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GAO

Report to the Chairman, Subcommittee on Housing and Consumer Interests, Select Committee on Aging, House of Representatives

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MEDICARE

Impact of State Mandatory Assignment Programs on Beneficiaries

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GAO
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Human Resources Division

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The Honorable James J. Florio
Chairman, Subcommittee on Housing
and Consumer Interests
Select Committee on Aging
House of Representatives

Dear Mr. Chairman:

In response to the former Chairman's request, this report provides information on the impact of mandatory assignment laws in the four states that have adopted such laws. As you requested, we did not obtain official comments from the Department of Health and Human Services.

Unless you publicly announce its contents earlier, we plan no further distribution of this report for 30 days. At that time, we will provide copies to the Secretary of Health and Human Services, the Director of the Office of Management and Budget, and other interested parties.

The major contributors to this report are listed in appendix III.

Sincerely yours,

Lawrence H. Thompson

Lawrence H. Thompson
Assistant Comptroller General

Executive Summary

Purpose

In 1988, physicians and other health care providers billed Medicare beneficiaries $2.25 billion more than the amount Medicare approved for payment. Between 1985 and 1988, four states—Connecticut, Massachusetts, Rhode Island, and Vermont—enacted laws that require physicians, under certain circumstances, to accept Medicare's approved amount as payment in full.

The Chairman of the Subcommittee on Housing and Consumer Interests, House Select Committee on Aging, asked GAO to examine these laws and determine whether they reduced out-of-pocket health care costs for Medicare beneficiaries. The Chairman was also interested in whether the laws resulted in (1) increased volume and intensity of physician services or (2) reduced access to health care for Medicare beneficiaries.

Background

The laws enacted in each of the four states cover beneficiaries with income below certain defined limits, except in Massachusetts, where all Medicare beneficiaries are covered. The laws apply to all physician services, except (1) in Vermont, which exempts physician office and home visits, and (2) in Rhode Island, for certain disabled beneficiaries. Although technically the laws do not require physicians to accept assignment, the payment limits the laws impose are the same as if assignment was mandated. For this reason, the laws are commonly referred to as mandatory assignment laws.

Advocates for the elderly argue that by limiting beneficiary costs for physician care, mandatory assignment increases beneficiary willingness to seek physician services. Health care researchers, however, suggest that when fees are limited, physicians, in order to maintain their income, may increase the volume or the intensity of their services and, therefore, the amounts charged to beneficiaries. Physician organizations have cautioned that the laws will reduce access to care because physicians may be reluctant to accept Medicare beneficiaries as patients or to establish practices in states where mandatory assignment limits their income.

Results in Brief

Mandatory assignment laws reduced out-of-pocket health care costs for covered beneficiaries in the four states. The Massachusetts law eliminated all billing by physicians that exceeded the amounts allowed under Medicare; the amount of savings in the other three states was less clear. Indicators developed by GAO suggest that physicians have not offset

reducing bills for covered beneficiaries by increasing bills for non-covered beneficiaries.

During the brief period GAO examined, the volume and intensity of services provided by physicians to Medicare beneficiaries in three states did not increase as some people had feared. In Massachusetts, the volume and intensity of services increased, but the law's relative importance in causing this increase is not clear. Access to care was not reduced in the four states as a result of the mandatory assignment laws. The experiences in these four states, however, cannot necessarily be used to predict the impact of mandatory assignment in other states. As more experience is gained with mandatory assignment, the impact of the laws on the use of services and access to care will become clearer.

GAO's Analysis

To assess the impact of the laws, GAO analyzed Medicare payment data in Connecticut, Massachusetts, Rhode Island, and Vermont, as well as pertinent statistical data developed by the Health Care Financing Administration and the American Medical Association.

Laws Reduced Beneficiary Out-of-Pocket Costs

Out-of-pocket health care costs were reduced for beneficiaries covered by the laws in the four states. In the case of Massachusetts, beneficiary liability for balance bills (difference between the billed amount and the Medicare-approved amount for unassigned claims), which amounted to $12.5 million during 1985, was completely eliminated. In the other three states, the laws resulted in savings for covered beneficiaries, but the amount of savings attributable to the laws is less clear. (See pp. 24, 28, 31, and 34.)

To assess savings in beneficiary out-of-pocket costs, GAO analyzed (1) assignment rates for physician claims and (2) beneficiary liability for balance bills. The increase in assignment rates in Connecticut and Vermont was significantly greater than national trends. Such an increase indicates that out-of-pocket costs for beneficiaries have been reduced. Rates increased less in Rhode Island than nationally, but this state had an assignment rate of 94 percent before the law was implemented and only a modest increase could be expected. Total beneficiary liability for balance bills also declined in the three states, as did the average balance bill on an unassigned claim, two additional measures of beneficiary savings. (See pp. 24, 28, 31, and 34.)

Laws Generally Did Not Affect Use of Physician Services

To assess how the laws affected the use of physician services, GAO analyzed (1) changes in the volume of physician services provided per beneficiary using services and (2) changes in physician billing patterns for six categories of services.

