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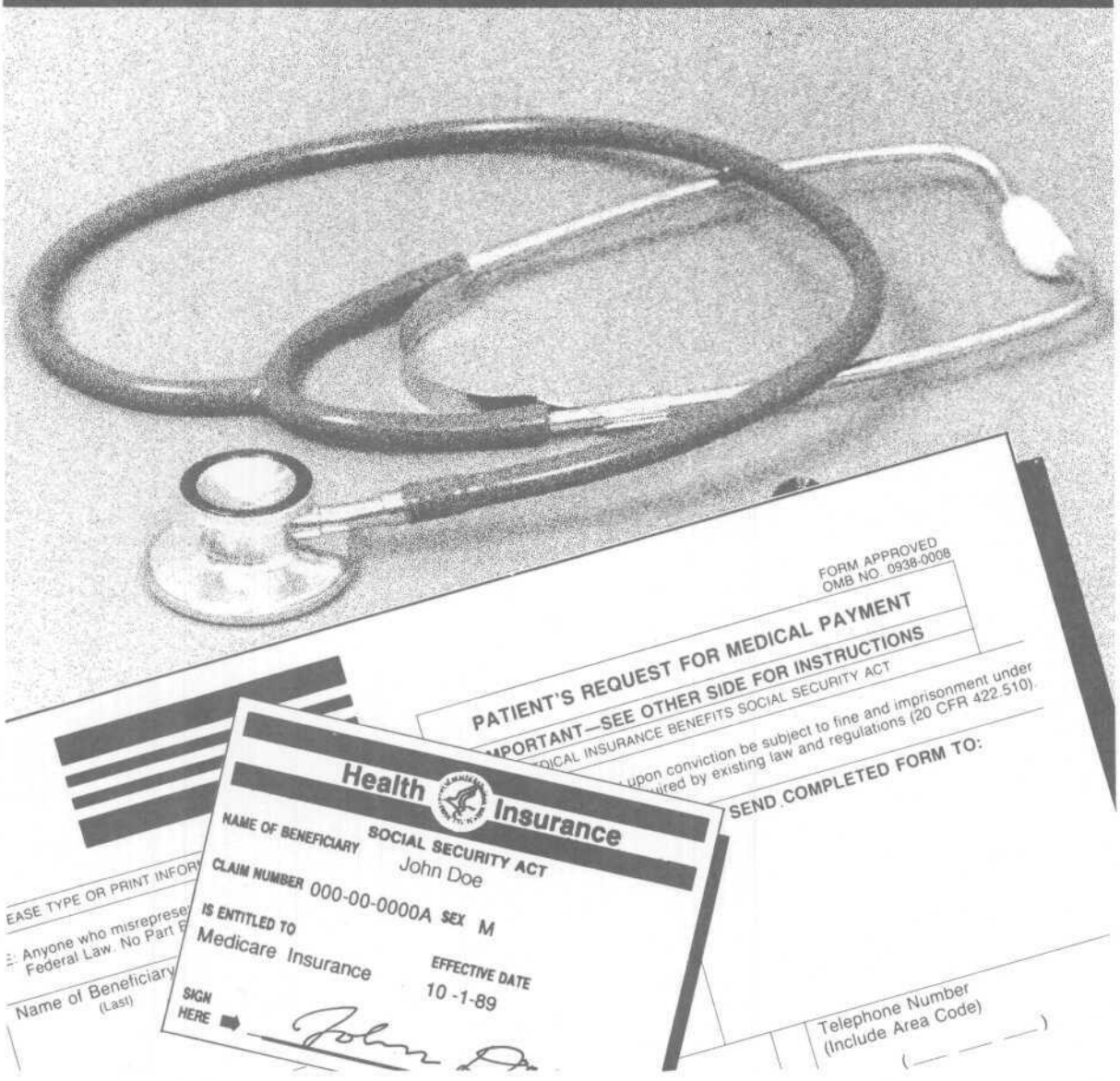
Physician Payment Reform Under Medicare



A CBO STUDY

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S U M M A R Y

April 1990

CBO STUDY ON PHYSICIAN PAYMENT REFORM

Medicare's system for paying physicians will be changed substantially by provisions in the Omnibus Budget Reconcilation Act of 1989. In addition to reducing payment rates for selected services for 1990, the Reconciliation Act provides for replacing Medicare's current charge-based payment system with a Medicare fee schedule (MFS) as of 1992. By 1996, the MFS will be entirely resource-based; that is, each fee will reflect the cost of the resources that must be used to provide the service. In addition, physicians' actual charges will be limited to no more than 115 percent of MFS amounts. These new payment provisions are examined in the Congressional Budget Office study *Physician Payment Reform Under Medicare.*

This study was prepared at the request of Congressman Henry A. Waxman, Chairman of the Subcommittee on Health and the Environment of the House Committee on Energy and Commerce. It describes the changes in physician payment enacted under the Reconciliation Act and presents estimates of the effects on physicians and on enrollees. It also outlines some of the reform issues that have yet to be resolved.

The study indicates that the MFS will increase payment rates for visits relative to rates for technical procedures, thereby favoring medical specialties over surgical and other specialties. In addition, rates in rural areas will increase relative to those in urban areas. For 1992, fees are to be set to keep Medicare's aggregate payments to physicians unchanged from the level that would have occurred under previous law. Physicians' receipts from Medicare (including balance-billing amounts paid by patients) will fall by an average of nearly 3 percent, however, because of new limits on actual charges. Also as a result of these limits, out-of-pocket costs for enrollees will fall by an average of 10 percent in 1992.

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PHYSICIAN PAYMENT REFORM UNDER MEDICARE

The Congress of the United States
Congressional Budget Office

PREFACE

Provisions in the Omnibus Budget Reconciliation Act of 1989 will substantially change Medicare's system for paying physicians. In addition to reducing payment rates for selected services for 1990, the Reconciliation Act replaces Medicare's current charge-based payment system with a Medicare fee schedule (MFS) as of 1992. By 1996, the MFS will be entirely resource-based; that is, each fee will reflect the cost of the resources used to provide the service. A number of refinements must be made, however, before the MFS will be ready for implementation. This study by the Congressional Budget Office (CBO) was requested by the Chairman of the Subcommittee on Health and the Environment of the House Committee on Energy and Commerce as background for further deliberations on payment reform.

Sandra Christensen and Scott Harrison of CBO's Human Resources and Community Development Division prepared the study, under the direction of Nancy Gordon and Kathryn Langwell. Susan Hilton Labovich, also of the Human Resources and Community Development Division, did the extensive programming required for the study. Holly Harvey of CBO's Budget Analysis Division provided spending projections and cost estimates.

Others outside CBO made substantial contributions to the study. Staff at the Physician Payment Review Commission (PPRC) developed the data file used for the simulations. In addition to providing data, PPRC staff--especially David Colby, Paul Ginsburg, and David Juba--offered advice as needed. The physician-level claims file used to obtain estimates of behavioral responses to changes in Medicare's payment policies was given to CBO by Thomas Rice, who was equally generous in helping CBO staff use it correctly.

Paul L. Houts edited the manuscript. Jill Bury typed the drafts, and Toby Whitney prepared the study for publication.

Robert D. Reischauer
Director

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SUMMARY

Under the Omnibus Budget Reconciliation Act of 1989 (the Reconciliation Act), Medicare's payment system for physicians' services will change significantly. Provisions of the act eliminate the current charge-based system and replace it with a resource-based fee schedule, under which each fee will reflect the cost of the resources necessary to produce the service. In addition, new ceilings on physicians' actual charges will be imposed, so that enrollees' balance-billing costs (the excess of actual charges over Medicare's payment rates) will be no more than 15 percent of fee schedule amounts when the new limits are fully in place.

Medicare's fees will be entirely resource-based by 1996 but, during a four-year transition period from 1992 through 1995, fees for most services will be a blend of resource-based values and historical charges. The current system based on physicians' charges will remain in place for 1991 to provide time to finish developing the new system. The new limits on actual charges will be introduced in 1991 (at 125 percent of prevailing charges), then reduced for 1992 (to 120 percent of fee schedule amounts), and fully in place in 1993 (at 115 percent of fees).

Unless superseded by legislative action, Medicare's fees will be adjusted annually by an update factor based on costs that will be reduced if growth exceeds a specified target in Medicare's expenditures for physicians' services in previous years. Although this procedure will slow the growth in Medicare's costs under current projections, a concern is that it may do so by reducing enrollees' access to care. For example, if Medicare Fee Schedule (MFS) rates fall much below rates paid by other insurers, some physicians might become reluctant to accept Medicare patients. Those who continued to do so might choose no longer to accept assignment, so that they could collect their actual charges rather than Medicare's lower payment rates. If this occurred, balance-billing costs would increase for some enrollees. To guard against these outcomes, the Reconciliation Act mandates that access for enrollees be monitored. It also provides funding for research to determine effective treatments and to establish guidelines for care, in an

effort to reduce growth in spending for physicians' services by eliminating unnecessary use of services.

The Reconciliation Act provides a general framework for payment reform, but many details are yet to be resolved. For example, the codes used to identify some services (especially visits and surgical procedures) must be more clearly defined before their fees can be accurately set. The services for which valid resource-based fee schedule amounts have been estimated must be expanded to include all physicians' services covered by Medicare. It must be decided whether to redefine Medicare's current payment localities (which do not always represent appropriate markets for physicians' services) and how to adjust the amounts in the fee schedule for differences among localities in physicians' expenses, such as office space and personnel.

Hence, the Medicare fee schedule that will actually be put in place is still evolving. At this time, only a preliminary version is available, which was developed by the Physician Payment Review Commission for use during the 1989 debate on reform. This study uses that preliminary fee schedule to estimate the effects of payment reform on physicians and on enrollees.

Although refinements to the MFS will probably alter its impact somewhat, they are unlikely to reverse the dominant effects shown here. These effects include an increase in payment rates for visits relative to rates for technical procedures, thereby favoring physicians in medical specialties over those in surgical and other specialties. The effects also include an increase in payment rates in rural areas relative to rates in urban areas.

If there were no changes in the number or mix of services provided, and if total payments were the same as they would have been under prior law, the realignment in Medicare's payments that would occur under a fully established MFS would be substantial (see Summary Table 1). Medical specialists would experience an increase of about 7 percent in their share of total payments; among this group, the share going to family and general practitioners would increase by about 25 percent. Surgical specialists would see their share of total payments fall by 5 percent, while the share for other physicians would fall by 7

percent. The share of payments going to physicians practicing in rural areas would increase by about 8 percent, while the share paid to those practicing in urban areas would fall by about 1 percent.

The provisions of the Reconciliation Act, however, specify that MFS rates are to be set so that total payments--following any induced changes in services provided--will be the same as they would have been under previous law. Because of behavioral responses by physicians and their patients, the overall volume of services should increase under the new payment system. Consequently, rates will have to be set at a lower level than was assumed in Summary Table 1 to achieve budget neutrality. The effects of payment reform shown in the sections below reflect this reduction.

The effects of reform are estimated relative to payment provisions for 1990, after incorporating the payment changes for 1990 contained in the Reconciliation Act. The 1990 changes generally reduce payment

SUMMARY TABLE 1. CHANGE BEFORE BEHAVIORAL RESPONSES IN SHARE OF MEDICARE'S PAYMENTS RECEIVED UNDER THE MEDICARE FEE SCHEDULE, BY SPECIALTY AND TYPE OF AREA (In percent)

	Initial Share of Payments	Percentage Change in Share of Payments		
		All Areas	Urban Areas	Rural Areas
All Specialties	100	0.0	-1.1	8.2
Medical specialties	43	7.4	5.2	23.9
Surgical specialties	37	-5.0	-5.4	-2.4
Other specialties	20	-7.0	-7.1	-6.5

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: Medicare's payments include both Medicare's reimbursements and enrollees' cost-sharing amounts.

rates for certain services that were overvalued relative to their expected MFS rates. If total payments for physicians' services are further reduced for 1991 as part of the budget reconciliation act for that year, the budget-neutral MFS values for 1992 and subsequent years will be reduced as well, unless the Congress takes some offsetting action.

Throughout this study, Medicare's payments are defined to include all of the amounts allowed by Medicare; that is, both Medicare's reimbursements and cost-sharing amounts for enrollees are incorporated. Physicians' receipts from Medicare include Medicare's payments plus balance-billing amounts paid by enrollees. However, physicians' receipts from Medicare are, on average, only about 30 percent of their receipts from all payers. As a result, the effects of changes in Medicare's payment provisions on practice income for physicians are considerably smaller than the effects on physicians' receipts from Medicare that are shown in this study.

ESTIMATED EFFECTS OF THE 1992 PAYMENT PROVISIONS--A CONSTRAINED MEDICARE FEE SCHEDULE

The 1992 fee schedule amounts will be set entirely by the MFS for only about 40 percent of services--those for which the difference between the MFS value and the average Medicare payment in the locality under previous law is no more than 15 percent of the MFS amount. For the other 60 percent of services, the 1992 fee will be a blend of the average Medicare payment under prior law and the MFS value. Medicare's payment rate will be the lesser of the Medicare fee or the physician's actual charge. In addition, each actual charge will be capped at 120 percent of the Medicare fee.

The initial MFS values are to be set to achieve the same total for Medicare's payments for physicians' services as would have occurred under the current payment system, making allowance for any change in services provided in response to the new payment provisions. This study adopts the behavioral assumptions usually made in the past by Medicare's actuaries in the Department of Health and Human Services (HHS), because the Reconciliation Act specifies that the level of MFS rates will be set by the Secretary of HHS. Under these assumptions,

increases in the volume of services will offset 50 percent of the initial impact of a reduction in physicians' receipts. At the same time, growth of volume will not slow in response to increases in physicians' receipts. HHS is reexamining these assumptions, however, to determine whether they are appropriate in the context of payment reform.

The estimates in this study show both the "initial impact" of the new payment provisions--that is, before any changes in behavior are incorporated--and the estimated effects following those responses, assuming that the assumptions used to set the rates are correct. If those assumptions turn out to be incorrect, the process by which payment rates are updated in later years will permit some correction.

Effect on Medicare's Payments and Physicians' Receipts

If the 1992 provisions were in effect in 1990, their initial impact would be to reduce Medicare's payments to physicians by more than 3 percent, on average nationwide, while physicians' receipts from Medicare would fall by nearly 6 percent (see upper panel of Summary Table 2). The impact on physicians' receipts would be more negative than the effect on payments because of the new limits on actual charges, which will reduce the amounts physicians can collect through balance-billing. Total payments would fall by about 1 percent for medical specialties as a group. Among this group, however, payments would increase by more than 8 percent for general and family practitioners. Medicare's payments would fall by more than 5 percent for surgical specialties, and by nearly 5 percent for other physicians.

After responses that will increase the volume of services provided, Medicare's payments would be unchanged if the assumptions used to set the fees are correct (see lower panel of Summary Table 2). Physicians' receipts from Medicare would fall by nearly 3 percent, only about half the initial impact. Medicare's payments would increase by nearly 2 percent for medical specialties, although their receipts would fall by about 1 percent. For surgical and other specialties, the drop in receipts would be about half the initial impact and the drop in payments would be no more than a third of the initial impact.

Most physicians practicing in rural areas would fare better than those in urban areas. The initial impact of the 1992 provisions on urban physicians would be to reduce Medicare's payments to them by nearly 4 percent, while overall payments to rural physicians would be virtually unchanged. Subsequent to behavioral responses, payments to urban physicians would drop while payments to rural physicians would increase by nearly 3 percent. Receipts, however, would fall for both groups.

SUMMARY TABLE 2. CHANGE IN MEDICARE'S PAYMENTS AND PHYSICIANS' RECEIPTS UNDER 1992 PAYMENT PROVISIONS, BY SPECIALTY AND TYPE OF AREA (In percent)

		Percentage Change in Payments and Receipts					
		All Areas		Urban Areas		Rural Areas	
	Initial Share of Payments	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts
		Initial Impact Before Behavioral Responses					
All Specialties	100	-3.3	-5.9	-3.7	-6.2	0.0	-3.6
Medical specialties	43	-0.8	-3.7	-1.7	-4.4	5.7	1.1
Surgical specialties	37	-5.5	-8.4	-5.7	-8.5	-4.5	-7.8
Other specialties	20	-4.5	-5.9	-4.6	-5.9	-4.1	-6.0
		Estimated Effect After Behavioral Responses					
All Specialties	100	0.0	-2.6	-0.4	-2.8	2.6	-0.9
Medical specialties	43	1.8	-1.1	1.1	-1.6	7.0	2.5
Surgical specialties	37	-1.3	-4.2	-1.4	-4.2	-0.7	-3.8
Other specialties	20	-1.5	-2.9	-1.6	-2.9	-0.9	-2.8

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: Medicare's payments include both Medicare's reimbursements and enrollees' cost-sharing amounts. Physicians' receipts include Medicare's payments plus balance-billing. Receipts from non-Medicare patients--which are 70 percent of total receipts, on average--are not shown.

SUMMARY TABLE 3. CHANGE IN BALANCE-BILLING AND TOTAL LIABILITY FOR ENROLLEES WITH OUT-OF-POCKET COSTS UNDER 1992 PAYMENT PROVISIONS (In 1990 dollars)

	Under Prior Law		Change in Balance-Billing		Change in Total Liability	
	Balance-Billing	Total Liability	Dollars	Percent	Dollars	Percent
Initial Impact Before Behavioral Responses	60	287	-29.45	-49.4	-35.13	-12.2
Estimated Effect After Behavioral Responses	60	287	-27.03	-45.4	-27.19	-9.5

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

Effect on Enrollees' Out-of-Pocket Costs

The initial impact of the 1992 provisions would reduce out-of-pocket costs for enrollees for Medicare-covered services by about 12 percent, or $35, on average, over all enrollees with any liability (see Summary Table 3). Most of this decline would represent lower balance-billing costs, which would fall by $29 because of the new limits on physicians' actual charges.

Even after responses that increase the volume of services, out-of-pocket costs for enrollees would be lower by more than 9 percent, or $27, on average, compared with their costs under prior law. Virtually all of this reduction would be the result of lower balance-billing costs.

ESTIMATED EFFECTS OF THE 1996 PAYMENT PROVISIONS--A FULLY IMPLEMENTED MEDICARE FEE SCHEDULE

The MFS rates designed to achieve budget neutrality when incorporated into the transition rules for 1992 would reduce Medicare's costs if they had been fully established in that year instead. Under the transition mechanism for 1992, more fees will exceed their MFS values than will fall below them. Consequently, full implementation of the MFS rates would reduce Medicare's payments because the drop in

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payments for services whose transitional rates are overvalued would be larger than the increase in payments for services whose transitional rates are undervalued.

Effect On Medicare's Payments and Physicians' Receipts

The initial impact of fully establishing the MFS in 1990 would be to reduce Medicare's payments to physicians by 12 percent (see Summary Table 4). Payments to medical specialties would fall by nearly 6 percent, while payments to surgical and other specialties would drop by about 17 percent. On average over all specialties, physicians' receipts would fall by nearly 15 percent.

SUMMARY TABLE 4. CHANGE IN MEDICARE'S PAYMENTS AND PHYSICIANS' RECEIPTS UNDER 1996 PAYMENT PROVISIONS, BY SPECIALTY AND TYPE OF AREA (In percent)

		Percentage Change in Payments and Receipts					
		All Areas		Urban Areas		Rural Areas	
	Initial Share of Payments	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts
		Initial Impact Before Behavioral Responses					
All Specialties	100	-12.0	-14.8	-13.0	-15.6	-4.9	-9.1
Medical specialties	43	-5.7	-8.9	-7.6	-10.6	8.6	2.9
Surgical specialties	37	-16.7	-19.8	-17.1	-20.1	-14.2	-17.8
Other specialties	20	-17.0	-18.5	-17.0	-18.5	-17.0	-19.1
		Estimated Effect After Behavioral Responses					
All Specialties	100	-3.9	-6.8	-4.7	-7.4	1.6	-2.6
Medical specialties	43	0.2	-3.1	-1.4	-4.3	11.4	5.7
Surgical specialties	37	-6.8	-9.8	-7.0	-10.0	-5.2	-8.7
Other specialties	20	-7.7	-9.2	-7.7	-9.2	-7.1	-9.2

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: Medicare's payments include both Medicare's reimbursements and enrollees' cost-sharing amounts. Physicians' receipts include Medicare's payments plus balance-billing. Receipts from non-Medicare patients--which are 70 percent of total receipts, on average--are not shown.

After behavioral responses, however, Medicare's payments would be lower by about 4 percent. Payments to medical specialties would increase only slightly, on average. Among this group, however, general and family practitioners would have their payments increase by more than 11 percent. Payments to surgical and other specialties would fall by roughly 7 percent to 8 percent. The effect on physicians' receipts would be less than half the initial impact for each specialty group.

For both medical and surgical specialties, physicians in rural areas would fare better than those in urban areas. Initially, payments would drop by 13 percent in urban areas, but by only about 5 percent in rural areas. After behavioral responses, payments would fall by about 5 percent in urban areas but would increase in rural areas. Receipts would fall by more than 7 percent for urban physicians, and would fall by less than 3 percent for physicians in rural areas.

