PROGRAM ADMINISTRATIVE COSTS AND INSURANCE OVERHEAD

Actual spending in the United States on health care administration totaled \$35.3 billion in 1989. The estimate of program administrative costs under a single-payer system is obtained by multiplying total health expenditures by the share of Medicare spending represented by administrative costs, which was 2 percent in 1989. Personal health expenditures totaled \$530.7 billion in 1989. Under a universal Medicare expansion, total benefits would be \$530.7 billion plus the addition to spending calculated in Tables 5 and 6. Under Alternative 1, program administrative costs would be:

$$(\$530.7 \text{ billion} + \$36.5 \text{ billion}) (.020) = \$11.3 \text{ billion.}$$

Similarly, program administrative costs would be \$11.2 billion under Alternative 2 and \$10.7 billion under Alternative 3.

The costs of program administration and insurance overhead in an all-payer system are calculated in an analogous manner.

CHANGE IN THE COSTS OF PROVIDERS' ADMINISTRATION

Actual costs for providers' administration were estimated to be 19.9 percent of benefit payments, or \$105.6 billion in 1989. Estimates show that these costs could be reduced to 15.1 percent of benefits.

Alternative 3 assumes that all of these savings would be obtained under a single-payer Medicare program. Thus, spending on hospital and nursing home administration and physicians' overhead would be:

$$(\$530.7 \text{ billion} + \$6.7 \text{ billion}) (.151) = \$81.1 \text{ billion.}$$

Similarly, assuming that half of the potential savings could be obtained under Alternative 2 yields spending under a universal Medicare program of \$95.6 billion. Alternative 1 assumes no savings on providers' administration.

Under an all-payer system, the savings on providers' administration are assumed to be half the size of the savings under a single-payer system.