Because of inconsistencies in the data available for Connecticut, GAO was unable to assess the use of physician services in this state. In Rhode Island and Vermont, the volume of Medicare-covered physician services following implementation of the laws either declined slightly or increased at a rate consistent with national trends. In Massachusetts, the volume of physician services provided per beneficiary increased 21 percent from 1985 to 1987. In addition, physician decisions to bill for more complex and costly services increased the cost of these services by 3.8 percent during the period, compared with an increase of 2.6 percent nationally. Because the assignment rate in Massachusetts was 94 percent before its law was implemented, GAO doubts that the law was a principal cause of this increase in intensity. (See pp. 24, 28, and 31.)

Physician decisions concerning the volume and intensity of services to provide may be influenced by a number of factors other than the laws. Further, more time may be needed for the full effects of the laws on service use to become clearer. (See p. 19.)

Data Do Not Indicate That Access to Care Has Been Compromised

To assess how the laws affected beneficiary access to health care, GAO analyzed trends in (1) American Medical Association estimates of the number of physicians providing patient care in the states and (2) data concerning the number of beneficiaries receiving treatment under Medicare.

In each of the four states, more physicians were providing patient care after implementation of the mandatory assignment laws than before. Although the increase in physician supply was less than the increase nationally, these states were among the top 10 states for physician supply both before and after implementation of the laws. The percentage increase in beneficiaries treated under Medicare since the law was implemented was greater than the percentage increase in newly enrolled beneficiaries in Medicare during the same period, indicating that access to care was not reduced. (See pp. 24-26, 28-29, 31-32, and 34.)

GAO consulted a variety of interested parties about access to care, including representatives of beneficiary and physician groups, as well as state legislators active in the debate concerning mandatory assignment

laws. All told GAO they know of no instances in which the laws had affected access to care. Physician groups, however, indicated that the physician responses that could reduce access to care, such as moving out of state or limiting the number of beneficiaries treated, would occur over a period of time rather than immediately.

Recommendations

This report includes no recommendations.

Agency Comments

As agreed with the requester, GAO did not obtain agency comments on a draft of this report; the views of responsible officials were sought and incorporated where appropriate.

Contents

Abbreviations

GAO	General Accounting Office
HCFA	Health Care Financing Administration

Introduction

When a physician provides a Medicare beneficiary covered services, some state laws limit the physician's total charge to the amount Medicare approves. In a December 11, 1987, letter, the Chairman, Subcommittee on Housing and Consumer Interests, House Select Committee on Aging, asked GAO to find out whether these state laws result in out-of-pocket savings to Medicare beneficiaries. He was also interested in whether the laws affect (1) the volume and intensity of health care services provided by physicians to beneficiaries and (2) beneficiary access to medical care.[1]

Background

Administered by the Health Care Financing Administration (HCFA) within the Department of Health and Human Services, Medicare is a health insurance program that covers most Americans 65 years of age or older and certain people under 65 years of age who are disabled or have chronic kidney disease. The program, authorized under title XVIII of the Social Security Act (42 U.S.C. 1395 et seq.), includes two parts. Part A, the hospital insurance program, covers principally the services of institutional health care providers, primarily hospitals. Part B, the supplementary medical insurance program, covers primarily outpatient services, principally from health care providers, such as physicians.[2] In fiscal year 1988, Medicare paid $52.7 billion for health care services under part A and $34.9 billion under part B, insuring about 32 million people.

Payment for part A services is generally made directly to the service provider. Under part B, however, payment for physician services may be made to the beneficiary or "assigned" to the physician. Assignment is an agreement between the physician and the beneficiary whereby the beneficiary transfers to the physician the right to payment for the services specified on the assigned claim. In return, the physician agrees to accept the Medicare-approved amount as the full charge for the services.

HCFA relies on a network of contractors (usually Blue Cross and Blue Shield organizations or other private insurers), referred to as carriers, to process and pay part B claims. In processing claims, individual carriers

[1]Intensity refers to the complexity of the services provided. Generally, more intensive services involve a higher level of treatment and greater payment. For example, in 1987 the average allowed charge for the lowest-level office visit was $11.73; the average allowed charge for the highest-level office visit was $47.08.

[2]Physician services account for about 72 percent of part B expenditures.

determine the Medicare-approved amount for each physician service, generally the lowest of (1) the actual charge (the billed amount), (2) the physician's customary charge (the median charge of all charges by that physician for that service over the previous 12 months), or (3) the prevailing charge (sufficient to cover the customary charge for three out of four bills for all physicians in the geographic area).[3] In determining the Medicare-approved amounts for part B services during fiscal year 1988, carriers reduced health care providers' fees by a total of $12.9 billion, 28.3 percent of the amount providers billed.

Current Medicare policy allows a physician to decide whether to accept assignment on a claim. Under assignment, the physician bills the carrier, which pays the physician 80 percent of the Medicare-approved amount. The beneficiary is then responsible for a 20-percent copayment, as well as any unmet deductible.[4] When a claim is assigned, the physician may not bill the beneficiary for the difference between the billed amount and the Medicare-approved amount, often referred to as the balance bill. For unassigned claims, however, the beneficiary generally submits the claim to the carrier, which pays the beneficiary 80 percent of the approved amount, less any unmet deductible. The beneficiary is responsible for paying the physician's entire bill, including any balance bill.