Effect On Enrollees' Out-of-Pocket Costs

The initial impact of MFS rates on enrollees with any out-of-pocket costs under Medicare would be to reduce their liability for those costs by about 20 percent, or $58, on average (see Summary Table 5). Balance-billing costs for these enrollees would be reduced by $37.

SUMMARY TABLE 5. CHANGE IN BALANCE-BILLING AND TOTAL LIABILITY FOR ENROLLEES WITH OUT-OF-POCKET COSTS UNDER 1996 PAYMENT PROVISIONS (In 1990 dollars)

	Under Prior Law		Change in Balance-Billing		Change in Total Liability	
	Balance-Billing	Total Liability	Dollars	Percent	Dollars	Percent
Initial Impact Before Behavioral Responses	60	287	-37.12	-62.3	-57.65	-20.1
Estimated Effect After Behavioral Responses	60	287	-32.03	-53.8	-39.04	-13.6

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

After behavioral responses, out-of-pocket costs would be reduced by nearly 14 percent, or $39, on average. Most of this drop--$32--would be the result of lower balance-billing costs.

CHAPTER I

INTRODUCTION

The Omnibus Budget Reconciliation Act of 1989 (the Reconciliation Act) contains provisions to reform the system that sets Medicare's payment rates for physicians' services in the fee-for-service sector.[1] Under these provisions, physicians will be paid according to a Medicare fee schedule (MFS), in which each fee will be set to reflect the costs of the resources necessary to produce the service. In other words, the MFS will be "resource-based." It will replace Medicare's customary, prevailing, and reasonable (CPR) system, which bases payments on physicians' previous charges.

Before the MFS is put in place, however, some of its elements will require further development. For this reason, Medicare's current CPR system will continue through 1991, but will be replaced by a fee schedule in 1992. About 40 percent of services will be paid based entirely on MFS rates during that year, while other services will be paid based on a blend of MFS amounts and historical charges during a four-year transition period. By 1996, all services will be paid based entirely on the MFS amounts.

In addition to the reform provisions, the Reconciliation Act contains a number of measures that will become effective before 1992, most of them intended to reduce Medicare's spending for physicians' services. In general, these measures are consistent with the changes in relative payment rates that will occur under the MFS. Visits--whose rates will increase relative to other services under the MFS--will be largely unaffected by the provisions for 1990, while payment rates for some "overvalued" services (those paid above their MFS amounts) will be cut.

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1. Throughout this study, physicians' services are defined broadly. They include not only Medicare-covered services provided by medical doctors, but also those provided by limited-license practitioners such as chiropractors, dentists, and optometrists.

These measures, together with any further cuts enacted for 1991, will reduce the total pool of dollars that will be reallocated among physicians when the "budget-neutral" fee schedule is established. Consequently, all physicians will receive lower fees than they would have if reductions in payments had not been enacted in previous years. In addition, most enrollees will see their out-of-pocket costs for physicians' services reduced because limits on what physicians may charge in excess of Medicare's fees will be tightened.

This study examines the payment changes enacted under the Reconciliation Act and presents estimates of the effects of those changes. It considers three kinds of effects: those on Medicare's payments (which as used here include both Medicare's reimbursements and enrollees' cost-sharing amounts); on physicians' receipts from Medicare (Medicare's payments plus balance-billing amounts); and on enrollees' liability for out-of-pocket costs.

The estimates presented are an initial attempt to assess the effects of the changes in payment that will be made. Not all of the provisions in the Reconciliation Act, however, can be simulated at this time. Further, the MFS rates to be phased in starting in 1992 are still evolving. The Department of Health and Human Services (HHS) intends to refine the components of the fee schedule that will ultimately be established. The results in this study are based on a preliminary fee schedule developed by the Physician Payment Review Commission (PPRC) for use during the 1989 debate on payment reform.

CHAPTER II

THE CPR SYSTEM AND THE PAYMENT REFORM PACKAGE

Under Medicare's current customary, prevailing, and reasonable (CPR) system, payment for each service provided is the lowest of the physician's actual charge, the physician's customary charge, or the prevailing charge for that service in the community. Prevailing charges are based on the customary charges of all physicians in the community, but increases in prevailing charges above their values for 1973 have been limited by a nationwide index of earnings and office expenses called the Medicare Economic Index (MEI), or by lower limits set by law.

Medicare pays its share of charges directly to physicians when they accept assignment of benefits, although physicians must bill their patients to collect deductible and coinsurance amounts. By accepting assignment, physicians agree not to charge patients for any excess of their actual charges over Medicare's payment rates. (Such excess charges are called balance-billing.) Currently, about 80 percent of charges under Medicare are assigned.

In 1989, about 45 percent of physicians signed "participating" agreements with Medicare, whereby they agreed to accept assignment on all claims for their Medicare patients. Nonparticipating physicians may reject assignment on a claim-by-claim basis, but their prevailing charges are set at only 95 percent of the charges that apply to participating physicians in the same locality. More than 60 percent of Medicare's payments for 1989 were made to participating physicians.

Since 1984, Medicare has set limits--now called maximum allowable actual charges, or MAACs--on the actual charges of nonparticipating physicians, thereby reducing balance-billing costs for enrollees. In brief, the MAACs allow increases in unassigned actual charges of no more than 1 percent a year in all instances where those charges are more than 115 percent of the applicable prevailing charge. For 1990, this limit affects more than 50 percent of unassigned services (accounting for about 10 percent of all services).

In the case of nonparticipating physicians who refuse assignment, receipts from Medicare may be larger than Medicare's approved payments because, within the MAAC limits described above, these physicians may collect their (usually higher) actual charges from patients. In these instances, the physician's Medicare receipts include not only Medicare's payments, but also balance-billing amounts paid by patients (see Box 1).

BOX 1
COMPARISON OF PAYMENTS AND RECEIPTS UNDER MEDICARE, BY TYPE OF PHYSICIAN

The distinction between Medicare's payments and physicians' receipts from Medicare is illustrated in the two examples below. In each example, it is assumed that the physician provides a service for which Medicare's full payment is $100. It is also assumed that the patient has already paid Medicare's $75 annual deductible amount.

Example 1: The doctor is a participating physician who charges the full Medicare fee of $100.

Medicare payment	=	$100
Medicare reimbursement = $100 * 0.80	=	$ 80
Beneficiary copayment = $100 * 0.20	=	$ 20
Balance-billing = $100 - $100	=	$ 0
Beneficiary total liability = $20 + $0	=	$ 20
Physician's receipts = $80 + $20	=	$100

Example 2: The doctor is a nonparticipating physician who charges $110 for the service.

Medicare payment = $100 * 0.95	=	$ 95
Medicare reimbursement = $95 * 0.80	=	$ 76
Beneficiary copayment = $95 * 0.20	=	$ 19
Balance-billing = $110 - $95	=	$ 15
Beneficiary total liability = $19 + $15	=	$ 34
Physician's receipts = $76 + $34	=	$110

Dissatisfaction with Medicare's current CPR system has been widespread. Specific objections cited are that it:

- Induces inflation in fees;
- Encourages the volume of services per enrollee to grow by increasing either their number or their complexity;
- Does not appropriately reflect the actual costs of providing alternative services, with the result that physicians' decisions about training, location, and treatment practices are distorted in undesirable ways;
- Is difficult for patients and providers to understand; and
- Is cumbersome to administer.

In the budget reconciliation acts of 1985 and 1986, the Congress began laying the foundation for payment reform. In those acts, the Congress instructed HHS to develop two major components of a fee schedule that would accurately reflect the resource costs necessary to provide each physician service covered by Medicare. The first component (mandated in the 1985 act) is a resource-based relative value scale, which gives each service a weight to indicate its value relative to any other service. (In other words, if the average weight for all services was 100, a weight of 110 would mean that providing that particular service requires 10 percent more in resources than the average.) The second component (mandated in the 1986 act) is a geographic index of practice costs, used to adjust the relative value scale for differences in local costs. Preliminary versions of both a relative value scale and a geographic cost index were available in early 1989, although further development will be necessary before they can be used to define a complete fee schedule.

THE PAYMENT REFORM PACKAGE

The Reconciliation Act contains a four-part reform package, including:

- A Medicare fee schedule based on resource costs, with no dif-

ferences in payment based on the specialty of the physician providing the service;

- Annual "volume performance standards" (or targets) to limit growth in costs;

- Limits on balance-billing, with ceilings on actual charges set at a fixed percentage above the amounts in the fee schedule; and

- Increased support for research intended to identify effective treatments and to develop guidelines for appropriate care.

In addition, starting in September 1990, the provisions of the reform package require physicians to submit all reimbursement claims for Medicare enrollees. Currently, physicians must directly submit only assigned claims. For unassigned claims, physicians may bill patients who, in turn, would submit claims to Medicare for reimbursement. Each part of the reform package is discussed in more detail below.

The Resource-Based Medicare Fee Schedule

The Medicare fee schedule (MFS) will have three basic components:

- A relative value scale (RVS), which will indicate the value of each service relative to others;

- A geographic practice cost index (GPCI), which will reflect cost differences among localities; and

- A monetary conversion factor (CF), which will translate the indexed relative values into a fee for each service in each locality.

The Relative Value Scale. The RVS for each service will include a measure of work (W) provided by physicians, a measure of physicians'

office expenses (O), and a measure of malpractice insurance costs (M). Work is measured by the time and the intensity of effort required of the physician to perform the service. Office expenses include costs for nonphysician personnel, office space, equipment, and supplies. Malpractice insurance costs are to be allocated among services in proportion to the risks associated with them, although the method of allocation has not yet been developed.[1]

The Geographic Practice Cost Index. The GPCI is intended to adjust relative values for differences among localities in input prices. Like the RVS, the GPCI will have three elements--one to adjust the work value (WGPCI), one to adjust the office expense value (OGPCI), and one to adjust the malpractice cost value (MGPCI). A WGPCI has been developed using earnings data for professional workers from a 20 percent sample of the 1980 population census. The GPCI currently available has no separate values for OGPCI and MGPCI, but has instead a single index (EGPCI) for all practice expenses including malpractice insurance. The EGPCI was derived from a number of sources, including the 1980 census for the earnings of nonphysician personnel, a fair market rent series from the Department of Housing and Urban Development for office space, and a survey of malpractice insurance costs from the Health Care Financing Administration (HCFA). Prices for other practice expenses--equipment and supplies--do not vary appreciably by locality, so their index values were set to one for every locality.

The overall index for each locality is the sum of the index values for each input, after weighting each input index by the percentage of its contribution to practice costs. The weights were obtained from earnings and expense data regularly collected by the American Medical Association.[2]

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1. See William C. Hsiao, Peter Braun, and others, "A National Study of Resource-Based Relative Value Scales for Physician Services: Final Report," Contract No. 17-C-98795/1-03, Health Care Financing Administration, U.S. Department of Health and Human Services, September 27, 1988.

2. See W.P. Welch, Stephen Zuckerman, and Gregory Pope, "The Geographic Medicare Economic Index: Alternative Approaches," Contracts No. 18-C-98326/1-01, No. 17-C-99222/3-01, and No. 17-C-98758/1-03, Health Care Financing Administration, U.S. Department of Health and Human Services, May 1989 (Draft).

The Conversion Factor. The conversion factor will transform an indexed relative value scale into a schedule of fees for each service. For 1992, the factor will be a single nationwide value that is supposed to be set to achieve the same level of total payments by Medicare to physicians as would have been made under the CPR system. In other words, the conversion factor is intended to make the 1992 fee schedule budget neutral. It will be very difficult, however, to determine the factor that will achieve budget neutrality. Further, it will be only slightly less difficult to determine in later years whether the 1992 rates were budget neutral.

The Medicare Fee Schedule. The components described above are combined to give fee schedule amounts. Both the office and the malpractice components of the RVS will be fully adjusted for geographic differences in costs, but only a quarter of the work component will be so adjusted. Thus, the fee for service i in locality j will be:

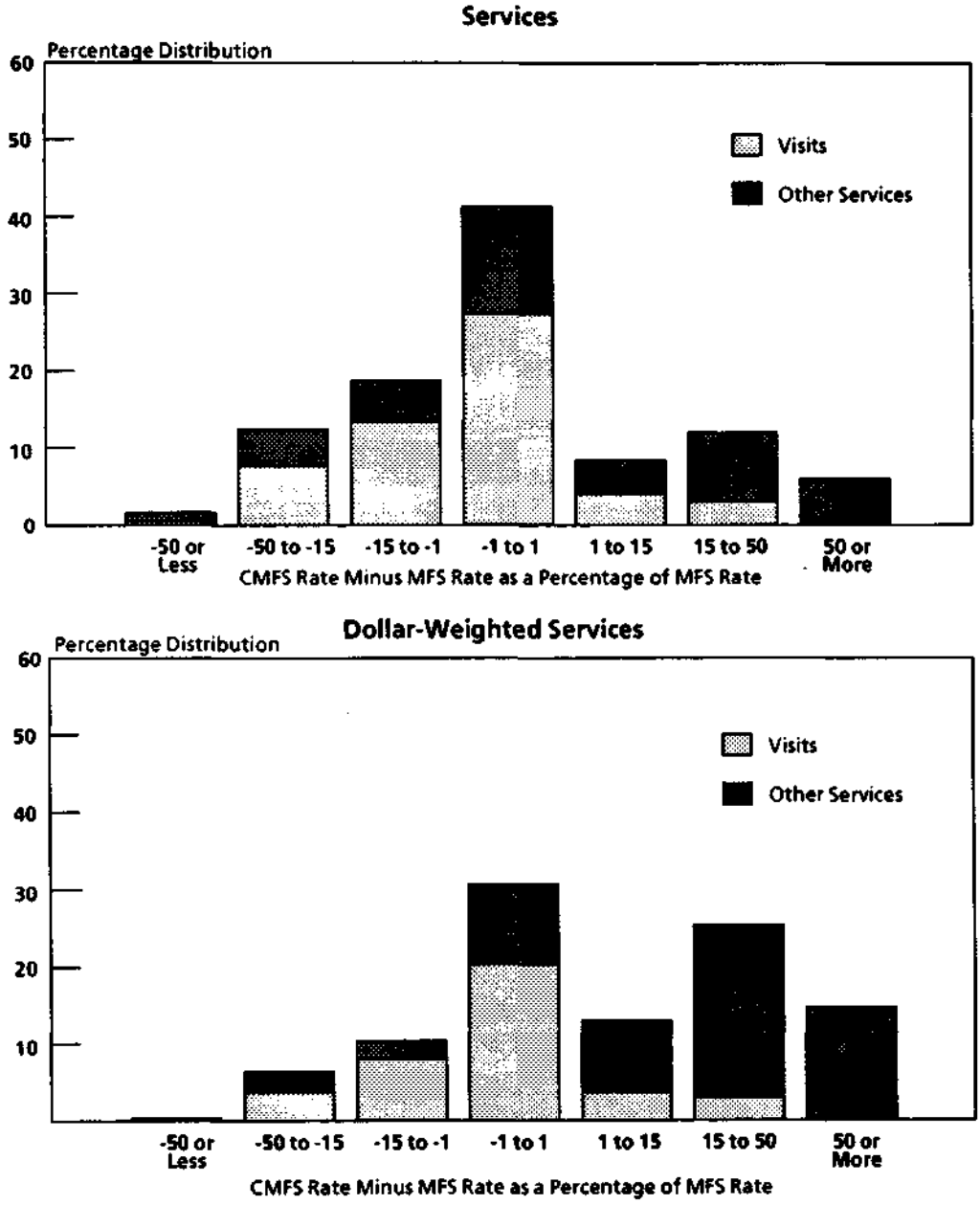
$$MFS_{ij} = CF * [W_i*(.75+.25*WGPCI_j) + O_i*OGPCI_j + M_i*MGPCI_j].$$

This formula was a compromise between proposals from the House Committee on Ways and Means and the Senate Committee on Finance, which provided no geographic adjustment on the work component, and the proposal from the House Committee on Energy and Commerce, which provided one-half of a full adjustment.

All physicians in the same payment locality, regardless of their specialty or years of experience, will face the same MFS rates with two exceptions. First, rates for nonparticipating physicians will be only 95 percent of the full MFS rates applicable to participating physicians--the same difference that now applies to prevailing charges. Second, Medicare will pay a bonus to physicians practicing in designated areas where a shortage of health manpower exists. Currently, this bonus is 5 percent; under the Reconciliation Act, it will increase to 10 percent for 1991 and subsequent years.

Payment Rates During the Transition. Although MFS values will be calculated and used to set payment rates beginning in 1992, rates will be based entirely on MFS amounts for only about 40 percent of services

Figure 1.
Percentage Difference Between 1992 Constrained Medicare Fee Schedule (CMFS) and Medicare Fee Schedule (MFS) Rates



SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

that year, as shown in Figure 1. For the other 60 percent of services, rates during the four-year transition period will be a blend of MFS amounts and historical amounts called the "historical payment basis" (HPB), yielding constrained MFS (or CMFS) rates.

An HPB will be calculated for each service in each locality based primarily on 1991 prevailing charges, adjusted to reflect instances in which payment is less than the prevailing charge. In effect, the HPB is the average amount Medicare allows for each service in the locality for 1991, updated to 1992.

Services for which the HPB is within 15 percent of the corresponding MFS amount will have no transition period. MFS rates will be fully effective for these services in 1992, which account for about 50 percent of visits and about 30 percent of other services. In these cases, Medicare's payment will be the lesser of the MFS amount and the physician's actual charge. However, because the HPB for a given service is based on the average Medicare payment in the locality and not on payments to individual physicians, payments to physicians whose previous rates were relatively high may be reduced by more than 15 percent. Similarly, payments to physicians whose previous rates were relatively low may increase by more than 15 percent--if these physicians increase their actual charges to match the new fees.

In instances where the HPB differs from the MFS amount by more than 15 percent, the move to MFS rates will be completed gradually between 1993 and 1996, in four roughly even steps. In each transitional year, CMFS rates will be set, as described below, and Medicare's payment will be the lesser of the CMFS amount or the physician's actual charge (see Box 2):

- For 1992: where the HPB is above the MFS amount, the CMFS amount will be the HPB minus 15 percent of the MFS amount. Where the HPB is below the MFS amount, the CMFS will be the HPB plus 15 percent of the MFS amount.

- For 1993: the CMFS amount will be 75 percent of the 1992 CMFS amount plus 25 percent of the MFS amount, with both amounts updated as described in the next section.

- For 1994: the CMFS amount will be 67 percent of the 1993 CMFS amount plus 33 percent of the MFS amount (updated).
- For 1995: the CMFS amount will be 50 percent of the 1994 CMFS plus 50 percent of the MFS amount (updated).
- For 1996: MFS rates will apply to all services.

This transition process is a mix of the proposals made by the three authorizing committees. The HPB was a feature of both the Ways and Means and the Senate Finance Committee proposals; the concept of blended rates was included in both the Energy and Commerce and the Senate Finance Committee proposals; and the 15 percent limit on changes was contained in the Ways and Means proposal. The effect of this process is that rates for most services will change by more in 1992 than in each of the four subsequent years. However, for 6 percent of services (most of which will have CMFS rates in excess of MFS values), the annual change in CMFS rates will exceed 15 percent each year in the 1993-1996 period.

BOX 2
THE TRANSITION TO THE MEDICARE FEE SCHEDULE

The progression of constrained Medicare fee schedule (CMFS) rates to Medicare fee schedule (MFS) rates is illustrated here for a service whose MFS value is $100, and whose historical payment basis is $150 (ignoring the update factor).

1992	CMFS = ($150 - .15 * $100)	=	$135
1993	CMFS = (.75 * $135) + (.25 * $100)	=	$126
1994	CMFS = (.67 * $126) + (.33 * $100)	=	$117
1995	CMFS = (.50 * $117) + (.50 * $100)	=	$109
1996	CMFS = MFS	=	$100

In each year, Medicare's payment will be the lesser of the CMFS amount or the physician's actual charge.

Volume Performance Standards and Updating the Payment Rates

In an effort to control the growth in Medicare's spending for physicians' services, the Congress will establish a target rate of growth--or volume performance standard--following receipt of recommendations from the Secretary of HHS and from the Physician Payment Review Commission.[3] If the Congress fails to specify a target in legislation, a default target is provided under the law. The default target is the sum of the following components, each to be estimated by the Secretary of HHS:

- The average percentage change in payment rates projected for the year;
- The percentage change in expenditures for physicians' services expected to result during the year from changes in law or regulations (other than changes in payment rates);
- The percentage change in the number of Medicare enrollees who will receive physicians' services in the fee-for-service sector (that is, excluding enrollees receiving services from prepaid medical plans); and
- The average annual percentage change in the volume of physicians' services per enrollee over the previous five years, minus a "performance standard factor" (PSF). The PSF is set by law at 0.5 percent for 1990, 1 percent for 1991, 1.5 percent for 1992, and 2 percent for 1993 and subsequent years.