Physicians may decide whether to accept assignment on a claim-by-claim basis, even for the same beneficiary. For example, a physician may accept assignment on a claim for surgical services but not for an office visit by the same beneficiary.

Advantages and Disadvantages of Assignment

Physicians experience both advantages and disadvantages when they accept assignment. Accepting assignment assures physicians that generally they will, at least, receive Medicare's payment within 30 days. This eliminates the uncertainty they may experience with collecting fees directly from beneficiaries. On the other hand, since physicians forgo balance bills on assigned claims, they usually receive a lower payment for their services. By accepting assignment, a physician loses the right to set his or her own charge for a service and assumes the added costs of billing Medicare as well as the beneficiary.

[3]Since the mid-1970s, increases in prevailing charges have been linked to an index that reflects changes in general wages and physicians' practice costs.

[4]The deductible for fiscal year 1989 is generally $75.00.

Beneficiaries experience two advantages from assignment. First, assignment assures they will pay no more than 20 percent of Medicare's approved amount. Second, beneficiaries are spared the administrative task of filing a claim. Some beneficiaries, depending on age or medical condition, may have difficultly following claims procedures.

Congressional and State Actions to Increase Assignment

Although Medicare has historically allowed physicians to decide when to accept assignment, the concept of mandating assignment has been discussed among various interested parties for some years. The Congress considered, but did not adopt, such a requirement in certain cases as part of the Deficit Reduction Act of 1984 (P.L. 98-369). The act did, however, create the Participating Physician and Supplier Program. In return for agreeing to accept assignment, participating physicians (1) receive faster payment and a higher prevailing charge than nonparticipating physicians and (2) are listed in a participating physician directory, which is available free of charge to beneficiaries. By creating this program, the Congress encouraged beneficiaries to use participating physicians, thus reducing out-of-pocket costs and eliminating the uncertainty about whether physicians would accept assignment.

The Congress has taken a number of other actions to encourage assignment. The Omnibus Budget Reconciliation Act of 1986 (P.L. 99-509) directs HCFA to award monetary bonuses to carriers who increase the number of physicians in the Participating Physician and Supplier Program for their service areas. The act requires a surgeon to notify the beneficiary in writing of the expected charge, the amount Medicare will allow, and the beneficiary's estimated liability if he or she (1) does not plan to take assignment and (2) performs elective surgery costing more than $500. The act also provides that a nonparticipating physician—one not enrolled in the Participating Physician and Supplier Program—can collect no more than a maximum charge calculated by Medicare; this charge is adjusted annually for each service provided by a nonparticipating physician. The Congress has also passed legislation requiring that Medicare claims for clinical diagnostic laboratory services provided by independent laboratories or physicians be assigned before Medicare will pay for the services.

The percentage of Medicare part B claims submitted on an assigned basis, as well as the percentage of covered charges billed on assignment, increased substantially between 1984 and 1988, particularly in 1985,

the first full year of the Participating Physician and Supplier Program (see table 1.1).[5]

Table 1.1: Medicare Part B Assignment Rates (1984-88)

Numbers in percent

Year	Assignment rates	
	Claims assigned[a]	Covered charges assigned[b]
1984	59.2	59.7
1985	68.5	68.6
1986	68.0	69.6
1987	73.1	75.2
1988	77.3	80.5

[a]Refers to the percentage of processed claims for which physicians have accepted assignment.

[b]Refers to the percentage of covered charges on all processed claims for which physicians have accepted assignment.

Source: HCFA Medicare Participating Physician/Supplier Claims Workload Reports.

In the absence of federal legislation mandating assignment, four states have responded to the call by beneficiaries for mandatory assignment of Medicare part B physician claims by enacting legislation. Laws that prohibit physicians from collecting balance bills from all or some Medicare beneficiaries have been enacted in four states—Connecticut, Massachusetts, Rhode Island, and Vermont. These laws cover beneficiaries with income below limits specified in the law, except in Massachusetts, where all beneficiaries are covered. The laws do not, however, require physicians to treat Medicare beneficiaries. The 1987 income eligibility limit of the laws and the percentage of Medicare beneficiaries covered, based on state estimates, are shown in table 1.2.

Table 1.2: Coverage of State Mandatory Assignment Laws (1987)

State	Income eligibility limit		Percentage of enrolled beneficiaries covered
	Single person	Married couple	
Connecticut	$19,950	$24,000	68
Massachusetts	None	None	100
Rhode Island	12,000	15,000	49
Vermont	25,000	32,000	90

[5]Throughout this report, assignment rates refer to the percentage of covered charges on all processed claims for which physicians have accepted assignment.

Although none of the four laws technically requires physicians to accept assignment in all cases, the laws have commonly been referred to in public discussion as mandatory assignment laws. (Throughout this report, we refer to laws that prohibit collecting balance bills as "the law[s].")