For 1990, the default target is 9.1 percent.[4] If the actual increase in spending for physicians' services in 1990 exceeds 9.1 percent (11.1 percent, for example), then "excess" growth will have occurred (by two percentage points, for the example).

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3. For all years after 1990, the Secretary of Health and Human Services must recommend not only an overall target but also separate targets for surgical and nonsurgical services.

4. *Federal Register*, vol. 54, no. 249, December 29, 1989, p. 53818. The projected change in payment rates is 2.3 percent. The change in expenditures resulting from legislation is -1.7 percent. The change in enrollment is 1.7 percent. The five-year average growth in volume is 7.3 percent, less the performance standard factor of 0.5 percent.

In the absence of an update factor set by legislation, the target will be used--along with the Medicare Economic Index--to update payment rates two years later. The default update factor for 1992, for example, will equal the percentage change in the MEI minus the excess of actual growth over target growth for 1990. If excess growth in 1990 is positive (that is, if actual growth exceeds the target), the update factor will be less than the MEI by the percentage of excess growth. If excess growth is negative (that is, if actual growth is less than the target), then the update factor will be more than the MEI by the difference.

The law, however, limits the size of downward adjustments that stem from excess growth to the default update factor. The downward adjustment may not exceed 2 percentage points for 1992 and 1993, 2.5 percentage points for 1994 and 1995, and 3 percentage points for subsequent years.

Limits on Actual Charges

For 1993 and subsequent years under the reform package, the actual charge for a service provided by a nonparticipating physician (one who refuses to accept assignment on all Medicare claims) may not exceed 115 percent of Medicare's fee. For 1992, the "limiting charge" is 120 percent, and for 1991 it is 125 percent. The current discount for nonparticipating physicians, under which they receive only 95 percent of the full Medicare fee, will continue. Thus, by 1993, balance-billing amounts on unassigned claims will be limited to 15 percent of the nonparticipating physicians' CMFS rate under Medicare for each service (see Box 3).

Effectiveness Research and Practice Guidelines

The Reconciliation Act provides federal support for research into the efficacy of alternative treatments and for disseminating the findings. The act authorizes expenditures of $50 million for 1990, increasing yearly to $185 million by 1994, to develop guidelines, standards, performance measures, and review criteria. One goal of these provisions is to reduce the incidence of unnecessary or inappropriate medical care

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by generating the necessary research and ensuring that the resulting information is readily available to physicians and patients. In addition, this information could be used as the basis for decisions about coverage and for utilization review.

COMPARING THE NEW SYSTEM WITH THE CPR SYSTEM

The MFS will be an improvement over the CPR system in several ways. It will break the link between physicians' actual charges and Medicare's payment rates, thereby allowing Medicare to determine its rates--which will involve a balance between containing costs and ensuring adequate access for enrollees. Since individualized CPR rates will be replaced by MFS rates that will be the same for all physicians in the community (apart from the difference for nonparticipating phy-

BOX 3
LIMITS ON ACTUAL CHARGES AND THEIR EFFECTS ON ENROLLEES' OUT-OF-POCKET COSTS

The effect of the limiting charge for nonparticipating physicians is illustrated here for a service with a full Medicare fee of $100. For nonparticipating physicians, Medicare's fee is $95 (95 percent of the full fee), but these physicians may charge patients up to the limiting charge. Thus:

1991	Limiting Charge = $95 * 1.25	=	$118.75
1992	Limiting Charge = $95 * 1.20	=	$114.00
1993	Limiting Charge = $95 * 1.15	=	$109.25

Medicare's reimbursement for this example is $76 ($95 * .80). The patient's out-of-pocket cost is $19 in coinsurance ($95 * .20) plus balance-billing equal to the limiting charge less $95. Thus:

1991	Out-of-Pocket Cost = $19 + ($118.75 - $95)	=	$42.75
1992	Out-of-Pocket Cost = $19 + ($114.00 - $95)	=	$38.00
1993	Out-of-Pocket Cost = $19 + ($109.25 - $95)	=	$33.25

By contrast, participating physicians accept assignment and will therefore charge no more than $100. Their patients will incur no balance-billing costs, but will be liable for coinsurance of $20 ($100*.20).

sicians), the payment system will be simpler for patients, physicians, and administrative agents to understand.

Further, enrollees will benefit because, for most nonparticipating physicians, the new limiting charges will be more restrictive than the current maximum allowable actual charges (MAACs). For example, actual charges for about 40 percent of unassigned claims by nonparticipating physicians (or 8 percent of all claims) will be affected by the 125 percent limit on actual charges for 1991. The new limits will also be much simpler to determine than the MAACs, which are based on the previous charges of each physician.

Finally, because MFS rates will reflect the relative costs of providing different services, they will not distort the decisions of physicians. In particular, physicians will have greater financial incentives to practice in rural areas than they do currently, since differences between payment rates in urban and rural areas will typically be smaller under the MFS than now. Moreover, the financial incentives for physicians to train for procedure-oriented specialties will be reduced by the realignment of payments that will increase rates for visits compared with those for technical procedures.

The initial realignment in Medicare's payments that would occur under a fully established MFS is significant. The results shown in Table 1 indicate how payments to various specialty groups would change under a budget-neutral MFS if the number and mix of services were unchanged by the new payment system--that is, if there were no behavioral responses to the new system. As discussed in later chapters, however, the initial change in actual payments to each physician group will be less favorable than the changes shown in Table 1 because the level of MFS rates must be reduced to achieve budget neutrality if likely behavioral responses occur. These responses by physicians and their patients are expected to increase the total volume of services provided, although the exact nature and size of the responses are very uncertain. Regardless of the level at which MFS rates are set, the effects shown in Table 1 reflect the initial change in the share of Medicare's payments that will go to each group of physicians.

Substantial changes in the allocation of Medicare's payments will occur under the MFS, both between urban and rural areas and among groups defined by specialty. The share of total payments made to physicians practicing in rural areas will increase by about 8 percent, while the share for those practicing in urban areas will fall by about 1 percent. The share of total payments made to medical specialists will increase by about 7 percent overall, but the share paid to general and family practitioners will increase by about 25 percent. By contrast, the

TABLE 1. CHANGE BEFORE BEHAVIORAL RESPONSES IN SHARE OF MEDICARE'S PAYMENTS RECEIVED UNDER THE MEDICARE FEE SCHEDULE, BY SPECIALTY AND TYPE OF AREA (In percent)

	Initial Share of Payments	Percentage Change in Share of Payments		
		All Areas	Urban Areas	Rural Areas
All Specialties	100	0.0	-1.1	8.2
Medical Specialties	43	7.4	5.2	23.9
General practice	5	24.2	20.3	40.7
Family practice	5	26.6	22.3	38.3
Internal medicine	17	9.9	8.6	20.9
Other	16	-6.2	-6.7	-0.9
Surgical Specialties	37	-5.0	-5.4	-2.4
General surgery	8	-5.2	-6.5	2.5
Ophthalmology	12	-7.7	-7.5	-9.1
Orthopedic surgery	6	-3.4	-3.8	-0.0
Thoracic surgery	3	-11.9	-11.9	-12.5
Urology	4	-0.9	-1.4	2.3
Other	4	1.5	1.3	3.4
Other Specialties	20	-7.0	-7.1	-6.5

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

share of payments made to surgical specialists will fall by about 5 percent under the MFS.[5]

Changes in the share of payments received by specialty groups reflect both the mix of services each specialty provides as well as the distribution of physicians between urban and rural areas. For example, generalists (general practitioners, family practitioners, and internists) tend to include more visits in the mix of services they provide than do other specialists. In addition, generalists are more likely to practice in rural areas than are other specialists. Hence, these physicians will see increases in their share of total payments under the MFS because they will benefit both from the relative increase in rates for visits and from the relative increase in rates in rural areas.

Although rationalizing payment rates is desirable in itself, another goal of the new payment system is to reduce the rate of growth in physicians' costs under Medicare. Since 1976, the rate of growth in costs per enrollee for physicians' services under Medicare has exceeded the rate of economywide inflation by nearly seven percentage points a year on average (see Table 2). This rapid growth has occurred despite the elimination or reduction of payment updates for some or all services in every year since 1983. In fact, during the 1984-1988 period, real fees actually declined. Nevertheless, real costs per enrollee increased at an annual rate of nearly 6 percent because of increases in the volume of services provided per enrollee. Growth in volume would probably have been even larger during this period were it not for the effect of the prospective payment system (PPS) implemented in 1984. Use of the hospital fell dramatically under the PPS, and this decline temporarily slowed the growth in the use of physicians' services.

Volume, rather than increases in real fees (increases above inflation), has been the driving force behind real growth in physicians' costs per enrollee under Medicare throughout the 1970s and the 1980s (see Figure 2). Some of this growth in volume is undoubtedly desirable, re-

5. The impact of the realignment in payment rates that will occur under the Medicare fee schedule is smaller here than in results presented by the Physician Payment Review Commission in its 1990 annual report. The PPRC results were for 1989, so they did not reflect the changes enacted for 1990. Those changes reduced differences between payment rates for visits and other services, thereby reducing differences in payments between medical specialists and other physician groups.

flecting advances in medical technology and better access to care. The belief is widespread, however, that much of the growth in services is undesirable. Some inappropriate services result from inadequate information about effective treatments for certain medical problems. Some services are defensive in the face of concerns about malpractice suits. And some are the result of attempts by physicians to maintain their incomes despite increased competition for patients and efforts by insurers to hold down payment rates.

Because the MFS is still a fee-for-service payment mechanism, incentives for increasing the volume of services that exist under the CPR system will remain. Recognizing that measures designed to address the problem of volume will be necessary to reduce the rate of growth in physicians' costs, the Congress included two such measures in the re-

TABLE 2. SOURCES OF GROWTH IN MEDICARE'S APPROVED CHARGES FOR PHYSICIANS' SERVICES
(By program years, in percent)

Components of Growth	1976-1980	1980-1984	1984-1988	1976-1988
Charges per Enrollee				
Annual Growth Rate	13.7	16.2	8.9	12.9
Source of Growth				
Volume of services	35.3	45.0	73.0	48.2
Real fees	6.3	14.4	-6.9	6.5
General inflation[a]	58.4	40.6	33.9	45.3
Real Charges per Enrollee				
Annual Growth Rate	5.5	9.3	5.8	6.9
Source of Growth				
Volume of services	84.9	75.8	110.4	88.1
Real fees	15.1	24.2	-10.4	11.9

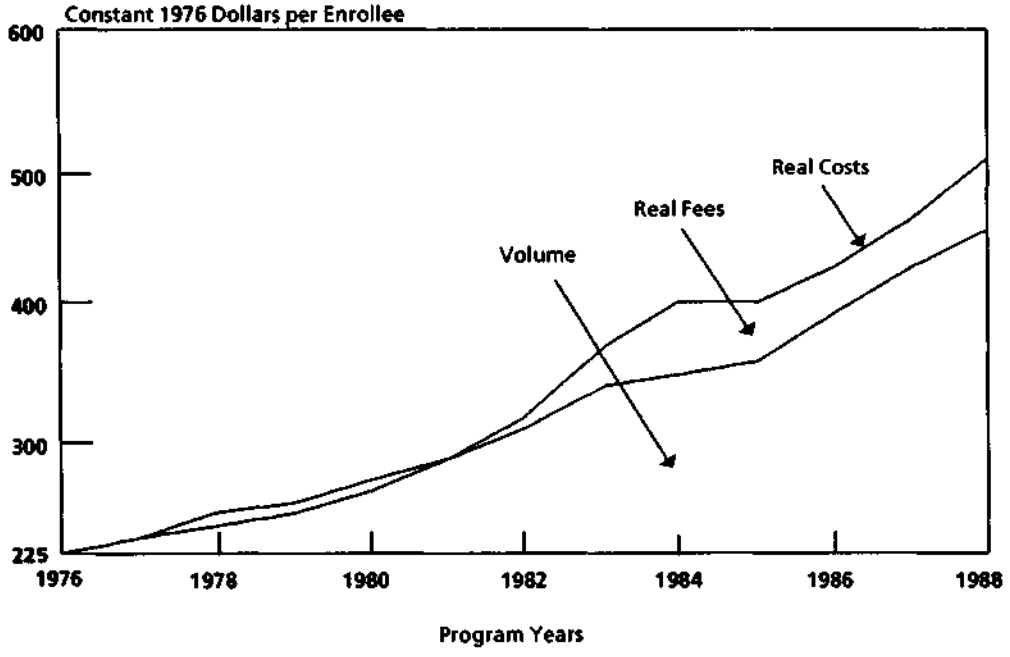
SOURCE: Compiled by Congressional Budget Office from data in the 1989 Annual Report of the Board of Trustees of the Federal Supplementary Medical Insurance Trust Fund.

a. As measured by the implicit price deflator for the gross national product.

form package--the volume performance standard (or target) and research on effectiveness.

The target has two main purposes: to give physicians collective incentives to contain costs; and to induce the medical community to work with the Medicare program to increase knowledge of the efficacy of alternative services, thereby improving treatment practices. If physicians fail to respond as desired, though, the target will work to reduce Medicare's costs by reducing the update in payment rates as a retrospective penalty.

Figure 2.
Contribution of Growth In Volume and Real Fees to Increases in Real Costs per Enrollee for Physicians' Services Under Medicare, 1976-1988



SOURCE: Compiled by Congressional Budget Office from data in the 1989 Annual Report of the Trustees of the Federal Supplementary Medical Insurance Trust Fund.

Under the default update mechanism, physicians will receive increases in payment rates that fall short of the growth in their costs (as measured by the MEI) unless they, as a group, reduce the rate of growth in volume per enrollee that has occurred in recent years. Under CBO's current projections, this mechanism will reduce Medicare's spending for physicians' services below what would otherwise occur, but the reduction will be the result of adjusting the payment rates.[6] Implicit in these projections is the assumption that recent trends in the growth of volume will be unchanged by the target mechanism, at least in the near term.

In time, the findings from the research on effectiveness may help to curtail growth in volume, so that penalties imposed through the update factor might be smaller. If not, and if the update factor continues to fall short of increases in physicians' costs, some physicians may withdraw from the Medicare market. Whether or not the volume of services provided to Medicare patients would then fall would depend on the responses of other physicians still involved with the program. It is possible that access for some enrollees would be reduced.

6. For example, the target announced by the Health Care Financing Administration for fiscal year 1990 is 9.1 percent. Spending for physicians' services is expected to grow by 10.7 percent in 1990, however, so that excess growth will be 1.6 percentage points. As a result, the update factor for physicians' services for calendar year 1992 is expected to be only 2 percent (the projected increase in the Medicare Economic Index of 3.6 percent minus excess growth of 1.6 percent).

CHAPTER III

PAYMENT PROVISIONS FOR 1990

The payment provisions that will be effective for 1990 will reduce payment rates for certain services, selected because they are overvalued relative to their expected MFS rates. For those provisions that are amenable to simulation, this chapter presents estimates of the effects on payments to physicians and on enrollees' out-of-pocket costs.[1] The provisions for 1990 that are simulated here are the base from which the effects of the reform provisions discussed in subsequent chapters are estimated.

DESCRIPTION OF PROVISIONS

Overall, Medicare's payments for physicians' services will be about 5 percent lower in 1990 than they would have been in the absence of the provisions in the Reconciliation Act. Two of the provisions--the sequestration and the delay in the update for payment rates--will reduce Medicare's costs for 1990 but will have no effect on the level of payment rates in future years. The other provisions, which will reduce costs by 2.5 percent in 1990, affect the base to which future updates to Medicare's payment rates are applied. Individual provisions are discussed below, and CBO's estimates of savings from these provisions are shown in Table 3.

Reduce Reimbursements to Physicians Under Sequestration Order

Since the deficit targets in the Balanced Budget Act were not met, a two-part sequestration of spending was ordered for fiscal year 1990.

1. See Appendix A for discussion of the data and simulation methods used for these estimates. The data were provided to CBO by the Physician Payment Review Commission. PPRC eliminated clinical laboratory services from the data base because they are paid under a separate fee schedule. PPRC also eliminated anesthesiology services because of problems in interpreting the claims information.

TABLE 3. COST ESTIMATES FOR 1990 PHYSICIAN PAYMENT PROVISIONS (By fiscal year, in millions of dollars)

Provision	1990	1991	1992	Three-Year Total
Provisions That Do Not Affect Base from Which Updates Occur				
Reduce Reimbursements Under Sequestration Order	-345	-60	0	-405
Delay Update for All Services	-245	0	0	-245
Subtotal	-590	-60	-0	-650
Provisions That Affect Base from Which Updates Occur				
Reduce Update for Nonprimary Care[a]	-215	-345	-390	-950
Reduce Prevailing Charges for Certain Overvalued Procedures[a]	-180	-245	-275	-700
Reduce Payments for Radiology Services[a]	-100	-150	-180	-430
Pay Actual Time for Anesthesiology Services	-35	-45	-50	-130
Limit Prevailing Charges to Those of the Designated Specialty	-45	-60	-70	-175
Limit Customary Charges for New Physicians	-25	-10	0	-35
Reduce Payments for Laboratory Services	-85	-130	-155	-370
Subtotal	-685	-985	-1,120	-2,790
Total Savings	-1,275	-1,045	-1,120	-3,440

SOURCE: Congressional Budget Office.

a. Effects included in simulation results shown in later tables.

This order will reduce Medicare's reimbursement amounts by 2.1 percent for services provided from October 16, 1989, through March 31, 1990. For the remainder of the fiscal year, through September 30, 1990, reimbursement will be reduced by 1.4 percent.

Delay the Update to Payment Rates for All Physicians' Services

The annual update to payment rates for all physicians' services will be effective April 1, 1990--three months later than it would normally occur.

Reduce the Update to Payment Rates for Nonprimary Care

When it occurs, the update will be less than the full increase in physicians' costs for services other than those visits designated as primary care. Prevailing charges for visits will increase by the full amount of the MEI (4.2 percent), but the increase for most other services will be only 2 percent. Moreover, there will be no update for the overvalued, radiology, or anesthesiology services affected by the provisions described below.

Reduce Prevailing Charges for Certain Overvalued Procedures

Payment will be reduced for some procedures that are overvalued when compared with their MFS amounts. Only procedures with valid MFS values currently available, and only those for which the estimated MFS rate is less than 90 percent of the national average amount allowed by Medicare, will be affected in 1990. Thirty-six groups of procedures (such as the group for lens extraction), containing 245 specific procedure codes, will be subject to cuts under this provision.

The reduction for each selected procedure will be obtained in the following way:

- The national average prevailing charge for the procedure (as reported by the Health Care Financing Administration) is

reduced by the percentage by which its average allowed amount exceeds the estimated national average MFS amount (as reported in a Congressional letter to the Secretary of HHS, correcting the percentages that were accidentally misreported in the legislation).

- The appropriate geographic index of costs (as reported in the legislation) then adjusts this reduced national average prevailing charge to produce a target fee in each payment locality.

- The previous year's (1989) prevailing charge in each locality is cut by one-third of the difference between that charge and the target rate, subject to a maximum cut of 15 percent of the prevailing charge. If the 1989 prevailing charge is below the target, it will be unchanged under this provision.

Overall, payment rates for the procedures affected by this provision are expected to fall by about 9 percent, relative to rates for 1989.

Reduce Payments for Radiology Services

Currently, Medicare pays for radiology services provided by radiologists under a charge-based fee schedule, one that was established in 1989 so as to be budget neutral in each payment locality. Under the Reconciliation Act, these fee schedule amounts will be reduced by 4 percent in each locality, effective April 1, 1990. An exception is made for specialists in nuclear medicine, however, who will be subject to fees that are a blend of the radiology fee schedule and of 1988 prevailing charges. Specifically, for 1990, specialists in nuclear medicine will be paid based on two-thirds of 101 percent of their 1988 prevailing charges, and one-third of the 1989 fee schedule amounts.

Pay Actual Time for Anesthesiology Services

Medicare's prevailing charges for anesthesiology services are based on a relative value guide established in 1989, although payment is set by

the CPR mechanism. The current method of setting the prevailing charge is as follows:

- Each anesthesiology procedure has a set number of "base" units assigned to it, reflecting the relative complexity of the service.

- A "time" unit is usually allowed for every 15 minutes of elapsed time that the anesthesiologist spends attending the patient. The time units are rounded up so that, for example, 16 minutes of elapsed time would allow the anesthesiologist to charge for two time units.

- To arrive at the prevailing charge, the base units and the time units are added, and their total is multiplied by a conversion factor. As in the case of the radiology fee schedule, the conversion factors for anesthesiology were designed to be budget neutral in 1989 for each locality.

This provision will change the time units allowed--from one unit for every 15 minutes or portion thereof, to 1/15 of a unit for every minute, effective April 1, 1990. As a result, payments for anesthesiology services will be reduced by about 3 percent according to CBO's estimates.

Limit Prevailing Charges for Selected Services to Those of the Designated Specialty

The prevailing charge for all physicians providing a given service in a given locality will be limited by the prevailing charge in that locality for the specialty most likely to provide that service nationwide. For example, internal medicine is the designated specialty for an electrocardiogram. Hence, Medicare's payment for this service will be limited by the prevailing charge applicable in each locality to internists. This provision will affect only certain high-volume services selected by the Secretary of HHS.

Limit Customary Charges for New Physicians

Currently, new physicians not practicing in areas where a health manpower shortage exists have their customary charges for services other than primary care visits set at 80 percent of the applicable prevailing charge. (In other cases, the customary charge for a new physician is set at the median of customary charges for other physicians in the locality. This amount may exceed the prevailing charge.) In subsequent years, their customary charges are calculated in the usual way, using each physician's own history of charges. Under the Reconciliation Act, the customary charge will be limited to 85 percent of the prevailing charge during a new physician's second year.

Reduce Payments for Clinical Laboratory Services

Currently, clinical laboratory services are paid under a fee schedule specific to each locality, subject to a ceiling set at 100 percent of the national median fee. Under the Reconciliation Act, the payment ceiling will be reduced to 93 percent of the national median fee for each service, effective January 1, 1990. In addition, the Reconciliation Act eliminates the preexisting legislative mandate for a uniform national fee schedule. Instead, the current fee schedules will continue.

ESTIMATED EFFECTS OF THE 1990 PROVISIONS

Estimates of the effects of the major payment provisions for 1990 are presented in this section. The simulations incorporate the reduction in the update factor for services other than primary care visits, the reduction in prevailing charges for overvalued procedures, and the reduction in radiology fees. Data limitations prevent including the other provisions with permanent effects on payment rates, which account for about 28 percent of the Medicare savings to be expected from the 1990 payment changes.[2]

2. Anesthesiology and laboratory fee schedule services are not included in the data used for this study. Further, the data base does not permit identification of new physicians. The services and specialties affected by the designated specialty provision had not been selected at the time this study was done. Finally, current data do not permit identification of areas where health manpower shortages exist, so that it is not possible to include in the simulations the bonus paid to physicians practicing in such areas.

The simulations show the estimated effects as if each provision had been in effect for a full year. The upper panel of each table shows the initial impact of the provisions on payments before any behavioral responses by physicians or their patients that will alter the number of services provided. The lower panel shows the estimated effect on payments to physicians after estimated responses. That is, the results in the lower panel incorporate the effects of changes in both rates and the number of services provided.

For its cost estimates, CBO assumes that about half of the initial impact of any reduction in physicians' receipts (Medicare payments plus balance-billing amounts) will be offset by increases in the volume of services, the result of behavioral responses by physicians and their patients. In addition, CBO assumes that physicians' decisions about participation and assignment will be unaffected by changes in payment (see Appendix B). The same assumptions are used here.

Effect on Medicare's Payments and Physicians' Receipts

The initial impact of the three provisions simulated will be to reduce Medicare's payments for physicians' services by an estimated 4.3 percent, while physicians' receipts will be reduced by an estimated 3.9 percent (see Table 4). After estimated responses, Medicare's payments will be reduced by only about half as much--2.3 percent--and physicians' receipts from Medicare patients will be lower by 1.9 percent on average. Less than 30 percent of physicians' receipts are from Medicare, however, so that the drop in the overall receipts of physicians will be about 0.6 percent.

Both the initial impact of the cuts and the effect after the estimated responses will vary significantly by specialty. Initially, payments for the medical specialties will drop by only 2.6 percent on average, while they will fall by 5.7 percent for the surgical specialties. The largest initial cut in payments--9.5 percent--will be for thoracic surgeons. At the other extreme, general and family practitioners will experience cuts of less than 2 percent. Following the responses, the effect

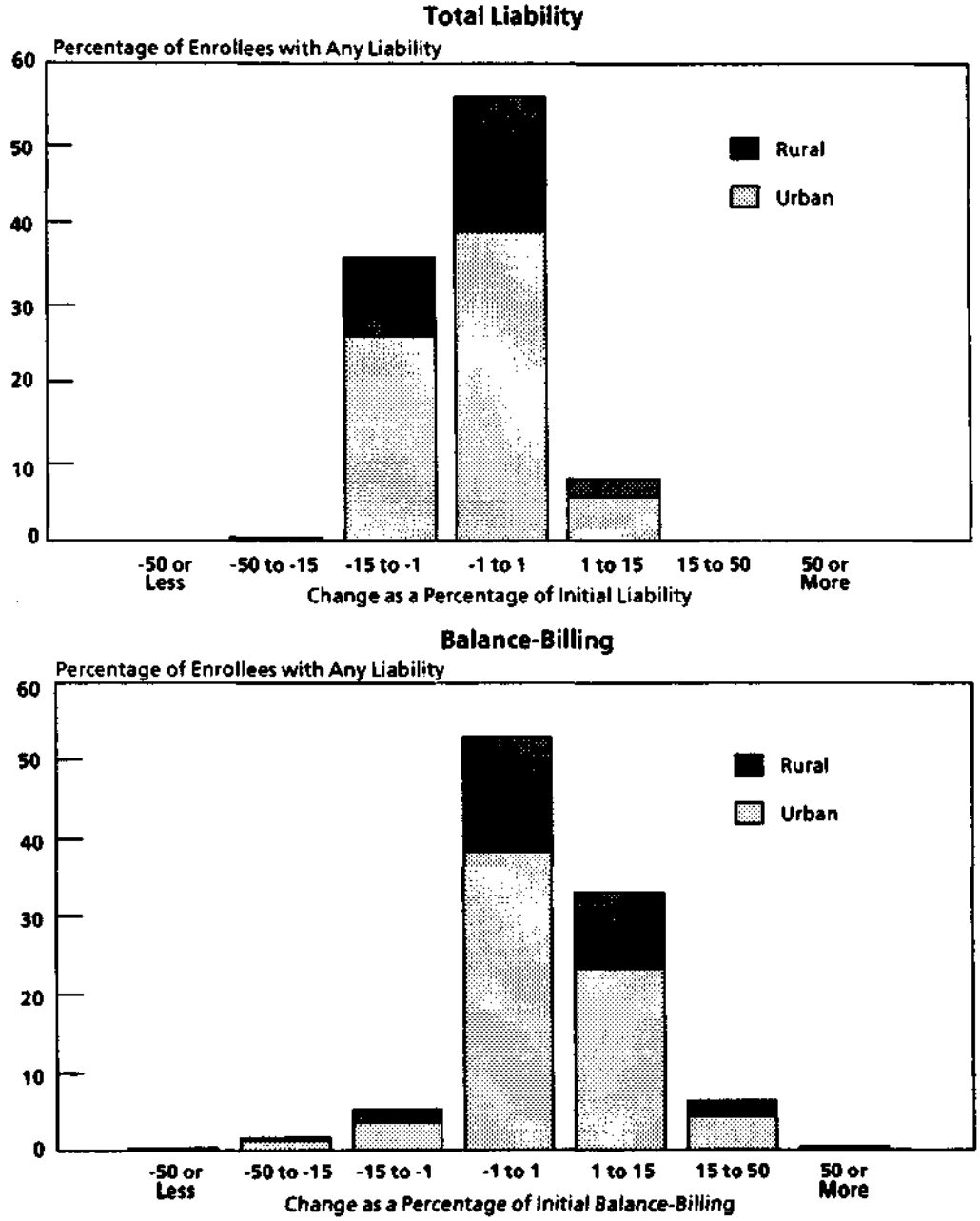
TABLE 4. CHANGE IN MEDICARE'S PAYMENTS AND PHYSICIANS' RECEIPTS UNDER 1990 PAYMENT PROVISIONS, BY SPECIALTY AND TYPE OF AREA (In percent)

		Percentage Change in Payment and Receipts					
		All Areas		Urban Areas		Rural Areas	
	Initial Share of Payments	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts
		Initial Impact Before Behavioral Responses					
All Specialties	100	-4.3	-3.9	-4.3	-3.9	-4.3	-3.8
Medical Specialties	43	-2.6	-2.4	-2.7	-2.4	-2.3	-2.0
General practice	5	-1.7	-1.5	-1.7	-1.6	-1.5	-1.3
Family practice	5	-1.8	-1.6	-1.8	-1.6	-1.7	-1.5
Internal medicine	17	-2.5	-2.2	-2.5	-2.2	-2.5	-2.2
Other	16	-3.4	-3.0	-3.4	-3.0	-3.4	-2.9
Surgical Specialties	37	-5.7	-5.1	-5.7	-5.1	-5.6	-5.0
General surgery	8	-5.6	-5.2	-5.8	-5.4	-4.5	-4.1
Ophthalmology	12	-6.5	-5.8	-6.3	-5.7	-7.5	-6.8
Orthopedic surgery	6	-4.1	-3.7	-4.0	-3.7	-4.3	-3.6
Thoracic surgery	3	-9.5	-8.5	-9.6	-8.6	-8.2	-7.2
Urology	4	-4.5	-3.6	-4.5	-3.6	-4.5	-3.7
Other	4	-3.7	-3.6	-3.7	-3.6	-3.5	-3.5
Other Specialties	20	-5.2	-4.9	-5.2	-4.8	-5.8	-5.4
		Estimated Effect After Behavioral Responses					
All Specialties	100	-2.3	-1.9	-2.3	-1.9	-2.3	-1.9
Medical Specialties	43	-1.5	-1.2	-1.5	-1.2	-1.3	-1.0
General practice	5	-0.9	-0.8	-0.9	-0.8	-0.9	-0.7
Family practice	5	-1.0	-0.8	-1.0	-0.8	-0.9	-0.8
Internal medicine	17	-1.4	-1.1	-1.4	-1.1	-1.4	-1.1
Other	16	-1.8	-1.5	-1.8	-1.5	-1.9	-1.4
Surgical Specialties	37	-3.1	-2.5	-3.1	-2.6	-3.1	-2.5
General surgery	8	-3.0	-2.6	-3.1	-2.7	-2.5	-2.0
Ophthalmology	12	-3.5	-2.9	-3.5	-2.8	-4.1	-3.4
Orthopedic surgery	6	-2.2	-1.9	-2.2	-1.9	-2.5	-1.8
Thoracic surgery	3	-5.3	-4.2	-5.3	-4.3	-4.6	-3.6
Urology	4	-2.7	-1.8	-2.7	-1.8	-2.6	-1.8
Other	4	-1.9	-1.8	-1.9	-1.8	-1.8	-1.7
Other Specialties	20	-2.8	-2.5	-2.7	-2.4	-3.1	-2.7

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: Medicare's payments include both Medicare's reimbursements and enrollees' cost-sharing amounts. Physicians' receipts include Medicare's payments plus balance-billing. Receipts from non-Medicare patients--which are 70 percent of total receipts, on average--are not shown. The provisions simulated include the reduced update for nonprimary care services, the reduction in prevailing charges for overvalued procedures, and the reduction in radiology fees.

Figure 3.
Percentage Change in Total Liability and in Balance-Billing at Impact Under the 1990 Provisions, by Type of Area



SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

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TABLE 5. CHANGE IN BALANCE-BILLING AND TOTAL LIABILITY FOR ENROLLEES WITH OUT-OF-POCKET COSTS UNDER 1990 PAYMENT PROVISIONS (In 1990 dollars)

	Under Prior Law		Change in Balance-Billing		Change in Total Liability	
	Balance-Billing	Total Liability	Dollars	Percent	Dollars	Percent
			Initial Impact Before Behavioral Responses			
Enrollees with Out-of-Pocket Costs	58	293	1.97	3.4	-5.66	-1.9
By Residence[a]						
Very large metro	71	376	2.27	3.2	-9.37	-2.5
Large metro	56	314	1.56	2.8	-6.81	-2.2
Other metro	59	284	2.16	3.7	-5.02	-1.8
Large rural	54	261	2.00	3.7	-4.55	-1.7
Other rural	54	249	2.28	4.2	-3.53	-1.4
By Hospital Use						
Yes	152	668	5.09	3.3	-15.94	-2.4
No	29	179	1.02	3.6	-2.54	-1.4
			Estimated Effect After Behavioral Responses			
Enrollees with Out-of-Pocket Costs	58	293	2.99	5.2	-1.18	-0.4
By Residence[a]						
Very large metro	71	376	3.65	5.1	-2.60	-0.7
Large metro	56	314	2.57	4.6	-1.92	-0.6
Other metro	59	284	3.20	5.4	-0.76	-0.3
Large rural	54	261	2.92	5.4	-0.74	-0.3
Other rural	54	249	3.15	5.8	-0.10	-0.0
By Hospital Use						
Yes	152	668	7.96	5.2	-3.86	-0.6
No	29	179	1.48	5.1	-0.37	-0.2

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: The provisions simulated include the reduced update for nonprimary care services, the reduction in prevailing charges for overvalued procedures, and the reduction in radiology fees.

a. Very large metro has population of 5 million or more; large metro has population of 1 to 5 million; other metro has population of less than 1 million; large rural areas are nonmetropolitan counties with population of 25,000 or more; and other rural areas are nonmetropolitan counties with population of less than 25,000.

of the new provisions on each group of specialists will be lower by about half. Although most physicians in rural areas will experience smaller cuts than their counterparts in urban areas, ophthalmologists and orthopedic surgeons are exceptions. For them, payments both before and after responses will fall by more in rural areas.

Effect on Enrollees' Out-of-Pocket Costs

The initial impact of the payment changes under the Reconciliation Act will reduce coinsurance costs for enrollees but will increase balance-billing costs on the approximately 20 percent of claims that are not assigned. Among enrollees with any out-of-pocket liability, only about 8 percent will see their costs increase and none of them will see increases that exceed 15 percent (see upper panel of Figure 3 on p. 29). Costs will drop for about 36 percent of enrollees. (Enrollees who use no services and those eligible for Medicaid benefits have no out-of-pocket costs for Medicare services, and therefore are not included in the results shown.) Balance-billing costs will increase initially for 40 percent of enrollees with any out-of-pocket costs, and will increase by more than 15 percent for 7 percent of such enrollees (see lower panel of Figure 3 on p. 29). Balance- billing costs will fall for about 7 percent of those with any liability.

The net result of the Reconciliation Act's provisions will be to reduce liabilities for enrollees by nearly 2 percent initially, on average, for those with any out-of-pocket costs (see Table 5). The reduction in these costs will be greater in larger urban areas and for enrollees who are hospitalized during the year. Because use of services will increase in response, however, liabilities will be nearly unchanged on average, following behavioral responses.

CHAPTER IV

PAYMENT REFORM PROVISIONS FOR 1992

In 1992, payment rates will be the lesser of the constrained Medicare fee schedule amount or the actual charge, where the CMFS amount is:

- Equal to the MFS amount for about 40 percent of services where the historical payment basis (HPB) is within 15 percent of the MFS amount;
- Equal to the HPB plus 15 percent of the MFS amount where the HPB is less than the MFS amount; and
- Equal to the HPB minus 15 percent of the MFS amount where the HPB is more than the MFS amount.

As of 1992, the actual charges of nonparticipating physicians may not exceed 120 percent of their CMFS amounts, which are 95 percent of the CMFS amounts applicable for participating physicians in the same locality.

Although the MFS will have three components (work, office expenses, and malpractice insurance costs), office and malpractice insurance costs were combined for the simulations in this study because the separate malpractice components have yet to be developed. Hence, the MFS used here is:

$$MFS_{ij} = CF * [W_i*(.75 + .25*WGPCI_j) + E_i*EGPCI_j]$$

where E denotes all practice expenses, including both office and malpractice insurance costs.

For the initial MFS values, a conversion factor is to be set so as to achieve the same aggregate spending by Medicare for physicians' services that would have occurred under prior law, allowing for any

change in services provided in response to the new payment provisions.[1] Thus, to define the 1992 payment rates for the simulations, it is necessary to make specific assumptions about responses to them. For this purpose, the behavioral assumptions usually made in the past by HCFA's actuaries in the Department of Health and Human Services were adopted because under the Reconciliation Act the appropriate conversion factor will be set by the Secretary.[2] Under these assumptions, increases in the volume of services would offset 50 percent of the initial impact of a reduction in physicians' receipts, while the growth of volume would not slow in response to increases in receipts. HHS is reexamining these assumptions, however, to determine whether they are appropriate in the context of payment reform.[3]

ESTIMATED EFFECTS OF THE 1992 PROVISIONS

This section presents estimates of the extent to which the 1992 provisions would change Medicare's payment rates and physicians effective rates (which are payment rates on assigned claims and actual charges on unassigned claims). It also shows the effects of those new rates on Medicare's payments, on physicians' receipts, and on enrollees' out-of-pocket costs. To estimate the effects following behavioral responses, this section assumes that the usual assumptions of the Health Care Financing Administration are correct.

The results shown are estimates of how Medicare's payments and physicians' receipts would differ from current law (incorporating the 1990 payment provisions in the Reconciliation Act) if the 1992 transitional payment rates had been established for 1990. In a rough sense, they may be interpreted as results for 1992 in constant 1990 dollars.

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1. Determining the budget-neutral Medicare fee schedule is an iterative process for two reasons--not all services are paid at the MFS rates, and behavioral responses alter the volume of services provided.

2. Estimating models used by CBO and by the Health Care Financing Administration differ, so that the implications for the level of rates in 1992 if HCFA's customary assumptions are used to set them can only be approximated here.

3. *Reports to Congress: Medicare Physician Payment*, U.S. Department of Health and Human Services, Health Care Financing Administration (October 1989).

This interpretation ignores, however, possible changes in the volume and mix of services that may occur over the next two years.

Effect on Payment Rates and Effective Rates

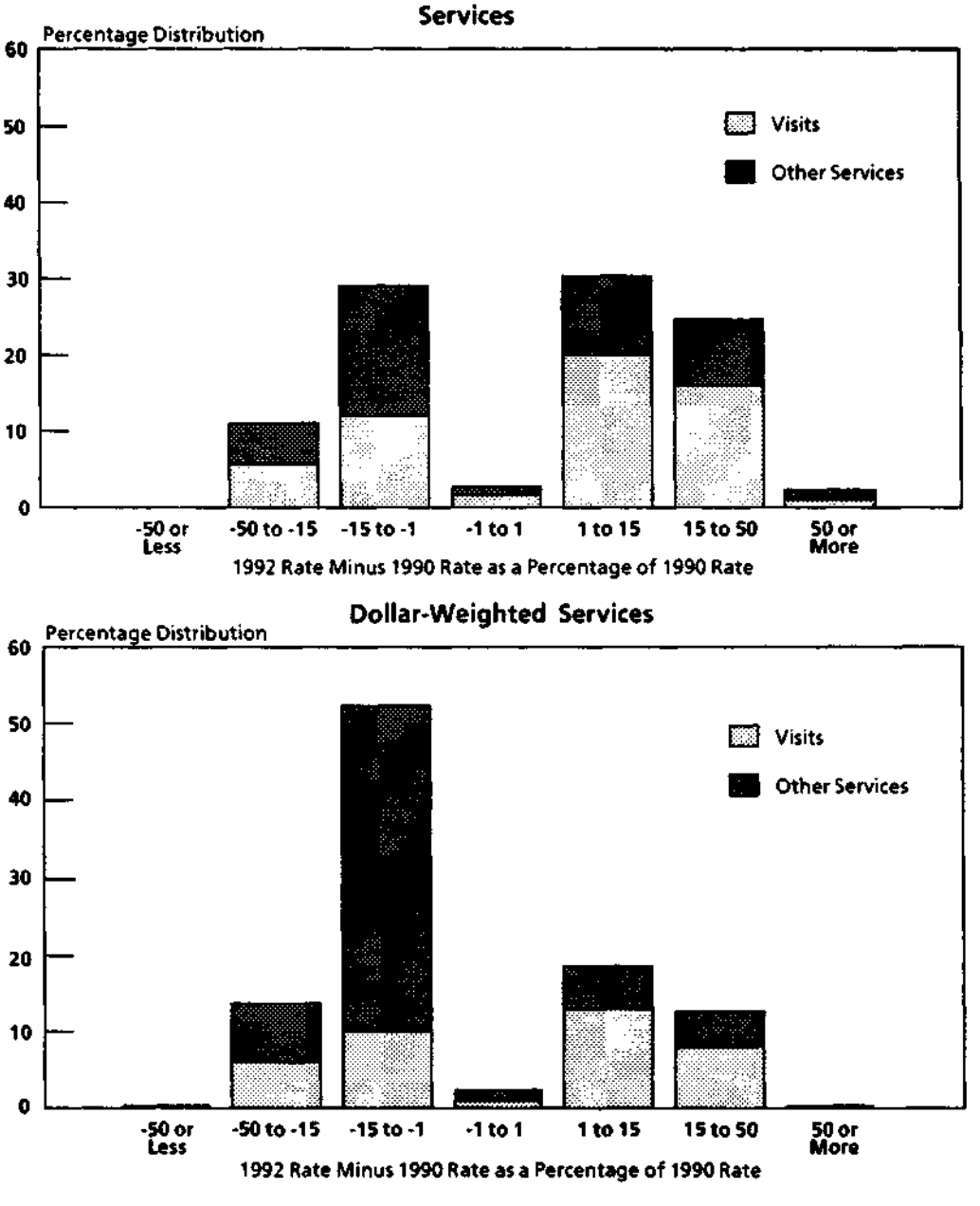
The 1992 payment rates would fall (in real terms) for about 40 percent of services and would increase for about 55 percent of services, relative to 1990 rates (see Figure 4). Nevertheless, the initial impact on Medicare's payments would be to reduce them (as seen in the next section) because those services whose rates would increase tend to be less expensive than those whose rates would fall. Visits, which are undervalued under the CPR system, would fare better than other services. Payment rates would drop for about 30 percent of visits, while about 50 percent of other services would face reduced payment rates. Payment rates would change by 15 percent or less for about 62 percent of services. For about 11 percent of services, payment rates would be lower by more than 15 percent, while they would increase by more than 15 percent for about 27 percent of services.