In 26 other states, as of June 1989, state medical societies or organizations representing the elderly have initiated voluntary programs that either encourage assignment or limit the collection of balance bills. Information on these programs is provided in appendix I.

Objective, Scope, and Methodology

Our objective was to answer the following questions:

- Which states have enacted laws? What are the basic provisions of each?
- Which states have adopted voluntary assignment programs? What are the basic provisions of each?
- To what extent have beneficiary out-of-pocket costs and assignment rates changed since the implementation of the laws?
- Has the volume or intensity of physician services increased in states with the laws?
- Have there been reductions in access to care for Medicare beneficiaries since the laws were implemented?

We did our work in Connecticut, Massachusetts, Rhode Island, and Vermont. In these states, we (1) reviewed the laws and the regulations pertaining to the laws, as well as documents concerning the legislative history and the anticipated effects of the laws on physicians and beneficiaries; (2) interviewed state medical society representatives, officials of organizations representing the elderly and state legislators, and state agency personnel responsible for implementing and enforcing the laws; and (3) obtained copies of pertinent studies and testimony. We met with officials of HCFA's headquarters in Baltimore and its regional office in Boston to obtain their opinions on the laws and pertinent statistical data. We discussed the voluntary programs with officials of the medical societies in states with such programs and with representatives of the American Medical Association.

Additionally, we obtained and analyzed carriers' payment tapes for each of the four states we visited. For Massachusetts, we obtained payment tapes for calendar years 1985 and 1987; for Connecticut, Rhode Island, and Vermont, we obtained payment tapes for 1986 and 1987. These

tapes enabled us to compare data for periods before and after the laws were implemented.

To identify states that have enacted laws or adopted voluntary programs, we

- reviewed periodicals and other publications and spoke with knowledgeable officials from the American Medical Association and
- obtained information describing the law or programs.

To obtain information on the provisions of the laws or programs, we

- spoke to medical society representatives in each state with a law or voluntary program about objectives, beneficiary eligibility criteria, implementation dates, and other relevant data;
- obtained a copy of each of the laws and copies of any studies discussing each law's history and its possible effects on physicians and beneficiaries; and
- interviewed state legislators active in the debate over the laws and state officials responsible for state compliance and enforcement activities.

To determine the extent to which beneficiary out-of-pocket costs and the assignment rates for physician services have changed since implementation of the laws, we

- analyzed carriers' payment tapes for comparable periods before and after implementation to determine changes in the (1) amount of balance bills in these states and (2) number and percentage of unassigned claims and
- used HCFA data to compare assignment rates, on the basis of percentage of covered charges on all processed claims, for physician claims in the four states and nationally for comparable periods before and after implementation of the laws.

To determine changes in the use of physician services in the four states since implementation of the laws, we

- analyzed carriers' payment tapes to determine changes in the average number of services received per Medicare beneficiary using services for periods before and after the laws were implemented;

- analyzed changes in the total allowed charges for six categories of services that are susceptible to increased intensity: (1) office visits, (2) hospital visits, (3) emergency room visits, (4) consultations, (5) skilled nursing facility visits, and (6) nursing home visits;[6] and
- compared the results of our analyses for the six services with comparable national data covering the entire calendar year.[7]

To determine whether there have been changes in access to care for Medicare beneficiaries, we

- interviewed representatives of state medical societies and officials of organizations representing the elderly for opinions on how the laws and other factors might influence physician decisions (1) to accept Medicare beneficiaries as patients or (2) to practice in the state;
- obtained American Medical Association data to determine the number of physicians providing patient care in each state for (1) the year before implementation of the law, (2) the year of implementation, and (3), for Massachusetts, the year after implementation; and
- analyzed carriers' payment tapes in each state comparing for similar periods the number of beneficiaries whose claims were paid before and after implementation of the laws.

Throughout this report, we address changes in various measures using both payment tape data and HCFA information for periods before and after implementation of the law in a state. Where possible, we use comparable HCFA data available on a quarterly basis; otherwise, we use HCFA data covering an entire calendar year. For Massachusetts, the periods are 1985 and 1987, the year before and the year after implementation of the state's law in 1986. Implementation of the Connecticut, Rhode Island, and Vermont laws occurred in mid-1987; we therefore analyzed the 1986 and 1987 tapes for claims paid in the last quarter of the year for services provided after July 1 of each year. This provided comparable periods before and after implementation of these laws. At the time of our review, 1988 tapes were not available for any of the states.

A new carrier assumed responsibility for processing Connecticut Medicare claims during the last quarter of 1986. As often happens during the transition from one carrier to another, the new carrier processed fewer

[6]Within each service there are a number of levels of service that may be provided: for example, a brief office visit versus an extended office visit; see appendix II for a description of the methodology used.

[7]Quarterly data were not available from HCFA.

claims during the transition than were processed before or after the transition. The new carrier also used different claims processing and statistical reporting systems than the previous one. As a result, for Connecticut, we did not have comparable payment tape data to do the same analyses as those for the other three states on (1) changes in balance bills, (2) number of unassigned claims, and (3) the use of services.