Because of the impact of the new limits on actual charges, there are fewer services for which effective rates would increase and more for which they would fall, compared with the changes in payment rates (see Figure 5). Effective rates would increase for about 47 percent of services, and would fall for about 44 percent. Those services whose effective rates would fall account for about 70 percent of Medicare's payments to physicians. For more than 35 percent of services, the change in effective rates would exceed 15 percent. Of those services facing such large changes, about 60 percent would increase and the remaining 40 percent would decrease.

Effect on Medicare's Payments and Physicians' Receipts

The 1992 payment rates would reduce Medicare's payments for physicians' services by more than 3 percent, if there were no behavioral responses by physicians or their patients (see Table 6 on page 38). After estimated responses, however, the change in payments would be zero if HCFA's customary assumptions are correct. The reduction in

Figure 4.
Percentage Change in Payment Rates Under 1992 Provisions



SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

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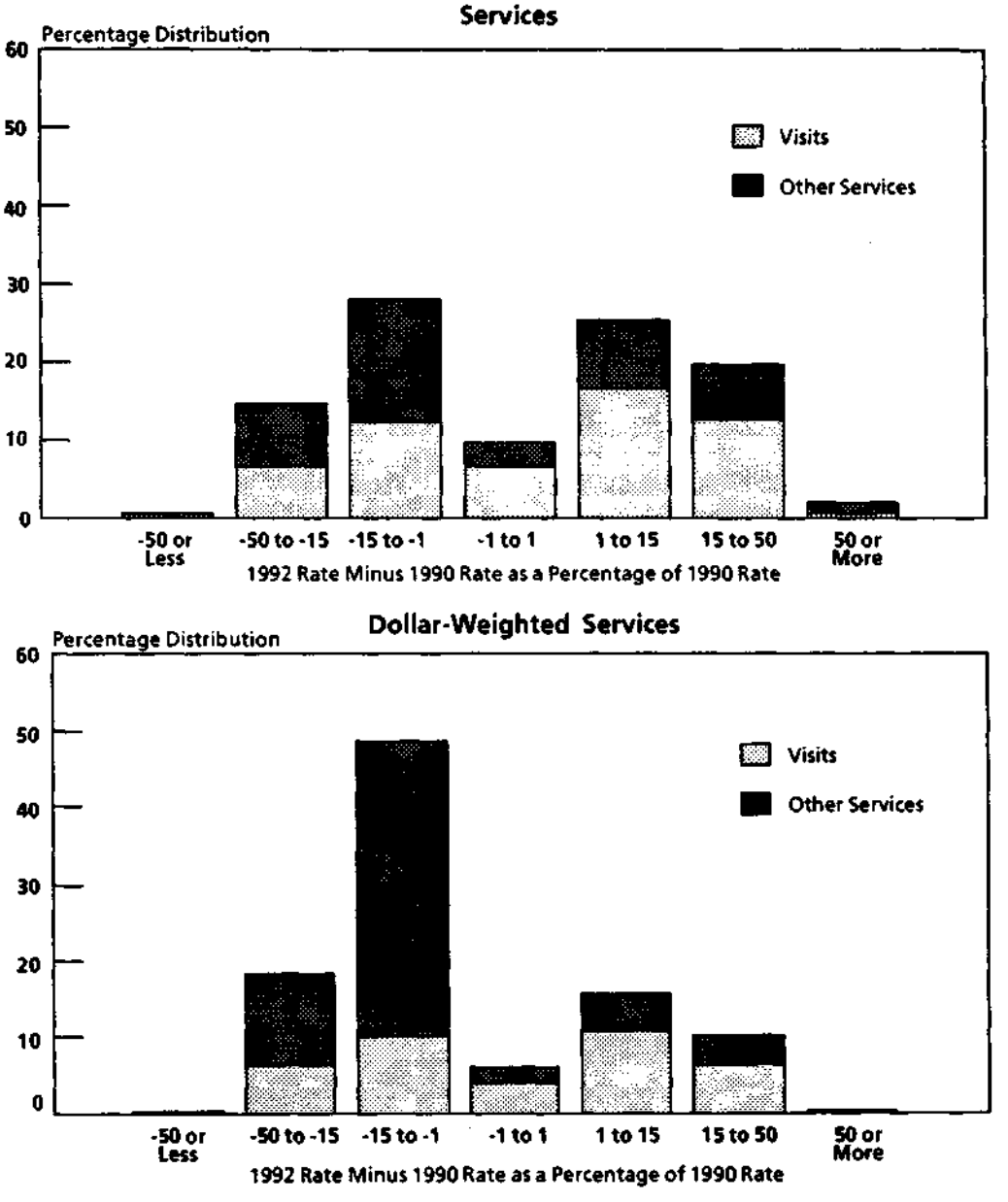
Figure 5.
Percentage Change in Effective Rates Under 1992 Provisions



SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: Effective rates are payment rates on assigned claims and actual charges on unassigned claims.

TABLE 6. CHANGE IN MEDICARE'S PAYMENTS AND PHYSICIANS' RECEIPTS UNDER 1992 PAYMENT PROVISIONS, BY SPECIALTY AND TYPE OF AREA (In percent)

		Percentage Change in Payments and Receipts					
		All Areas		Urban Areas		Rural Areas	
	Initial Share of Payments	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts
Initial Impact Before Behavioral Responses							
All Specialties	100	-3.3	-5.9	-3.7	-6.2	-0.0	-3.6
Medical Specialties	43	-0.8	-3.7	-1.7	-4.4	5.7	1.1
General practice	5	8.4	4.4	7.0	3.3	14.7	8.7
Family practice	5	8.1	3.9	6.7	2.9	12.0	6.5
Internal medicine	17	-1.5	-4.4	-2.0	-4.8	2.8	-1.4
Other	16	-5.5	-7.7	-5.6	-7.7	-3.6	-7.1
Surgical Specialties	37	-5.5	-8.4	-5.7	-8.5	-4.5	-7.8
General surgery	8	-4.5	-7.9	-4.8	-8.2	-2.5	-6.1
Ophthalmology	12	-7.8	-9.2	-7.8	-9.3	-7.4	-8.8
Orthopedic surgery	6	-4.8	-7.8	-4.9	-7.8	-4.1	-7.8
Thoracic surgery	3	-5.6	-8.3	-5.7	-8.2	-4.1	-9.2
Urology	4	-5.0	-9.1	-5.3	-9.4	-3.5	-7.3
Other	4	-2.7	-7.7	-2.7	-7.6	-2.4	-8.8
Other Specialties	20	-4.5	-5.9	-4.6	-5.9	-4.1	-6.0
Estimated Effect After Behavioral Responses							
All Specialties	100	0.0	-2.6	-0.4	-2.8	2.6	-0.9
Medical Specialties	43	1.8	-1.1	1.1	-1.6	7.0	2.5
General practice	5	9.3	5.2	8.0	4.3	14.8	8.8
Family practice	5	8.7	4.5	7.5	3.7	12.1	6.6
Internal medicine	17	0.8	-2.0	0.5	-2.3	3.9	-0.2
Other	16	-1.5	-3.6	-1.6	-3.7	0.3	-3.1
Surgical Specialties	37	-1.3	-4.2	-1.4	-4.2	-0.7	-3.8
General surgery	8	-0.5	-3.9	-0.7	-4.0	0.5	-3.0
Ophthalmology	12	-3.2	-4.6	-3.2	-4.6	-3.0	-4.4
Orthopedic surgery	6	-1.0	-3.9	-1.1	-3.9	-0.2	-3.9
Thoracic surgery	3	-1.5	-4.1	-1.6	-4.1	0.6	-4.3
Urology	4	-0.6	-4.5	-0.7	-4.7	0.2	-3.6
Other	4	1.2	-3.5	1.1	-3.5	2.1	-3.9
Other Specialties	20	-1.5	-2.9	-1.6	-2.9	-0.9	-2.8

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: Medicare's payments include both Medicare's reimbursements and enrollees' cost-sharing amounts. Physicians' receipts include Medicare's payments plus balance-billing. Receipts from non-Medicare patients--which are 70 percent of total receipts, on average--are not shown.

physicians' receipts following the responses would be nearly 3 percent. The effect on receipts would be more negative than the effect on payments since physicians would collect less in balance-billing because of the tighter limits on actual charges.

On average nationwide, payments would increase initially for general and family practitioners--groups for which visits are relatively important--but would fall for other specialty groups. Following behavioral responses, payments would increase by about 9 percent for general and family practitioners. Payments for internists would increase by less than 1 percent, and amounts for other medical specialists would fall by more than 1 percent. Payments to surgical specialists would fall by less than 2 percent on average, although the changes differ appreciably among the surgical groups.

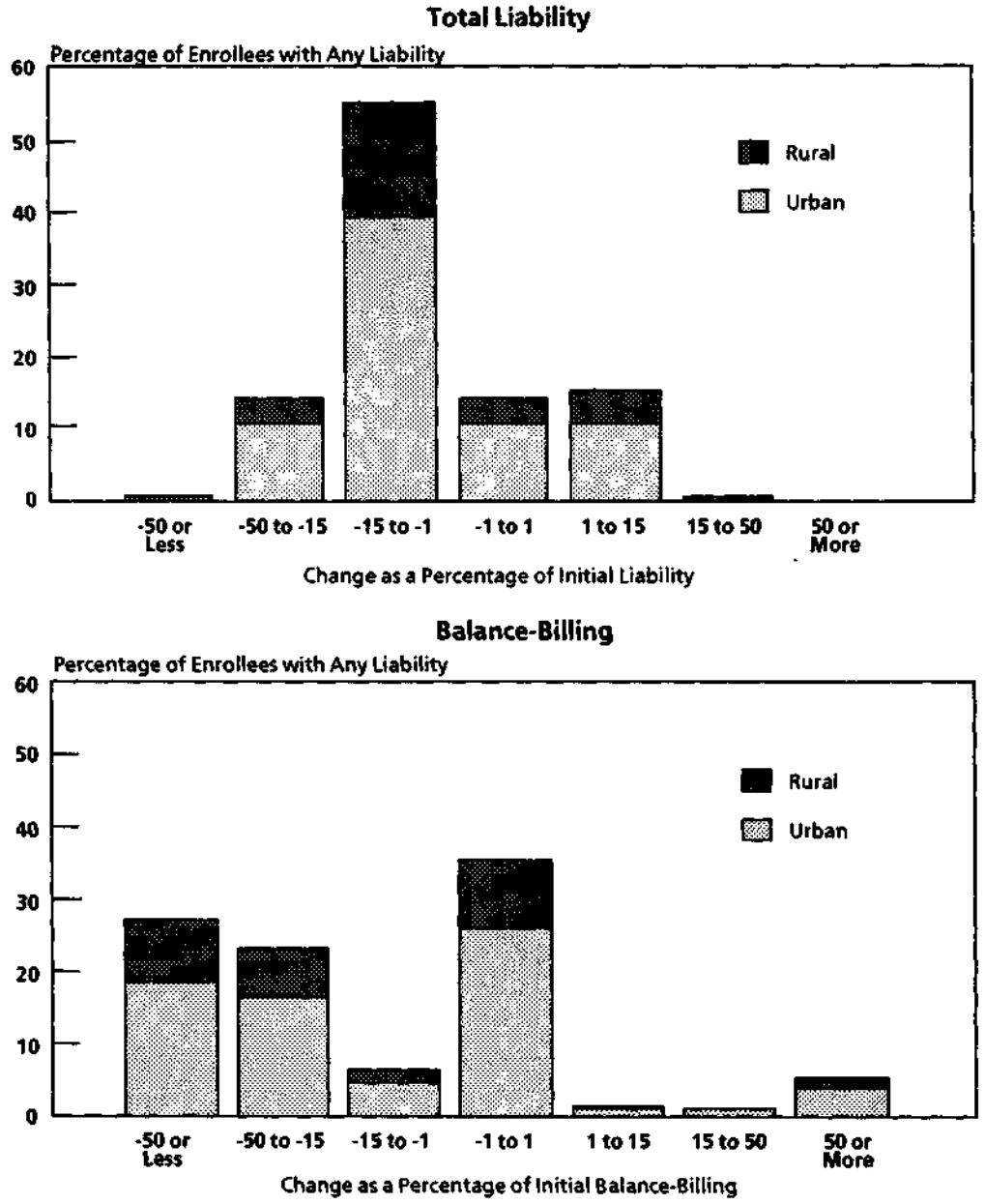
In rural areas, payments would increase overall by nearly 3 percent after behavioral responses, while they would fall slightly in urban areas. Receipts would fall in both areas because of the new limits on actual charges, but they would fall by more in urban areas.

Effect on Enrollees' Out-of-Pocket Costs

About 70 percent of enrollees with any liability would see their out-of-pocket costs fall initially, while 15 percent would experience increases under the 1992 payment provisions (see upper panel of Figure 6). Virtually no enrollees would have their costs increase initially by more than 15 percent. Balance-billing costs would fall for about 57 percent of those enrollees who have any liability (see lower panel of Figure 6). About 8 percent of these enrollees would face increased balance-billing costs, and the increases would exceed 15 percent for most of them.

On average, enrollees' costs would be lower initially by about 12 percent ($35) for those with any liability (see Table 7). Balance-billing costs would be lower by about 49 percent ($29). Enrollees who live in larger urban areas and those who are hospitalized would see greater reductions than the average. Even following behavioral responses, total liabilities for enrollees would be lower by nearly 10 percent, or $27, on average.

Figure 6.
Percentage Change in Total Liability and in Balance-Billing at Impact Under the 1992 Provisions, by Type of Area



SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

TABLE 7. CHANGE IN BALANCE-BILLING AND TOTAL LIABILITY FOR ENROLLEES WITH OUT-OF-POCKET COSTS UNDER 1992 PAYMENT PROVISIONS (In 1990 dollars)

	Under Prior Law		Change in Balance-Billing		Change in Total Liability	
	Balance-Billing	Total Liability	Dollars	Percent	Dollars	Percent
			Initial Impact Before Behavioral Responses			
Enrollees with Out-of-Pocket Costs	60	287	-29.45	-49.4	-35.13	-12.2
By Residence[a]						
Very large metro	73	366	-38.42	-52.5	-52.17	-14.2
Large metro	57	307	-28.42	-49.5	-35.94	-11.7
Other metro	61	279	-29.64	-48.4	-34.22	-12.3
Large rural	56	257	-27.73	-49.7	-30.90	-12.0
Other rural	57	246	-27.85	-49.2	-29.66	-12.1
By Hospital Use						
Yes	157	652	-79.83	-50.8	-96.30	-14.8
No	30	177	-14.16	-47.3	-16.57	-9.4
			Estimated Effect After Behavioral Responses			
Enrollees with Out-of-Pocket Costs	60	287	-27.03	-45.4	-27.19	-9.5
By Residence[a]						
Very large metro	73	366	-35.01	-47.9	-39.12	-10.7
Large metro	57	307	-25.93	-45.2	-27.13	-8.8
Other metro	61	279	-27.19	-44.4	-26.69	-9.6
Large rural	56	257	-25.59	-45.9	-24.64	-9.6
Other rural	57	246	-25.96	-45.9	-24.04	-9.8
By Hospital Use						
Yes	157	652	-72.85	-46.3	-74.52	-11.4
No	30	177	-13.12	-43.8	-12.83	-7.3

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

a. Very large metro has population of 5 million or more; large metro has population of 1 to 5 million; other metro has population of less than 1 million; large rural areas are nonmetropolitan counties with population of 25,000 or more; and other rural areas are nonmetropolitan counties with population of less than 25,000.

EFFECTS USING ALTERNATIVE ASSUMPTIONS ABOUT BEHAVIORAL RESPONSES

Empirical evidence about behavioral responses by physicians and their patients to changes in physicians' effective rates (or receipts) is weak and sometimes contradictory. As a result, there is great uncertainty about the responses that will occur under the new payment system. Under HCFA's usual assumptions, behavioral responses are very asymmetric (a 50 percent offset for those whose receipts fall initially; no offset for others). Empirical work done by CBO, however, indicates that the asymmetry in responses may be less extreme (see Appendix B).

The estimates in this section of the effects of the 1992 payment provisions assume responses that differ from those used to set the payment rates. Two alternatives are considered, which differ from HCFA's customary assumptions only in the expected responses of physicians whose receipts will increase initially. While HCFA usually assumes that there will be no offsetting reduction in the growth in volume for these physicians, the alternatives used here are that slower growth in the volume of services will offset either 35 percent or 50 percent of the initial increase in receipts stemming from higher effective rates. The first alternative is called "nearly symmetric," and the second is called "symmetric" in the tables.

The estimated effect on payments following behavioral responses is not very sensitive to these alternative assumptions. If the nearly symmetric response is correct, then the payment rates set by HCFA would be budget-reducing rather than budget-neutral, but only slightly so (see Table 8). Even if behavioral responses are fully symmetric, total payments under the 1992 payment rates would be reduced by only 0.4 percent.

The effects are relatively insensitive to the offsetting responses assumed for those physicians whose receipts would increase initially because about 85 percent of payments go to physicians whose receipts would fall--and each of the three alternatives considered makes the same assumption about the behavioral responses of these physicians.

TABLE 8. CHANGE IN MEDICARE'S PAYMENTS AND PHYSICIANS' RECEIPTS UNDER 1992 PAYMENT PROVISIONS USING ALTERNATIVE ASSUMPTIONS, BY SPECIALTY AND TYPE OF AREA (In percent)

		Percentage Change in Payments and Receipts					
		All Areas		Urban Areas		Rural Areas	
	Initial Share of Payments	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts
		Estimated Effect After Behavioral Responses (Nearly Symmetric)					
All Specialties	100	-0.3	-2.8	-0.6	-3.0	2.0	-1.5
Medical Specialties	43	1.3	-1.6	0.7	-2.0	5.7	1.1
General practice	5	7.2	3.1	6.1	2.4	11.6	5.7
Family practice	5	7.0	2.7	6.0	2.1	9.7	4.3
Internal medicine	17	0.7	-2.2	0.4	-2.3	3.5	-0.5
Other	16	-1.6	-3.8	-1.8	-3.8	-0.0	-3.4
Surgical Specialties	37	-1.4	-4.2	-1.5	-4.3	-0.7	-3.9
General surgery	8	-0.6	-3.9	-0.8	-4.1	0.5	-3.0
Ophthalmology	12	-3.2	-4.6	-3.2	-4.6	-3.0	-4.4
Orthopedic surgery	6	-1.0	-3.9	-1.1	-3.9	-0.3	-3.9
Thoracic surgery	3	-1.5	-4.1	-1.7	-4.1	0.3	-4.5
Urology	4	-0.6	-4.5	-0.7	-4.7	0.1	-3.6
Other	4	1.0	-3.7	0.9	-3.7	1.7	-4.2
Other Specialties	20	-1.5	-2.9	-1.6	-2.9	-1.0	-2.9
		Estimated Effect After Behavioral Responses (Symmetric)					
All Specialties	100	-0.4	-2.9	-0.7	-3.1	1.7	-1.8
Medical Specialties	43	1.0	-1.8	0.5	-2.2	5.1	0.6
General practice	5	6.3	2.2	5.3	1.6	10.2	4.4
Family practice	5	6.2	1.9	5.3	1.4	8.7	3.3
Internal medicine	17	0.7	-2.2	0.3	-2.4	3.4	-0.7
Other	16	-1.7	-3.8	-1.8	-3.9	-0.2	-3.5
Surgical Specialties	37	-1.4	-4.2	-1.5	-4.3	-0.8	-3.9
General surgery	8	-0.6	-3.9	-0.8	-4.1	0.5	-3.0
Ophthalmology	12	-3.2	-4.6	-3.2	-4.6	-3.0	-4.4
Orthopedic surgery	6	-1.0	-3.9	-1.1	-3.9	-0.3	-3.9
Thoracic surgery	3	-1.5	-4.1	-1.7	-4.1	0.2	-4.6
Urology	4	-0.6	-4.5	-0.7	-4.7	0.1	-3.7
Other	4	0.8	-3.8	0.8	-3.8	1.5	-4.4
Other Specialties	20	-1.6	-3.0	-1.6	-3.0	-1.1	-3.0

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: Medicare's payments include both Medicare's reimbursements and enrollees' cost-sharing amounts. Physicians' receipts include Medicare's payments plus balance-billing. Receipts from non-Medicare patients--which are 70 percent of total receipts, on average--are not shown.

Under the assumptions usually made by HCFA and under the two alternatives considered here, it is assumed that increases in volume will offset 50 percent of the initial negative impact on receipts. The effects of the alternatives considered here differ appreciably from the effects under HCFA's usual assumptions only in one respect: for those physicians whose receipts would increase initially, the increase in payments and in receipts subsequent to behavioral responses would not be as large.

Another alternative--one that would appreciably alter the estimated effects of the 1992 payment provisions--is to assume that there will be no behavioral responses to the new effective rates. If this assumption was correct, the eventual effects of the new payment provisions would be identical to the initial impact shown in the upper panel of Table 6 on page 38, unless the MFS rates were increased to achieve budget neutrality under this alternative assumption.

Because of the uncertainty about what behavioral responses will occur, the PPRC has suggested setting the initial MFS rates based on the assumption that there will be no behavioral responses, and later imposing a retrospective penalty through the update process for any increases in volume that occurred. By contrast, reducing the initial MFS rates for expected increases in volume imposes a prospective penalty that may be at least partially corrected later through the update process if the prospective penalty turns out to have been too large or too small.

CHAPTER V

PAYMENT REFORM PROVISIONS FOR 1996

In 1996, payment rates will be the lesser of the Medicare fee schedule amount or the actual charge. The actual charges of nonparticipating physicians will be limited to 115 percent of their MFS amounts, which are 95 percent of the MFS amounts applicable to participating physicians.

The MFS rates for 1996 will be the 1992 budget-neutral rates, increased each year thereafter by the update mechanism described in Chapter II. Just as in Chapter IV, however, the results shown here ignore the update process. The results are estimates of how Medicare's payments, physicians' receipts from Medicare, and enrollees' out-of-pocket costs would differ from current law if the initial MFS rates had been fully in place for 1990. As before, they may be roughly interpreted as results for 1996 in constant 1990 dollars.

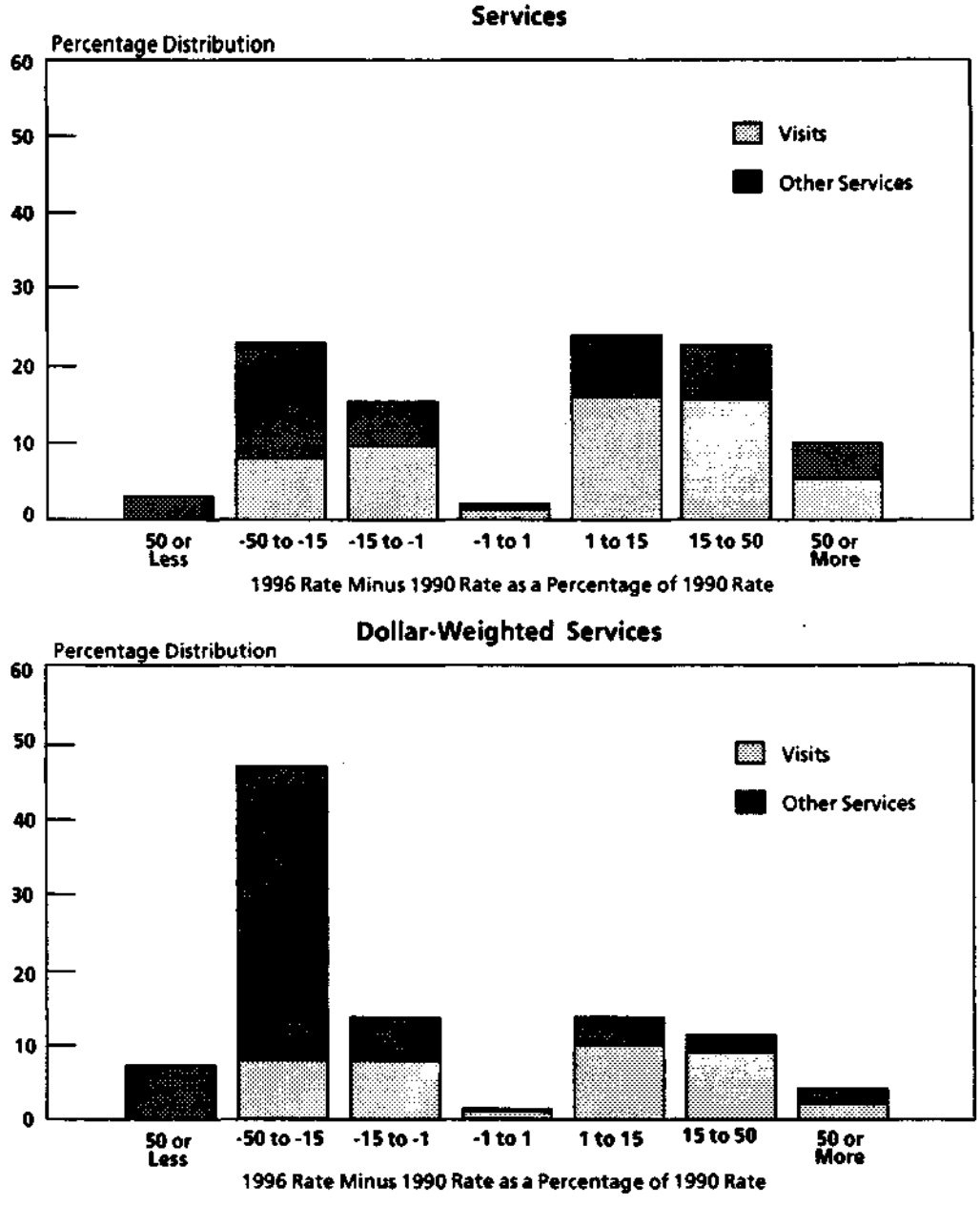
ESTIMATED EFFECTS OF THE 1996 PROVISIONS

The MFS rates designed to achieve budget neutrality when incorporated into the constrained MFS for 1992 would reduce costs--by about 4 percent--if they were fully established in that year instead. This effect occurs because, under the constrained MFS (or CMFS) rates set for 1992, more fees will exceed their MFS values than will fall below them. Consequently, eliminating the constraints--as is assumed for these simulations--would result in a net reduction in Medicare's total payments.

Effect on Payment Rates and Effective Rates

With full implementation of MFS rates, payments for about 42 percent of services would be lower than under the CPR system, while payments for about 56 percent would be higher (see Figure 7). For visits, about

Figure 7.
Percentage Change in Payment Rates Under 1996 Provisions



SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

32 percent would be paid less, and 66 percent would be paid more. For other services, about 54 percent would be paid less, and 44 percent would be paid more.

For about 58 percent of services, payment rates would change by more than 15 percent, compared with CPR rates. Fewer than half of these would experience reductions, while more than half would benefit from increases. At the extremes, about 3 percent of services would be paid less than half what they would have been paid under the CPR system, while almost 10 percent would be paid at least 50 percent more.

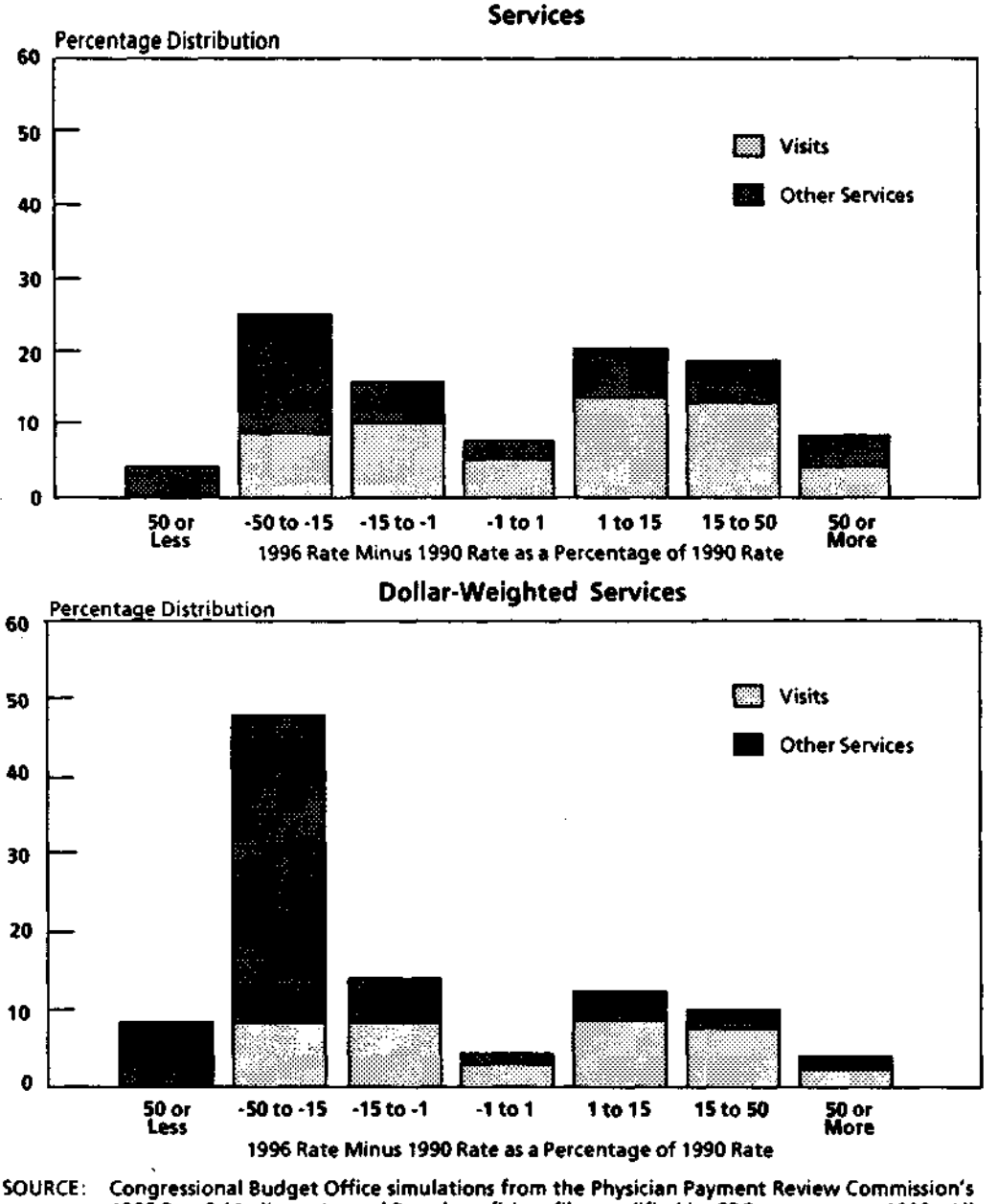
Because of the tighter limits on actual charges, physicians' effective rates would be reduced by more than their payment rates. Effective rates would drop for about 45 percent of services, while they would increase for about 47 percent of services (see Figure 8).

Effect on Medicare's Payments and Physicians' Receipts

Under the 1996 provisions, the new payment rates would reduce Medicare's payments for physicians' services by 12 percent relative to what CPR rates would otherwise have been before any behavioral responses (see Table 9). After those responses, payments for physicians' services would be lower by the nearly 4 percent mentioned earlier if the assumptions used to set the rates are correct. Physicians' receipts from Medicare patients would decline by nearly 7 percent overall. The effect on receipts would be more negative than the effect on Medicare's payments because physicians would lose some balance-billing collections as well.

For the most part, the patterns found when comparing the 1992 with 1990 rates hold when comparing 1996 with 1990 rates, although the magnitude of the changes is larger. General and family practitioners would be the only specialties to experience an appreciable increase in payments and in receipts from Medicare. These physicians benefit so greatly in part because they provide a disproportionate share

Figure 8.
Percentage Change in Effective Rates Under 1996 Provisions



SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: Effective rates are payment rates on assigned claims and actual charges on unassigned claims.

TABLE 9. CHANGE IN MEDICARE'S PAYMENTS AND PHYSICIANS' RECEIPTS UNDER 1996 PAYMENT PROVISIONS, BY SPECIALTY AND TYPE OF AREA (In percent)

		Percentage Change in Payments and Receipts					
		All Areas		Urban Areas		Rural Areas	
	Initial Share of Payments	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts
Initial Impact Before Behavioral Responses							
All Specialties	100	-12.0	-14.8	-13.0	-15.6	-4.9	-9.1
Medical Specialties	43	-5.7	-8.9	-7.6	-10.6	8.6	2.9
General practice	5	9.3	4.7	5.9	1.9	23.4	16.1
Family practice	5	11.0	6.0	7.3	2.9	21.4	14.5
Internal medicine	17	-3.7	-7.1	-4.9	-8.1	5.7	0.4
Other	16	-17.5	-19.7	-17.8	-19.9	-12.7	-16.4
Surgical Specialties	37	-16.7	-19.8	-17.1	-20.1	-14.2	-17.8
General surgery	8	-16.8	-20.4	-18.0	-21.4	-10.2	-14.3
Ophthalmology	12	-19.3	-21.0	-19.2	-20.9	-20.0	-21.7
Orthopedic surgery	6	-14.9	-18.2	-15.2	-18.4	-12.1	-16.5
Thoracic surgery	3	-23.1	-25.9	-23.1	-25.7	-23.8	-28.5
Urology	4	-13.1	-17.6	-13.6	-18.1	-10.1	-14.5
Other	4	-10.4	-15.6	-10.7	-15.6	-8.6	-15.4
Other Specialties	20	-17.0	-18.5	-17.0	-18.5	-17.0	-19.1
Estimated Effect After Behavioral Responses							
All Specialties	100	-3.9	-6.8	-4.7	-7.4	1.6	-2.6
Medical Specialties	43	0.2	-3.1	-1.4	-4.3	11.4	5.7
General practice	5	11.3	6.7	8.4	4.4	23.6	16.4
Family practice	5	12.3	7.3	9.0	4.6	21.5	14.6
Internal medicine	17	0.3	-3.1	-0.6	-3.7	7.2	2.0
Other	16	-7.0	-9.2	-7.4	-9.4	-3.0	-6.6
Surgical Specialties	37	-6.8	-9.8	-7.0	-10.0	-5.2	-8.7
General surgery	8	-6.7	-10.2	-7.4	-10.7	-3.0	-7.0
Ophthalmology	12	-8.8	-10.5	-8.8	-10.4	-9.2	-10.8
Orthopedic surgery	6	-5.8	-9.1	-6.1	-9.2	-3.9	-8.1
Thoracic surgery	3	-10.1	-12.8	-10.2	-12.7	-9.0	-13.5
Urology	4	-4.4	-8.7	-4.7	-9.0	-2.8	-7.1
Other	4	-2.4	-7.2	-2.6	-7.3	-0.4	-6.8
Other Specialties	20	-7.7	-9.2	-7.7	-9.2	-7.1	-9.2

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: Medicare's payments include both Medicare's reimbursements and enrollees' cost-sharing amounts. Physicians' receipts include Medicare's payments plus balance-billing. Receipts from non-Medicare patients--which are 70 percent of total receipts, on average--are not shown.

of visits--services whose rates will increase compared with CPR payments. In addition, general and family practitioners are more likely than other specialists to practice in rural areas, where rates will generally increase relative to CPR payments.

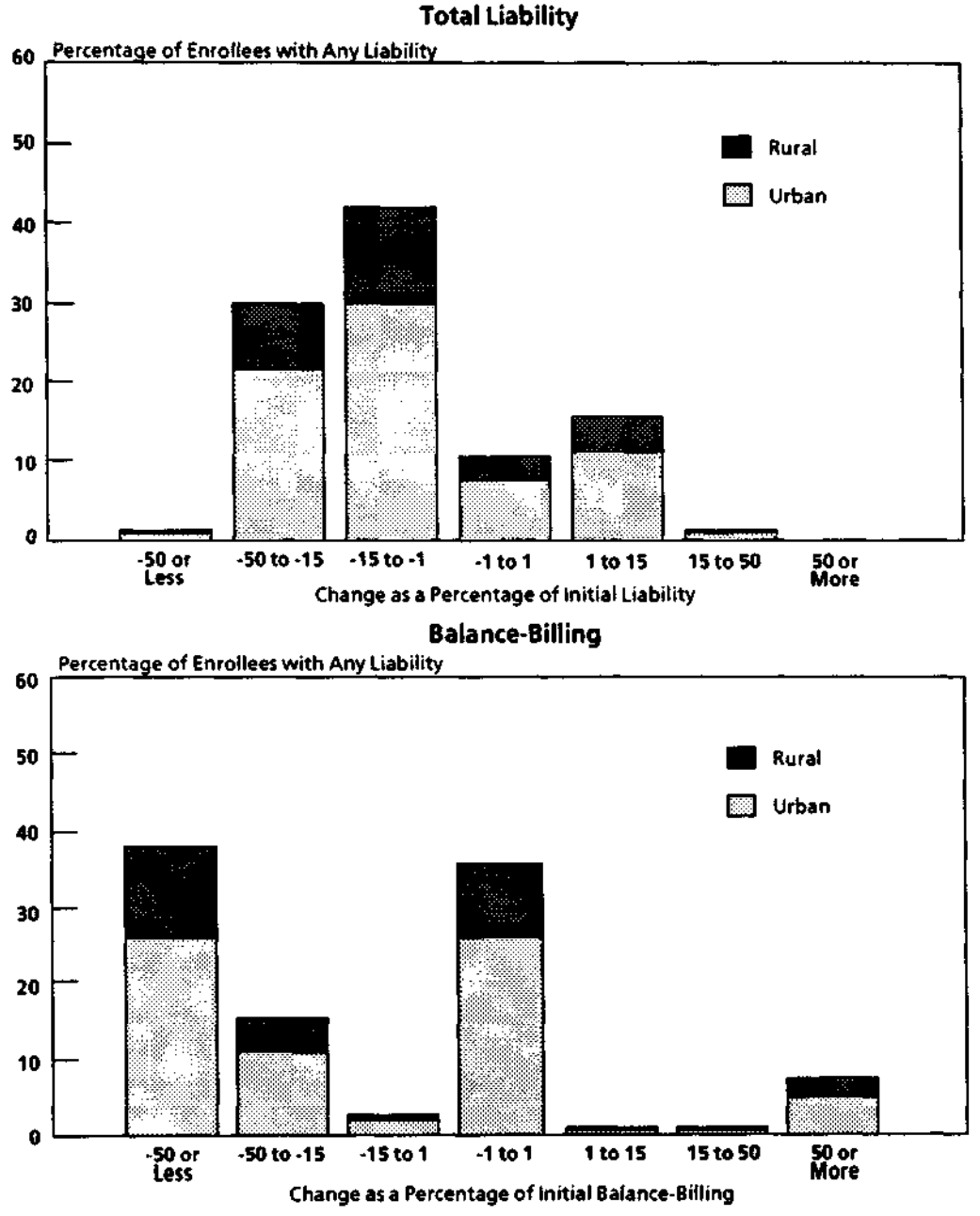
Payments and receipts for internists would fall initially under the 1996 provisions. After behavioral responses, however, their payments would be essentially unchanged under the new system, while the drop in their receipts would be cut by more than half. For surgical and other specialties, payments and receipts would be lower under the new system both initially and after behavioral responses.

Effect on Enrollees' Out-of-Pocket Costs

Under the 1996 provisions, out-of-pocket costs would fall initially for about 73 percent of enrollees with any liability, and would increase for about 17 percent of them (see upper panel of Figure 9). These costs would increase by 15 percent or more for about 1 percent of enrollees, while for more than 30 percent of enrollees they would fall by 15 percent or more. Balance-billing costs would be lower initially for about 56 percent of enrollees with any out-of-pocket costs, while they would be higher for about 9 percent of them, compared with those costs under the CPR system (see lower panel of Figure 9). About 8 percent of these enrollees would see their balance-billing costs increase by more than 15 percent.

Overall, enrollees' out-of-pocket costs would fall initially by 20 percent, or $58, on average, while their balance-billing costs would fall by about 62 percent, or $37 (see Table 10 on page 52). Following behavioral responses, total costs would fall by about 14 percent, or $39, on average. Enrollees living in the largest urban areas and those using the hospital during the year would see their costs fall by more than the average reduction.

Figure 9.
Percentage Change in Total Liability and in Balance-Billing at Impact Under the 1996 Provisions, by Type of Area



SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

TABLE 10. CHANGE IN BALANCE-BILLING AND TOTAL LIABILITY FOR ENROLLEES WITH OUT-OF-POCKET COSTS UNDER 1996 PAYMENT PROVISIONS (In 1990 dollars)

	Under Prior Law		Change in Balance-Billing		Change in Total Liability	
	Balance-Billing	Total Liability	Dollars	Percent	Dollars	Percent
			Initial Impact Before Behavioral Responses			
Enrollees with Out-of-Pocket Costs	60	287	-37.12	-62.3	-57.65	-20.1
By Residence[a]						
Very large metro	73	366	-46.75	-63.9	-89.74	-24.5
Large metro	57	307	-35.40	-61.7	-59.40	-19.3
Other metro	61	279	-37.74	-61.7	-56.19	-20.1
Large rural	56	257	-35.18	-63.1	-49.16	-19.1
Other rural	57	246	-35.93	-63.5	-46.80	-19.1
By Hospital Use						
Yes	157	652	-101.06	-64.3	-161.13	-24.7
No	30	177	-17.72	-59.2	-26.25	-14.9
			Estimated Effect After Behavioral Responses			
Enrollees with Out-of-Pocket Costs	60	287	-32.03	-53.8	-39.04	-13.6
By Residence[a]						
Very large metro	73	366	-39.03	-53.4	-58.20	-15.9
Large metro	57	307	-30.30	-52.8	-39.31	-12.8
Other metro	61	279	-32.52	-53.1	-38.25	-13.7
Large rural	56	257	-30.83	-55.3	-34.57	-13.5
Other rural	57	246	-31.96	-56.5	-33.56	-13.7
By Hospital Use						
Yes	157	652	-86.39	-55.0	-109.54	-16.8
No	30	177	-15.53	-51.9	-17.66	-10.0

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

a. Very large metro has population of 5 million or more; large metro has population of 1 to 5 million; other metro has population of less than 1 million; large rural areas are nonmetropolitan counties with population of 25,000 or more; and other rural areas are nonmetropolitan counties with population of less than 25,000.