We did not do a reliability assessment of the carriers' claims processing systems that produced the payment tapes used in our analysis. Instead, for ensuring the reliability of carrier systems, we depended on the results of HCFA procedures—tests conducted as part of its annual contractor evaluation. Carriers do weekly tests of the processing systems to determine the accuracy of data entry and payment computations; HCFA officials, in turn, validate the carrier's results through independent tests. Carriers must meet HCFA standards in order to pass the annual evaluations.

We did our review from March 1988 to May 1989 in accordance with generally accepted government auditing standards, except, as noted, we did not do a reliability assessment of the carrier payment tapes. The views of responsible agency officials were sought during our work and are incorporated where appropriate. As agreed with the requester, however, we did not obtain written comments from agency officials on a draft of this report.

Perspectives on Assignment and Our Approach to Analyzing the Laws' Impact

Groups that represent the elderly have proposed laws to reduce beneficiaries' out-of-pocket health care costs by limiting the amount physicians can charge Medicare beneficiaries. Others, however, have cautioned that such laws might have unintended adverse effects. Health care researchers have argued that physicians may respond by providing beneficiaries more services or more intensive services than they would have in the absence of the law. Physician groups have cautioned that physicians may reduce access to care by limiting the number of Medicare beneficiaries they treat, refusing to treat Medicare beneficiaries at all, or moving to states without such laws.

We identified a number of indicators that provide insight into the impact of the laws in the four states that have enacted them. Our analyses in most instances, however, cover a limited time—from the date of implementation through December 31, 1987—for physicians to have modified their behavior in response to the laws, 22 months in Massachusetts and 6 months in the other three states. More time may be needed for the full effects of the laws to become clearer.

Beneficiary Out-of-Pocket Costs

Liabilities for balance bills during 1988 were a significant element of beneficiary out-of-pocket costs, representing about $2.25 billion nationally, according to HCFA data, for all part B services, about $71 per each part B enrollee. Most Medicare supplemental insurance policies, commonly referred to as Medigap policies, do not cover balance bill amounts. Likewise, the limits on out-of-pocket amounts provided for in the Medicare Catastrophic Coverage Act of 1988 (P.L. 100-360) include only beneficiary deductible and coinsurance payments for part B services, not balance bill amounts.

The amount of beneficiary liability for balance bills varies widely from beneficiary to beneficiary, depending on such factors as (1) the number of unassigned claims and (2) the significance of the difference between the physician's charge and the Medicare-approved amount. In its 1989 annual report to the Congress, the Physician Payment Review Commission estimates that 39 percent of the 24 million beneficiaries who had part B claims paid in 1988 had no balance bills; this includes the 10 percent of Medicare beneficiaries enrolled in Medicaid who may also not be charged balance bills.[1] The commission estimates that during 1988,

[1]The Physician Payment Review Commission was created by the Congress in the Consolidated Omnibus Budget Reconciliation Act of 1985 (P.L. 99-272) to advise it on reforms of the methods used to pay physicians for services to Medicare beneficiaries.

about 4 percent of Medicare beneficiaries had total liabilities for balance bills of over $500; about 1 percent had a liability of over $1,000.

Beneficiary Concerns About Balance Bills

Representatives of advocacy groups for the elderly argue that it may be difficult for beneficiaries to control their potential liability for balance bills when they cannot choose their physicians. Although a beneficiary may seek out a physician enrolled in the Participating Physician and Supplier Program, the representatives stated, in a medical emergency or a serious illness, it is unreasonable to expect a beneficiary to consult a listing of participating physicians. Further, beneficiaries normally play a limited role in selecting hospital-based specialists, such as the attending anesthesiologist at surgery or radiologists. Accordingly, mandating assignment would mean that all physicians accept assignment and the beneficiary's liability for Medicare-covered services would be limited to 20 percent of the approved amount, regardless of which physician provided the service.

Representatives also said that beneficiaries may forgo medical treatment for financial reasons when they know Medicare will not cover the full cost of their care. In 1987, about 12 percent of eligible Medicare beneficiaries lived at or below the federal poverty level (in 1987, $5,447 for a single elderly person and $6,872 for a couple); for them, balance bills could take a large portion of their disposable income. Medicare's approved amount, the representatives said, should be considered payment in full for a service; a physician should not be permitted to collect more from the beneficiary.

Another concern is that many beneficiaries are not familiar with the term "assignment" or its implications, according to the Physician Payment Review Commission's 1989 annual report; thus, these beneficiaries do not know enough to inquire if physicians accept assignment. According to the study, about one-half of the Medicare beneficiaries surveyed did not understand the meaning of assignment; three of four did not know of the Participating Physician and Supplier Program. The study also found a great reluctance on the part of beneficiaries to change physicians on the basis of their assignment practices.