TABLE 11. CHANGE IN MEDICARE'S PAYMENTS AND PHYSICIANS' RECEIPTS UNDER 1996 PAYMENT PROVISIONS USING ALTERNATIVE BEHAVIORAL ASSUMPTIONS, BY SPECIALTY AND TYPE OF AREA (In percent)

		Percentage Change in Payments and Receipts					
		All Areas		Urban Areas		Rural Areas	
	Initial Share of Payments	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts	Medicare Payments	Physician Receipts
Initial Impact Before Behavioral Responses (Nearly Symmetric)							
All Specialties	100	-4.4	-7.2	-5.0	-7.7	0.2	-3.9
Medical Specialties	43	-0.8	-4.0	-2.1	-5.0	8.4	2.7
General practice	5	8.2	3.7	6.0	2.0	17.7	10.6
Family practice	5	9.3	4.3	6.8	2.4	16.3	9.4
Internal medicine	17	-0.1	-3.4	-0.8	-3.9	6.0	0.7
Other	16	-7.5	-9.6	-7.7	-9.8	-4.0	-7.7
Surgical Specialties	37	-6.9	-9.9	-7.1	-10.0	-5.3	-8.9
General surgery	8	-6.7	-10.2	-7.4	-10.7	-3.1	-7.1
Ophthalmology	12	-8.8	-10.5	-8.8	-10.4	-9.2	-10.9
Orthopedic surgery	6	-5.8	-9.1	-6.1	-9.2	-4.0	-8.2
Thoracic surgery	3	-10.2	-12.9	-10.3	-12.8	-9.6	-14.0
Urology	4	-4.4	-8.8	-4.7	-9.0	-2.8	-7.2
Other	4	-2.8	-7.6	-3.0	-7.7	-1.1	-7.4
Other Specialties	20	-7.7	-9.2	-7.8	-9.2	-7.3	-9.5
Estimated Effect After Behavioral Responses (Symmetric)							
All Specialties	100	-4.6	-7.4	-5.2	-7.8	-0.4	-4.5
Medical Specialties	43	-1.2	-4.4	-2.4	-5.3	7.1	1.5
General practice	5	6.9	2.3	5.0	1.0	15.2	8.1
Family practice	5	8.0	3.0	5.8	1.5	14.1	7.2
Internal medicine	17	-0.2	-3.6	-0.9	-4.0	5.4	0.2
Other	16	-7.6	-9.8	-7.9	-10.0	-4.5	-8.2
Surgical Specialties	37	-6.9	-9.9	-7.1	-10.1	-5.4	-8.9
General surgery	8	-6.8	-10.2	-7.4	-10.7	-3.1	-7.1
Ophthalmology	12	-8.8	-10.5	-8.8	-10.4	-9.2	-10.9
Orthopedic surgery	6	-5.9	-9.1	-6.1	-9.2	-4.0	-8.2
Thoracic surgery	3	-10.3	-13.0	-10.3	-12.9	-9.8	-14.2
Urology	4	-4.4	-8.8	-4.7	-9.1	-2.9	-7.3
Other	4	-2.9	-7.8	-3.1	-7.8	-1.4	-7.7
Other Specialties	20	-7.7	-9.3	-7.8	-9.2	-7.4	-9.6

SOURCE: Congressional Budget Office simulations from the Physician Payment Review Commission's 1986 Part B Medicare Annual Data beneficiary file, modified by CBO to represent 1990. All physicians' claims except for anesthesiology and clinical laboratory services were used.

NOTE: Medicare's payments include both Medicare's reimbursements and enrollees' cost-sharing amounts. Physicians' receipts include Medicare's payments plus balance-billing. Receipts from non-Medicare patients--which are 70 percent of total receipts, on average--are not shown.

EFFECTS USING ALTERNATIVE ASSUMPTIONS ABOUT BEHAVIORAL RESPONSES

The estimated effects of the 1996 provisions subsequent to behavioral responses are not very sensitive to the two alternative assumptions described in Chapter IV. If the nearly symmetric response (35 percent) is correct, then the 1996 payment rates would reduce Medicare's payments by 4.4 percent, compared with a reduction of 3.9 percent if HCFA's usual assumptions are correct (see Table 11 on page 53). Even if behavioral responses are fully symmetric (50 percent), payments under the 1996 payment rates would be reduced by only 4.6 percent. Just as in Chapter IV, which examined the payment reform provisions for 1992, the effects of the two alternatives differ from the effects under HCFA's usual assumptions only in one significant way: the post-response increase in payments and receipts for those physicians who gain initially would not be as large.

CHAPTER VI

UNRESOLVED ISSUES AND FUTURE REFINEMENTS

Provisions of the Reconciliation Act have determined the basic elements of payment reform, but there remain outstanding issues that may, when resolved, affect the impact that the Medicare fee schedule will have. The Congress has addressed some of these issues explicitly through mandated studies; the Department of Health and Human Services will address others as it implements the new system. This chapter discusses some of these unresolved matters.

VOLUME CONTROL AND ACCESS UNDER THE UPDATE PROCESS

Most of the growth in real costs per enrollee for physicians' services under Medicare has been the result of increases in the volume of services provided, rather than of increases in real payment rates. The research on effectiveness mandated under the Reconciliation Act may eventually help to reduce the incidence of unnecessary services by providing better information about appropriate types and levels of care. It may also help to lessen the need for defensive medicine if courts rely on practice guidelines to distinguish justified from unjustified malpractice suits. The benefits of this research, however, will not be immediate. Further, in some instances, better information about appropriate care will lead to more, not fewer, services being provided.

Spending targets are the tool intended in the near term to reduce historical rates of growth in Medicare's costs per enrollee, by reducing the annual update factor for payment rates when growth in volume exceeds a specified target. Although the legislative language is ambiguous, the Reconciliation Act apparently intended the default update mechanism to generate a single update factor each year. The Secretary of HHS may recommend and the Congress may enact different update factors, however, for separate categories or groups of services.

Two sets of issues are associated with the target and its effect on the update factor. One issue is whether it is advisable to set separate targets and update factors for different categories of services. A second issue is whether the update process will adversely affect enrollees' access to health care.

Separate Targets and Update Factors

There are two arguments made for separate update factors, instead of a single one. The first argument is that only those physicians who provide unnecessary services should be penalized, if it is feasible to identify and to isolate them. The second argument is that it may be difficult for physicians to respond as desired under a single target/update mechanism. According to this argument, only cohesive physician groups with some means of informing and influencing their members can reasonably hope to modify the practice patterns of physicians in the group. Such groups might be based on specialty, locality, or group practice arrangements.

There are also arguments in favor of a single update factor. One argument is that any nonuniform update would distort the cost-based relationships in the MFS, so that payment rates would again differ in ways unrelated to resource costs. Such distortion would be less serious, however, if the update factors differed only by locality. In this way, the schedule of rates faced by each physician would continue to reflect the relative costs associated with each service. It is also argued that the effects of a single target/update mechanism should be monitored before concluding that it cannot have the desired effect. If it cannot, then would be the time to decide whether the additional complications of separate targets and update factors might be justified.

Under the Reconciliation Act, the Secretary of HHS is required to study the feasibility of separate targets--by locality, specialty, and type of service. The report is due in July 1990. In addition, the General Accounting Office is instructed to study the effect of antitrust laws on the ability of physicians to act in concert in developing and applying practice guidelines. This study is due in July 1991.

Enrollees' Access to Care

The provisions on payment reform could adversely affect enrollees' access to care in some areas or for some services if legislation does not supersede the default update process when there is evidence of inadequate access. The default process is designed to increase payment rates by less than the increase in physicians' practice costs (as measured by the MEI) unless growth in the volume of services per enrollee is reduced by a specified percentage each year. The result will be either increases in payments that fall short of increases in physicians' practice costs, or eventual decreases (not just a slowing of growth) in the volume of services. For 1993, for example, growth in volume must be reduced by two percentage points below average growth for the previous five years. If volume grew by 2 percent a year, say, during the previous years, payment rates would increase by less than the full MEI unless there was no growth in volume for 1993. If growth in volume was eliminated for 1993 and later years, the five-year average used to set future targets would then fall. Consequently, volume per enrollee would have to fall in years after 1993 to avoid the default update penalty.

If this decline in the volume of services provided per enrollee continued, eventually many would question whether the care provided was adequate. Alternatively, if physicians did not succeed in reducing volume by enough to avoid the default update penalty, then increases in payment rates would lag increasingly behind increases in physicians' practice costs. If MFS rates fell below the costs of providing the services, or even if they fell much below rates paid by other insurers, some physicians might become reluctant to accept Medicare patients. Those who continued to accept Medicare patients might choose no longer to accept assignment, so that they could collect their actual charges rather than Medicare's lower payment rates. If this occurred, balance-billing costs would increase for enrollees.

To guard against these problems, the Secretary of HHS is required to monitor enrollees' use of and access to services. Annual reports are to be made in April, beginning with 1991.

DEFINING PAYMENT LOCALITIES AND ADJUSTING FOR GEOGRAPHIC DIFFERENCES IN COSTS

The current 243 payment localities do not always represent appropriate markets for physicians' services. Individual carriers define the localities as they choose and design them for calculating customary and prevailing charges. Some carriers use statewide localities, others use sometimes noncontiguous localities based on the extent of urbanization, and others use contiguous collections of counties.

The work, expense, and malpractice components of the relative value scale are service-based values that are uniform nationwide. Therefore, the definition of payment localities is of importance only when adjusting these values for geographic differences in costs. Two separate issues have been raised in this context.

First, would some different definition of localities correspond more closely to economic areas with significant differences in physicians' expenses? In states with a mix of urban and rural areas, statewide localities ignore some observable price differences. Even if separate localities were defined for each metropolitan area, with all other counties in each state combined into a single "rest of state" locality (as in Medicare's prospective payment system for reimbursing hospitals), price differences among the counties in the rest of the state would be ignored. For some office personnel, the relevant labor market may be larger than it is for office space, while the relevant market for malpractice insurance is typically the state because state regulations govern its provision.

Second, do the differences in input prices that are measured by the geographic practice cost indexes (the GPCIs) accurately reflect differences in physicians' costs per service? This issue is probably more important to rural physicians than the first. Rural physicians argue that costs to them per service provided are larger than they are in urban areas. For example, rural physicians may have a greater need to maintain certain office facilities, such as laboratory or radiology equipment, that are readily available elsewhere for urban physicians.

Under the Reconciliation Act, the Physician Payment Review Commission is instructed to study variation in practice costs by alternative geographic areas, and to assess how accurately the current GPCIs reflect those cost differences. This report is due in July 1991.

TREATMENT OF MALPRACTICE INSURANCE COSTS

In the RVS values and the GPCIs currently available for the MFS, malpractice costs are combined with other practice expenses. The Reconciliation Act requires, however, that malpractice costs be separated out as a third component in the fee schedule. It also requires that malpractice costs be allocated to particular services, rather than assessed on the basis of specialty as is the current practice of insurers. Even if the malpractice insurance system is unchanged, this redefinition of the MFS will necessitate additional research. In a study due in July 1991, the PPRC is instructed to study appropriate methods for incorporating malpractice expenses into the MFS.

There is considerable sentiment in the medical profession and in the Congress, however, to modify the malpractice insurance system, thereby reducing its costs for all concerned. To further this goal, the General Accounting Office is instructed to study alternative resolution procedures, including no-fault insurance and mandatory arbitration of claims. This study is due in April 1991. The Physician Payment Review Commission is also examining alternatives to the current treatment of malpractice costs by Medicare, including having the federal government serve as the insurer on Medicare claims.

REVISING DEFINITIONS OF SERVICE CODES

One of the major goals of the MFS is to ensure that all physicians are paid the same rate (adjusted for geographic differences in costs) for the same service. To achieve this goal, service codes must be precise and used uniformly nationwide. Currently, physicians' use of the codes for visits and for surgical services varies considerably. Until that variation is eliminated, there can be no assurance of equitable payment under the MFS.

For visits, the problem is that the current service definitions are vague. As a result, some physicians may bill for a "brief" visit, for example, while others providing essentially the same service will bill for a more expensive "intermediate" visit. PPRC has recommended that the definitions of the codes for visits be expanded to include time the physician spends with the patient, in order to give the definitions precision. Under the Reconciliation Act, the Secretary of HHS is instructed to study this proposal compared with the alternative of clarifying the clinical descriptions in the current definitions. The report is due in July 1991. By mid-1990, a consensus panel convened jointly by the PPRC and the American Medical Association is expected to develop new codes for visits that include time in their definition.

For surgical procedures, carriers differ in the related services that they "bundle" in with the procedure and that are ineligible for separate payment. The most significant variation occurs in two areas: whether the physician may bill for a visit as well as the procedure at the time of surgery; and for how many days following the surgery must related services be provided at no additional charge. Under the Reconciliation Act, HCFA is required to develop standard guidelines for each service, to be followed by all carriers. One possible set of guidelines for surgical services has already been developed by the PPRC.

REFINING AND REVISING THE RELATIVE VALUE SCALE

The RVS work values that were developed for the Health Care Financing Administration are currently being refined; additional specialties and services are being surveyed so that the definition of a complete RVS will require less extrapolation. Refining the practice expense values is also under way. Under the Reconciliation Act, HCFA is instructed to publish a "model fee schedule" by September 1990, although it is recognized that valid relative values for all services may not exist at that time. Further refinement will continue throughout 1991, until MFS rates are first used as one factor determining 1992 payment amounts.

Although most of the refinements to the Medicare fee schedule will depend on technical considerations, other factors may influence the

ultimate MFS rates for some services. For example, a fee schedule based on charges for radiology services was established in 1989, and the Reconciliation Act mandates implementation of a (not necessarily resource-based) fee schedule for physicians' pathology services for 1991. Whether or not the preexisting fee schedules for these services will be replaced under the MFS is uncertain.[1] The PPRC has recommended complete adherence to resource-based fees, but HCFA may choose to define the model fee schedule differently.

Another issue is how to set Medicare's fees for the services of limited-license practitioners (LLPs, such as chiropractors and optometrists).[2] Because they provide some services that are similar to those provided by physicians, setting the same MFS rates on those services might be appropriate. For services that are specific to the LLPs, however, either new survey work must be undertaken or some alternative must be used to set MFS values. Under the Reconciliation Act, the PPRC is instructed to study this problem and to report by July 1991.

1. The Reconciliation Act requires use of the relative value guide already in place for anesthesiology services--which the Physician Payment Review Commission believes is an acceptable resource-based scale. The conversion factors used with it currently to define prevailing charges must be modified, however, to incorporate the guide into the Medicare fee schedule.

2. Dentists are the one limited license specialty that was surveyed in the initial work on the relative value scale for the Health Care Financing Administration, so resource-based values for their services are already available.

APPENDIXES

APPENDIX A

DATA AND METHODS

The estimates presented in this paper were derived from CBO simulations of Medicare claims for a representative sample of nearly 83,000 enrollees.[1] For enrollees in the sample, all physicians' claims filed on their behalf for services in calendar year 1986 were included with two exceptions. Claims for anesthesiology services were excluded because it was not possible to define reliable payment rates for them. Claims for clinical laboratory services were excluded because they are already paid under a separate fee schedule.

These data were adjusted to reflect CBO's projections for participation rates, assignment rates, and customary, prevailing, and actual charges under Medicare for 1990. CBO then calculated payment rates for 1990 using the customary, prevailing, and reasonable (CPR) methodology, choosing the lesser of the customary, the prevailing, or the actual charge for each claim. In the adjusted data, about 60 percent of Medicare's payments were to participating physicians, about 20 percent were for assigned claims by nonparticipating physicians, and the remaining 20 percent were for unassigned claims.

The effects of the new payment provisions for 1990 were simulated by changing prevailing charges and the limits on actual charges as specified in the Omnibus Budget Reconciliation Act of 1989. The CPR methodology was then used to calculate new payment rates for comparison with baseline amounts. The change in physicians' effective rates (payment rates on assigned claims and actual charges on unassigned claims) was also calculated. CBO estimated the effects of the reform

1. The initial data source was the Part B Medicare Annual Data beneficiary file for 1986. The Physician Payment Review Commission added Medicare fee schedule values to this data set, and CBO modified it to represent 1990 both before and after the payment changes enacted under the Omnibus Budget Reconciliation Act of 1989. The following provisions of the law for 1990 could not be incorporated: the bonus paid to physicians practicing in areas where a health manpower shortage exists; the lower prevailing charges set for new physicians; and the limits on prevailing charges for selected services to those of the specialty designated by the Secretary of Health and Human Services.

provisions for 1992 and for 1996 in a similar way. The new fee schedule amounts were compared with baseline payment rates after adjusting those baseline rates to reflect the payment changes for 1990 contained in the Reconciliation Act.

The initial impact of the new payment provisions is the estimated change in payments and in physicians' receipts from Medicare before any induced behavioral changes. Thus, it reflects only the changes in Medicare's payment rates and in physicians' effective rates. The ultimate effect of the new provisions incorporates behavioral responses to the initial change in physicians' effective rates. Only induced changes in the volume of services provided were incorporated into the simulations. No induced changes in assignment were simulated because the relationship between assignment and payment rates appears to be weak and unpredictable.

Appendix B presents regression estimates of changes in volume induced by payment changes under Medicare. The estimates assume that changes in the volume of services provided are responses to the initial impact of new payment provisions on a physician's practice receipts. In other words, changes in volume are responses at the practice level to the average impact on effective rates for a physician, and not a response to changes in particular rates for specific services. Because the simulations in this study used a sample of enrollees as the data base rather than a sample of physicians, it was necessary to define a substitute for the individual physician's practice in order to apply the behavioral estimates. For this purpose, it was assumed that all physicians in a given specialty and locality would be affected in the same way by new payment provisions, so that they could be treated as a single practice.

Induced changes in volume partially offset the initial impact of new payment provisions on physicians' receipts, but they could either offset or augment the initial impact on Medicare's payments for each practice. If, for example, a provision would increase payment rates but lower effective rates (because of tighter limits on unassigned actual charges), then Medicare's payments would increase not only because of the higher payment rates but also because of an induced increase in the volume of services provided.

APPENDIX B

ESTIMATES OF BEHAVIORAL RESPONSES

During periods of fee constraint under Medicare, a response in volume--observed as a temporary acceleration in growth for the number of services per enrollee (or their complexity)--could arise from either of two sources:

- Greater demand for care by patients in response to lower out-of-pocket costs, relative to what they would otherwise face; or

- Physician-induced demand resulting from physicians' efforts to offset at least partially the fall in their practice income, compared with what would otherwise result.

Both of these effects could be at work simultaneously. For purposes of estimating costs, it makes no difference which effect is responsible for the increase in volume. The implications for reduced savings from fee constraints are the same. There might be analogous responses to increases in fees, in that the costs of a payment rate increase might be partly offset by a decrease in volume--observed as a temporary slowdown in the normal rate of growth.

When only Medicare's payment rates--and not physicians' actual charges--are constrained, physician-induced demand is probably the dominant factor behind increases in volume that appear to be responses to those constraints. About 75 percent of Medicare enrollees have supplementary coverage--either private medigap insurance or Medicaid--that pays their coinsurance costs. On assigned claims for this group (about 60 percent of all claims), out-of-pocket costs would be unaffected by Medicare's rate changes (see Table B-1). On unassigned claims (about 20 percent of all claims), enrollees' out-of-pocket costs would be more likely to increase than to fall after a reduction in payment rates. Those with medigap coverage would see their balance-

billing costs (which are often not covered by medigap) increase with no offsetting reduction in coinsurance costs. For those without supplementary coverage, increases in balance-billing costs would exceed the fall in coinsurance costs. Fee constraints would reduce out-of-pocket costs only on assigned claims made on behalf of enrollees who lack supplementary coverage (about 20 percent of all claims). For this group, the reduction in costs would be small--equal only to the change in coinsurance amounts. (See Box 4 for a numeric example.)

On balance, then, the effect of fee constraints under Medicare--in the absence of any limits on actual charges--would be more likely to

TABLE B-1. MEDICARE ENROLLEES GROUPED BY SUPPLEMENTARY INSURANCE COVERAGE AND EXPECTED DEMAND RESPONSE IN A PERIOD OF MEDICARE PAYMENT CONSTRAINTS

Supplementary Insurance	Approximate Share of Claims (Percent)	Change in Enrollees' Out-of-Pocket Health Costs[a]	Change in Enrollees' Demand for Services[a]
Medicaid			
Assignment refused	0.0	n.a.	n.a.
Assignment accepted	10.0	None	None
Medigap			
Assignment refused	15.0	Higher[b]	Lower
Assignment accepted	50.0	None	None
None			
Assignment refused	5.0	Higher[c]	Lower
Assignment accepted	20.0	Lower[d]	Higher

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. Assumes no limits on actual charges.

b. By 100 percent of the reduction in allowed amounts.

c. By 80 percent of the reduction in allowed amounts.

d. By 20 percent of the reduction in allowed amounts.

reduce patient demand than to increase it. Hence, increases in volume observed in the past when Medicare's fees were constrained may have been the net result of physician-induced demand partially offset by reductions in patient demand.

But greater demand for services by patients will probably occur as well under the payment reforms examined in the study because physicians' actual charges will be subject to new limits that will reduce balance-billing costs for most enrollees. Only those enrollees eligible for Medicaid will be unaffected by the new limits on actual charges. Most enrollees with medigap insurance will benefit because such poli-

BOX 4
CHANGES IN ENROLLEES' OUT-OF-POCKET COSTS AFTER A REDUCTION IN PAYMENT RATES, BY TYPE OF SUPPLEMENTARY INSURANCE

This example illustrates the effect on enrollees' out-of-pocket costs of a payment rate reduction, depending on the type of supplemental insurance coverage the enrollee has. It assumes that the payment rate is reduced from $100 to $90, and that the physician continues to charge $100.

Supplementary Insurance	$100 Payment Rate			$90 Payment Rate			
	Balance-Billing	Coinsurance	Total	Balance-Billing	Coinsurance	Total	Change
Medicaid							
Unassigned	a	a	a	a	a	a	a
Assigned	0	0	0	0	0	0	0
Medigap							
Unassigned	0	0	0	10	0	10	10
Assigned	0	0	0	0	0	0	0
None							
Unassigned	0	20	20	10	18	28	8
Assigned	0	20	20	0	18	18	-2

a. Not applicable since all claims for Medicaid beneficiaries must be assigned.

cies typically do not cover balance-billing costs. All enrollees without supplementary coverage and with unassigned claims will benefit.

This appendix examines the volume offset both to cuts and to increases in real fees under Medicare, allowing as well for the effects of limits imposed on actual charges. It assumes that the offset in volume is a response to the initial change in practice receipts that would result from a change in the effective rates faced by physicians (where effective rates are defined as payment rates on assigned claims, and actual charges on unassigned claims).

METHODS AND DATA

The volume of services provided by physicians responds to changes in practice receipts from Medicare.[1] The behavioral response estimated is the elasticity of volume with respect to Medicare receipts (E(vol;rec)).[2]

Medicare receipts are a function of allowed amounts on assigned claims, actual charges on unassigned claims, and the assignment rate--which might itself change in response to changes in Medicare's payment rates. Hence, it is also necessary to estimate the elasticity of assignment with respect to Medicare's allowed amounts (E(a;aa)).[3]

The estimates use physicians' records containing information from Medicare claims filed in Colorado for 1976 and for 1978 for services provided by general practitioners and internists.[4] Other groups of

1. Actually, responses in volume would probably occur because of changes in total practice receipts from all payers, not only from Medicare payers. Because the data base used for simulation contains only Medicare information, however, an estimate of the responses to changes in Medicare receipts is necessary.

2. Technically, E(vol;rec) is the percentage change in the volume of services in response to a 1 percent change in receipts because of a change in effective rates.

3. E(a;aa) is the percentage change in physicians' assignment rates in response to a 1 percent change in Medicare's payments because of a change in payment rates.

4. The Medicare physician fee freeze period (from 1984 through 1986) might appear to provide more recent evidence that could be used to estimate behavioral responses. However, during that same period, Medicare implemented a new prospective payment system for hospitals and a new peer review oversight system, with significant effects on physicians' practice patterns. It is doubtful that the effects of the fee freeze can be successfully isolated from that experience.

specialists were excluded because they were largely unaffected by the changes in payment rates that were carried out in Colorado during this period. In early 1977, Colorado combined 10 payment localities into a statewide locality. As a result, the structure of Medicare's prevailing charges changed substantially in each of the original 10 localities. Consequently, physicians' Medicare receipts per service also changed, with receipts increasing for some practices and falling for others, in each of the 10 original localities.[5]

This natural experiment permits empirical assessment of physicians' responses to independent changes in Medicare's payment provisions without the potential problems inherent in single-year cross-section analyses, in which differences among the physicians that were not taken into account statistically could distort the estimates. Because the change in payment provisions took place at the beginning of 1977, the behavioral changes observed followed a full year's experience with the new payments. As a result, it is reasonable to view the observed responses as equilibrium values.

REGRESSION ESTIMATES

Two equations are estimated and reported here: one for the change in physicians' assignment rates in response to a change in Medicare's payment rates--or payments per relative value unit (RVU); and one for the change in the volume of services provided in response to a change in physicians' effective rates--or receipts per RVU.[6] Volume is measured by total RVUs per patient for each physician.

The change between 1976 and 1978 is used in specifying the regression equations as a way to control for unobserved differences among the physicians in the sample that might otherwise distort the estimates. The estimated equations are not intended to represent

5. The coefficient of variation (CV) on the primary independent variable used in regressions for this study is very large, over all regions and separately for each of the 10 original payment localities. The CV--a widely used measure of variation--is defined as the ratio of the standard deviation to the mean.

6. Relative value units are used to indicate the complexity or intensity of any given service, with a higher number of units associated with more complex services.

either demand or supply equations, but rather the final result of the interaction between demand and supply factors.

A value for total RVUs was obtained by adding together the RVUs for each service category, with each category weighted by the applicable conversion factor (designed to convert the service-specific RVU scales to the same basis). Implicit conversion factors were calculated from the 1978 data (when Medicare's rates were uniform throughout Colorado) by dividing the statewide sum of allowed amounts by the statewide sum of RVUs, separately for each of the four service categories. The implicit conversion factors are 2.34 for medical services; 5.22 for surgical services; 5.06 for laboratory services; and 6.05 for radiology services.

In addition to the payment measures that are the explanatory variables of primary interest, each estimated equation includes a number of other variables to control for factors other than reimburse-ment that could have affected physicians' behavior over the period studied. These variables are measures of demand for the physician's services, including experience, board certification, specialty, sex, medical school, and physician density in the locality. The equations also include measures of direct practice costs, such as whether the physician is part of a group, wage costs in the locality, and how urbanized the locality is. Definitions for all variables used are shown in Table B-2.

Separate equations are estimated for general practitioners, internists, and the two groups combined. Each practice's total allowed amounts for 1976 weight the data, so that the estimated behavioral responses will appropriately reflect the impact on Medicare's costs.

Assignment Equation

The dependent variable in the assignment equation is the 1976-1978 change in the proportion of services that were assigned. Services are measured as RVUs, to make the measure of quantity independent of

TABLE B-2. DEFINITION OF VARIABLES USED IN REGRESSIONS

Variable	Definition
	Dependent Variables
Assignment	Change in ratio of assigned relative value units (RVUs) to total RVUs between 1976 and 1978.
Volume	Change in ratio of total RVUs to total patient count between 1976 and 1978.
	Independent Variables
Payment Rate	Change in ratio of total allowed amounts to total RVUs between 1976 and 1978, adjusted by Medicare Economic Index (MEI).
Effective Rate	Change in ratio of total receipts to total RVUs between 1976 and 1978, where receipts are the sum of allowed amounts on assigned claims and actual charges on unassigned claims, adjusted by MEI and holding 1976 assignment rate constant.
Experience	Number of years between the year the physician graduated from medical school and 1977.
Board Certified	Dummy variable indicating whether the physician has one or more specialty certifications.
Female	Dummy variable indicating whether the physician is female.
Foreign	Dummy variable indicating whether the physician graduated from a medical school outside the United States or Canada.
Osteopath	Dummy variable indicating whether the physician is an osteopath.
Group Practice	Dummy variable indicating whether the physician is in a group.
Large MSA	Dummy variable indicating that the physician practices in a metropolitan area of more than 1 million.
Small MSA	Dummy variable indicating that the physician practices in or adjacent to a metropolitan area of less than 1 million.
Non-MSA	Control group for urbanization, including physicians practicing in rural or semirural areas.
Wages	Change in average wage for health-sector workers in the area between 1976 and 1978.
Physician Density	Change in number of nonfederal physicians per 1,000 population in the area between 1975 and 1977.

SOURCE: Congressional Budget Office.

payment rates.[7] The independent variable of most interest is the change in MEI-adjusted allowed amounts per RVU (the payment rate).[8]

The response of assignment to changes in Medicare's payment rates differs appreciably for the two specialties examined (see Table B-3). The estimated coefficient for the payment rate variable is significant for internists, but not for general practitioners. For internists, the elasticity of assignment with respect to Medicare's payment rates is positive and large, with an implied elasticity of 1.03. In other words, a 1 percent reduction in payment rates would reduce internists' assignment rates by about 1 percent as well. The estimated elasticity for general practice is 0.17. For general practitioners and internists together, the estimated elasticity is 0.57.

One should note, however, that the estimated equations explain very little of the observed variation in assignment rates in the sample, even for internal medicine. Because of the subsequent implementation of Medicare's participating physician program, under which physicians are encouraged to accept assignment on all claims, assignment rates are probably even less predictably related to payment rates now than they were in the mid-1970s in Colorado. For this reason, the simulations in the study assume that no changes in assignment will occur in response to changes in Medicare's payment provisions.

Volume Equation

The regression equation for volume uses the change in total RVUs per Medicare patient seen by a given physician over the period as the

7. Ordinary least squares estimation is used. Changes in Medicare's payment rates are largely exogenous here because of the nature of the change made by Colorado between 1976 and 1978. Although physicians' allowed amounts are influenced by the physicians' charges in previous periods, changes between 1976 and 1978 were primarily the result of the elimination of separate payment localities within the state.

8. Regressions were also run to determine whether the assignment response was different between those for whom allowed amounts per relative value unit increased, and those for whom payment decreased. Because no significant difference in response was found between gainers and losers, only the results for regressions where gainers and losers are assumed to have the same response are shown.

TABLE B-3. REGRESSION RESULTS: CHANGE IN ASSIGNMENT RATES IN RESPONSE TO CHANGES IN MEDICARE'S PAYMENT RATES, BY SPECIALTY

Independent Variable	General Practice		Internal Medicine		Both Combined	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Payment Rate	0.110	(1.441)	0.408	(3.815)[a]	0.279	(4.790)[a]
Experience (10s of years)	0.003	(1.238)	0.003	(0.962)	0.003	(1.722)[c]
Squared (100s of years)	-0.000	(1.923)[c]	-0.000	(0.658)	-0.000	(1.748)[c]
Board Certified	-0.027	(1.465)	-0.019	(1.036)	-0.016	(1.335)
Female	-0.041	(0.793)	-0.041	(0.638)	-0.051	(1.259)
Foreign	0.108	(2.885)[a]	0.032	(0.557)	0.075	(2.354)[b]
Osteopath	0.014	(0.764)	0.077	(1.504)	0.020	(1.054)
Group Practice	0.004	(0.196)	-0.001	(0.031)	0.008	(0.603)
Large MSA	-0.014	(0.834)	-0.021	(0.834)	-0.015	(1.077)
Small MSA	-0.020	(0.948)	-0.030	(0.906)	-0.027	(1.486)
Non-MSA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Wages	-0.000	(1.006)	0.000	(0.004)	-0.000	(0.926)
Physician Density	-0.088	(1.579)	0.059	(0.468)	-0.022	(0.408)
Intercept	-0.008	(0.153)	-0.069	(0.901)	-0.030	(0.728)
R-Square	0.041		0.060		0.037	
F-Statistic	1.998[b]		2.174[b]		3.174[a]	
Number of Observations	569		424		993	
E(a;aa)	0.173		1.025		0.569	

SOURCE: Congressional Budget Office regressions from 1976 and 1978 Medicare claims data from Colorado.

NOTE: MSA = metropolitan statistical area; n.a. = not applicable.

a. Significant at 1 percent level.

b. Significant at 5 percent level.

c. Significant at 10 percent level.

dependent variable, and the change in MEI-adjusted Medicare receipts per RVU (the effective rate) as the independent variable of primary interest. Rather than using reported receipts for 1978 (which would reflect any payment-induced changes in assignment), a value was calculated for what receipts would have been in 1978 had assignment rates been unchanged from 1976. Hence, the equation provides an estimate of the response in volume to the change in receipts per RVU that would have occurred as a result of Medicare's change in payment rates, had there been no offsetting change in assignment behavior.

When responses for gainers and losers are constrained to be the same (a symmetric response), the estimated response of volume is negative and significant, with a value of approximately -0.5 for both general practitioners and internists (see Table B-4). The estimated responses for the two specialties were not significantly different, and an estimate for the two combined was obtained. The results indicate that increased volume would offset about half of the change in practice receipts that would result initially from changes in Medicare's payment policies.

However, the response of volume could possibly differ depending on whether receipts increased or decreased initially as the result of policy changes (an asymmetric response). When different responses are permitted for gainers and losers, the estimated elasticity of volume to a change in receipts is negative both for losers and for gainers, but the size of the response is larger for losers (see Table B-5 on page 80). For both specialties combined, the elasticity of volume is -0.375 for gainers, and -0.555 for losers.

Imposing symmetry on the responses of gainers and losers is a strong constraint. Because the asymmetric estimates do not impose this constraint, they are probably better estimates of the response of volume even though the estimated differences are not statistically significant. For the effects of payment changes under alternative assumptions about behavioral responses discussed in Chapters IV and V, both the asymmetric (or nearly symmetric) and the symmetric estimates obtained here are used.

TABLE B-4. REGRESSION RESULTS: CHANGE IN VOLUME OF SERVICES IN RESPONSE TO CHANGES IN EFFECTIVE RATES FOR GAINERS AND LOSERS COMBINED, BY SPECIALTY

Independent Variable	General Practice Coefficient	General Practice t-value	Internal Medicine Coefficient	Internal Medicine t-value	Both Combined Coefficient	Both Combined t-value
Effective Rate	-65.459	(4.439)[a]	-64.971	(4.656)[a]	-59.051	(5.935)[a]
Experience (10s of years)	-0.462	(0.765)	-0.116	(0.258)	-0.356	(1.005)
Squared (100s of years)	-0.004	(0.386)	-0.013	(1.313)	-0.008	(1.016)
Board Certified	-4.337	(1.032)	1.790	(0.612)	1.947	(0.845)
Female	-7.787	(0.667)	0.395	(0.039)	-2.157	(0.278)
Foreign	8.459	(0.991)	20.078	(2.217)[b]	12.560	(2.039)[b]
Osteopath	-1.130	(0.267)	-26.229	(3.232)[a]	-8.862	(2.465)[b]
Group Practice	1.121	(0.241)	-3.861	(1.365)	-2.222	(0.915)
Large MSA	16.421	(4.216)[a]	2.911	(0.729)	12.344	(4.553)[a]
Small MSA	17.717	(3.694)[a]	2.180	(0.421)	9.116	(2.635)[a]
Non-MSA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Wages	-0.084	(2.936)[a]	0.070	(1.985)[b]	-0.025	(1.128)
Physician Density	-20.829	(1.650)[c]	3.518	(0.176)	-0.272	(0.027)
Intercept	-2.214	(0.196)	-30.023	(2.505)[b]	-15.116	(1.911)[c]
R-Square	0.120		0.171		0.113	
F-Statistic	6.296[a]		7.044[a]		10.418[a]	
Number of Observations	569		424		993	
E(vol;rec) for Gainers and Losers Combined	-0.512		-0.528		-0.473	

SOURCE: Congressional Budget Office regressions from 1976 and 1978 Medicare claims data from Colorado.

NOTE: MSA = metropolitan statistical area; n.a. = not applicable.

a. Significant at 1 percent level.

b. Significant at 5 percent level.

c. Significant at 10 percent level.

TABLE B-5. REGRESSION RESULTS: CHANGE IN VOLUME OF SERVICES IN RESPONSE TO CHANGES IN EFFECTIVE RATES FOR GAINERS AND LOSERS SEPARATELY, BY SPECIALTY

Independent Variable	General Practice		Internal Medicine		Both Combined	
	Coefficient	t-value	Coefficient	t-value	Coefficient	t-value
Effective Rate (Gainers)	-38.567	(1.182)	-57.693	(2.593)[a]	-46.586	(2.515)[b]
Adjustment for Losers	-40.511	(0.924)	-17.498	(0.420)	-22.813	(0.798)
Experience (10s of years)	-0.414	(0.684)	-0.106	(0.236)	-0.333	(0.938)
Squared (100s of years)	-0.006	(0.475)	-0.013	(1.327)	-0.008	(1.078)
Board Certified	-4.368	(1.040)	1.853	(0.632)	2.008	(0.871)
Female	-7.379	(0.631)	0.344	(0.034)	-2.087	(0.269)
Foreign	8.373	(0.981)	20.003	(2.206)[b]	12.275	(1.982)[b]
Osteopath	-1.205	(0.285)	-26.120	(3.214)[a]	-8.878	(2.469)[b]
Group Practice	1.097	(0.236)	-3.702	(1.296)	-2.116	(0.870)
Large MSA	16.501	(4.235)[a]	2.893	(0.724)	12.350	(4.554)[a]
Small MSA	17.558	(3.658)[a]	2.356	(0.453)	9.236	(2.667)[a]
Non-MSA	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Wages	-0.083	(2.921)[a]	0.071	(2.008)[b]	-0.024	(1.089)
Physician Density	-22.494	(1.764)[c]	4.026	(0.201)	-0.669	(0.065)
Intercept	-3.915	(0.342)	-31.206	(2.532)[b]	-16.380	(2.030)[b]
R-Square	0.121		0.171		0.114	
F-Statistic	5.876[a]		6.503[a]		9.662[a]	
Number of Observations	569		424		993	
E(vol;rec)						
Gainers	-0.334		-0.451		-0.375	
Losers	-0.582		-0.653		-0.555	

SOURCE: Congressional Budget Office regressions from 1976 and 1978 Medicare claims data from Colorado.

NOTE: MSA = metropolitan statistical area; n.a. = not applicable.

a. Significant at 1 percent level.

b. Significant at 5 percent level.

c. Significant at 10 percent level.

GLOSSARY

Allowed Amount: Medicare's approved payment rate including enrollees' cost-sharing portion.

Assignment: Enrollees may assign their Medicare benefits to physicians. Physicians who accept this assignment bill Medicare directly and accept Medicare's payment rates as full payment.

Balance-Billing: The excess of a physician's actual charge on unassigned claims over Medicare's payment rate.

CMFS: Constrained Medicare fee schedule amounts that apply to most services during a transition period from 1992 through 1995.

CPR: Medicare's current method of setting payment rates, under which payment is the lowest of the customary, prevailing, and reasonable charges for the service.

Effective Rate: Medicare's payment rate on assigned claims; the physician's actual charge on unassigned claims.

E: Nonphysician practice expenses, including both office expenses and malpractice insurance costs, for each service.

EGPCI: Index component used to adjust nonphysician practice expenses (E) for price differences among localities.

GPCI: Geographic practice cost index, used to adjust fees for price differences among localities.

HCFA: Health Care Financing Administration.

HHS: Department of Health and Human Services.

HPB: Historical payment basis, used as part of the blended fee that defines Medicare's CMFS rates for the 1992-1995 period.

MAAC: Maximum allowable actual charge.

MEI: Medicare Economic Index, an index of physicians' earnings and practice costs.

MFS: The resource-based Medicare fee schedule to be established as part of payment reform.

M: Malpractice insurance costs for each service.

MGPCI: Index component used to adjust the value of malpractice insurance (M) for price differences among localities.

O: Office expenses for each service.

OGPCI: Index component used to adjust office expenses (O) for price differences among localities.

Payment Rate: The payment amount approved by Medicare for a given service; also called the allowed amount.

Payments: Total payments approved by Medicare, or payment rate times number of services. Includes both Medicare's reimbursements and enrollees' cost-sharing amounts.

PPRC: Physician Payment Review Commission.

PSF: Performance standard factor; one component for calculating the default volume performance standard (VPS).

Receipts: Physicians' payments from Medicare plus any balance-billing amounts collected, or effective rate times number of services.

RVS: Relative value scale, which indicates the level of resources necessary to provide a given service relative to some standard.

Volume: Quantity of services provided per enrollee; the volume increases if either the number of services provided or their complexity increases.

VPS: Volume performance standard, or target rate of growth for Medicare's spending for physicians' services.

W: Physician work--measured by time spent and intensity of effort--for each service.

WGPCI: Index component used to adjust work value (W) for price differences among localities.