Basis for GAO Analysis

We could not determine from the carrier tapes specifically which beneficiaries met the eligibility criteria of the Connecticut, Rhode Island, and Vermont laws; therefore, we could not, on a beneficiary-by-beneficiary

basis, identify out-of-pocket savings as resulting from the laws. In addition, the states do not maintain a listing of eligible beneficiaries. We did not have this problem in Massachusetts because the law in this state covers all beneficiaries. Our analysis concerning the laws' impact on beneficiary out-of-pocket costs used two broad measures, changes in (1) assignment rates and (2) beneficiary liability for balance bills. When physicians accept assignment, beneficiary costs are limited to any unmet deductible and the 20-percent copayment amount. Thus, increases in assignment rates would indicate reduced costs for beneficiaries.

Changes in beneficiary liability for balance bills represent a direct measure of out-of-pocket costs. Changes in total balance bills within a state result from physicians' (1) not collecting balance bills from those beneficiaries covered under the law and (2) increasing the charges for services provided to the remaining beneficiaries not covered by law. Beneficiaries covered by the laws who were previously responsible for balance bills would experience savings in their out-of-pocket costs. Beneficiaries who were treated by participating physicians and continued to be treated by these physicians would not be affected by the laws because participating physicians may not collect balance bills from beneficiaries. Those beneficiaries in Connecticut, Rhode Island, and Vermont who exceed income limitations established in the laws may be charged balance bills; the laws, in such instances, would not directly reduce their out-of-pocket costs.

Physicians could respond to the financial effects of the laws in several ways; the results would be reflected in total balance bills in the state, the number of unassigned claims, and the average balance bills on unassigned claims. First, physicians could accept assignment for beneficiaries covered under the laws, absorbing any resulting differences between billed and approved amounts. To the extent this occurs, both total balance bills and the total number of unassigned claims in the state should decline subsequent to the laws' enactment; the average value of a balance bill on an unassigned claim should remain about the same. Second, physicians could attempt to recoup their losses by increasing fees for beneficiaries not covered by the laws. The average balance bills for unassigned claims would increase under this situation.

Use of Physician Services

The use and cost of physician services has increased nationwide. Researchers attribute these increases to several factors, including (1) the development of new health care technologies, which permit physicians to provide services not previously available and to treat previously untreatable conditions; (2) the increase in malpractice litigation and the increasing cost of obtaining malpractice insurance, which may motivate physicians to do more diagnostic tests and provide treatments of greater complexity than they otherwise would have; and (3) the growing restraints on physician fees that, researchers believe, can prompt physicians to provide more costly or intensive services in order to maintain their income.

Since the laws we examined limit the amounts physicians can collect from Medicare patients, concern has been expressed that physicians will respond by providing increased services that will increase program costs. Researchers have argued that when limits are imposed affecting physicians' income, they are motivated to provide patients more services—or more complex and costly services—than before the limits were imposed. For example, physicians may do more tests and diagnostic procedures. Concerning physician visits with beneficiaries in such settings as physicians' offices, the hospital, or nursing homes, researchers argue that physicians may be motivated to bill for longer and more costly visits.

We analyzed changes in the use of physician services by measuring (1) the average number of physician services provided per beneficiary receiving services and (2) changes in physician billing patterns for six categories of services. We did not attempt to determine the medical need for the level of services provided in the four states either before or after implementation of the laws.

Growth in Use of Services

The Physician Payment Review Commission states, in its 1989 annual report to the Congress, that the cost of part B services has grown about 17 percent per year between 1980 and 1988; increases in both use of health care services and fees have been major contributors to expenditure growth for Medicare. A study by private health researchers covering part B expenditures from 1983 to 1986 found that Medicare spending for physician services increased by almost 30 percent; during much of this period, Medicare imposed a freeze on physician fees. That study and the commission report attribute a substantial portion of the expenditure growth to increases in the average number of services per

beneficiary and the substitution of more intensive and costly services for less intensive and costly services.

Basis for GAO Analysis

In order to determine how service volume and intensity had changed since enactment of the laws, we analyzed the number of services provided Medicare beneficiaries and changes in the levels of service for the six services we reviewed. An increase in the average number of services per beneficiary may indicate that the laws affected the volume of services, although other factors may influence this trend. Small increases or decreases in the average number of services per beneficiary would indicate that the laws have not unduly affected service volume.

Changes in billing patterns may also show whether enactment of the laws was followed by physicians' billing for more intensive and costly services. For the six services that we reviewed, there are descriptions of procedures that represent various levels of service. For example, there are six descriptions for office visits for an established patient—minimal, brief, limited, intermediate, extended, and comprehensive—with minimal being the least intensive. A shift in billing patterns from less intensive—and less costly—services to more intensive services that exceeds trends in the nation as a whole may indicate that the laws increased the intensity of services. An insignificant change in billing patterns, as compared with national patterns, could indicate that the laws had not affected service intensity.

A major limitation of our analysis is the small amount of elapsed time between enactment of the laws in the states and the end of the period examined. In most cases, if physicians were to change the ways in which they provide services because of the laws, such changes might occur over a longer time span than the period examined—6 months in the case of Rhode Island and Vermont and 22 months in the case of Massachusetts. Thus, the effects of the laws on service use may still be evolving.

Access to Medical Care

On average, Medicare beneficiaries aged 65 and older use more health care services than younger Americans. Though only about 12 percent of the U.S. population are aged 65 or older, they account for 30 percent of hospital discharges, 20 percent of physician services, and about 33 percent of all personal health care expenditures. Access to medical care is an important consideration for Medicare beneficiaries.

Because the laws may reduce physician income, medical society officials and physicians have argued that some physicians may (1) decline to accept Medicare beneficiaries as patients, (2) establish a practice in another state that has not enacted a law, or (3) retire from medical practice early. These actions may occur over time rather than immediately. Physicians beginning their careers would be discouraged, some officials said, from establishing a practice in states with laws; these actions could reduce the number of physicians treating Medicare beneficiaries and reduce beneficiary access to medical care.

Basis for GAO Analysis

The measures we used to determine Medicare beneficiaries' access to care were changes in physician supply and the number of beneficiaries receiving treatment. Because the supply of physicians in a state affects beneficiary access to health care, changes in the number of physicians providing care are one indicator of changes in access. The American Medical Association reports national and state estimates of practicing physicians, excluding physicians in administrative or teaching positions, as of December 31 of each year. Increases in the supply of physicians following implementation of laws in the four states would indicate that the laws had not affected access to care.

Changes in the number of beneficiaries receiving treatment within a state from year to year provide another indicator of access to care. Increasing numbers of beneficiaries treated provide a broad measure that beneficiaries, as a whole, are not experiencing reduced access to care. On the other hand, decreasing numbers of beneficiaries treated from one year to the next may indicate reduced access.

Physician supply data do not provide a direct measure of access to care because the data do not indicate how many physicians provide care to Medicare beneficiaries or how many beneficiaries they treat. Likewise, carrier data on the number of beneficiaries treated under Medicare do not address whether beneficiaries had to (1) wait longer to see physicians willing to treat Medicare beneficiaries or (2) travel further to see physicians willing to treat them.

In addition, the data we analyzed may not provide sufficient historical perspective to fully assess the impact of the laws on a physician's decision about whether to establish or maintain a practice in a state with a law. According to medical society officials, establishing a practice is a long-term process, and physicians would be reluctant to move and establish a practice in another state. Therefore, the impact of the laws on

physician supply may not be fully apparent until some years into the future. The data we analyzed may also not fully reflect how the laws affected access to care; therefore, to obtain views on this, we discussed the laws with individuals interested in health care for Medicare beneficiaries. In each state, we met with groups representing the elderly, state medical societies, and state legislators.

Further, a number of economic factors unrelated to whether a state has mandated assignment can have an impact on physician income in a state. For example, the costs of operating a practice in a state, as well as state regulatory practices that affect physician billing, will affect physician income in the state. In addition, the cost of malpractice insurance is a prominent concern of physician organizations, particularly in states that have experienced significant increases in insurance rates. Finally, the competitive environment and the number of physicians practicing in the state have the potential to increase or decrease physician income.

The economic impact that enactment of the law in a state would have on physicians practicing in that state could vary substantially from physician to physician. For an individual physician, the impact would depend on whether

- Medicare beneficiaries represented a substantial percentage of the physician's overall caseload,
- the physician's fees were substantially higher than Medicare's approved payments, and
- the physician normally accepted assignment on claims for a substantial portion of all Medicare patients.

The impact would be greatest on physicians who treated a large number of Medicare patients, charged fees significantly higher than the amounts Medicare approved, and seldom accepted assignment. Physicians who treated few Medicare beneficiaries, charged lower fees, or normally accepted assignment would experience more modest reductions in income.

Effects of Mandatory Assignment Laws in the Four States

Connecticut, Massachusetts, Rhode Island, and Vermont have passed laws affecting physicians' ability to collect balance bills from Medicare beneficiaries. With the exception of the Massachusetts law, which covers all Medicare beneficiaries, these laws prohibit physicians from collecting balance bills for beneficiaries with income below certain levels. Beneficiary out-of-pocket costs were reduced in each of the four states following implementation of the laws. Our data generally show that during the period we examined, the laws have not resulted in increased use of physician services or reduced beneficiary access to care. As more experience is gained under the laws, their impact on use and access to care will become clearer.

Massachusetts: The Law and Its Effects

The Massachusetts law, the first enacted in the nation, effectively eliminated balance bills for all Medicare beneficiaries. The use of physician services increased in the state following passage of the law, but the law does not appear to be the principal cause of the increase. In addition, the number of physicians providing patient care and the number of beneficiaries treated increased following the law, suggesting that access to care was not affected by the law.

Provisions of the Law

In 1985, Massachusetts became the first state to enact a law, effective February 1986, that stopped physicians from collecting balance bills from Medicare beneficiaries. The Massachusetts Medical Society unsuccessfully challenged this legislation on constitutional grounds. Massachusetts Medical Society v. Dukakis, 815 F.2d 790 (1st Cir. 1987), cert. denied, 108 S.Ct. 229.

The law requires that, in order for a physician's certificate of registration to be granted or renewed, physicians who treat Medicare beneficiaries must agree to accept Medicare's approved amount as full payment for any such services. The Massachusetts Board of Registration in Medicine may not grant or renew a physician's medical license unless the physician agrees not to charge or collect more than the Medicare-approved amount. Therefore, a physician who collects balance bills may be denied a license. According to a board official, physicians that violate such an agreement may also be (1) censured, (2) fined up to $10,000, or (3) required to perform 100 hours of public service work. As of June 1989, no physician had been charged with violating any such agreement.

Because the Massachusetts law was implemented in February 1986, it gives the longest time period to use in measuring changes since passage of the four laws. For Massachusetts, changes in beneficiary out-of-pocket costs, use of services, and access to care from 1985 to 1987 are shown in table 3.1.

Table 3.1: Changes in Massachusetts Medicare Beneficiary Out-of-Pocket Costs, Use of Services, and Access to Care (1985 and 1987)

Category	1985	1987	Percentage change
Beneficiary out-of-pocket costs:			
Beneficiary liability for balance bills (in millions)	$12.5	0	−100.0
Unassigned claims (in thousands)	1,009.4	492.5	−51.2
Average balance bill per unassigned claim	$12.40	0	−100.0
Assignment rate	93.6%	98.5%[a]	5.2
Comparable national rate	65.9%	72.5%	10.2
Use of health care services:			
Average services per beneficiary using services	23.9	29.0	21.3
Allowed charges for six categories of services (in constant 1985 dollars—millions)	$133.2	$138.2	3.8
Comparable national data (in constant 1985 dollars—millions)	$4,057.2	$4,162.3	2.6
Beneficiary access to health care:			
Physicians providing patient care[b]	14,731	15,794	7.5
Comparable national data[b]	431,527	478,511	10.9
Beneficiaries receiving treatment	714,547	733,029	2.6

[a]By the last quarter of 1988, the assignment rate in Massachusetts was 99.3 percent as compared with 79.3 percent nationally.

[b]As of December 31 of each year.

Source: GAO analysis of carrier payment tapes, HCFA, and American Medical Association data.

Changes in Out-of-Pocket Costs

In 1987, no balance bills were allowed in Massachusetts. Physicians were unable to collect balance bills associated with the 492,500 unassigned claims processed during 1987. But in 1985, 55,821 Massachusetts Medicare beneficiaries were liable for balance bills of approximately $12.5 million, an average $224 each.

In both 1985 and 1987, Massachusetts had the highest assignment rate of any state in the country—93.6 percent in 1985 and 98.5 percent in 1987. Blue Shield of Massachusetts prohibits balance billing under its private insurance plans and, according to medical society officials, this

ban has encouraged physicians to accept assignment on Medicare claims as well. The high 1987 assignment rate is not surprising given the complete prohibition on balance bills. Although the assignment rate increased to a greater extent nationally than in the state for the time span measured, the Massachusetts rate had little room for growth.

Changes in the Use of Physician Services

The average number of services per beneficiary in Massachusetts increased by 21.3 percent between 1985 and 1987. Although the law was in effect for only about 10 months during 1986, almost 70 percent of the increase occurred between 1985 and 1986. Because the assignment rate was high to begin with, increasing modestly after the law was implemented in February 1986, it is unlikely that the law by itself would have stimulated the increase. Also during this period, Massachusetts physicians expressed concern about the increase in malpractice litigation and its impact on the cost of malpractice insurance. These concerns may have motivated Massachusetts physicians to practice more defensive medicine and, accordingly, provide increased services. The relative importance of the law compared with other factors, such as malpractice concerns, in causing increased service use is not, however, clear.

Physician billings for more intensive services increased the total allowed charges for the services we analyzed by 3.8 percent in Massachusetts between 1985 and 1987, compared with a 2.6 percent increase nationally for the same period. Given the high assignment rate prior to the law, however, it is not clear how much of this intensity increase can be ascribed to physician reactions to the Massachusetts law.

Changes in Beneficiary Access to Health Care

It does not appear that beneficiary access to care decreased subsequent to the law. Between 1985 and 1987, the number of physicians providing patient care increased in the state, although to a lesser extent than it did nationally. Massachusetts has, however, a comparatively large number of physicians. In 1985, the state ranked first among the 50 states in the number of physicians providing patient care per 100,000 population; it ranked second in 1987. Given the relatively large number of physicians in practice prior to the law, it is not surprising that the number of physicians providing patient care increased less in Massachusetts than nationally.

The number of beneficiaries receiving treatment increased by 2.6 percent over the 2 years, further suggesting that the law has not adversely affected beneficiary access to health care. Over the same 2 years, the

number of Massachusetts beneficiaries enrolled in part B increased by 1.3 percent, exactly half the 2.6 percent increase in the number of beneficiaries treated.

The people we spoke with provided no examples of cases in which the law had reduced access to care. Physicians, said the president of the state medical society, are leaving the state for several reasons, with the law being one of them; some physicians wish to limit the number of Medicare beneficiaries they treat. No access-to-care problems resulted from the law, said one of the co-chairmen of the Massachusetts Senate Joint Health Committee; if physicians are leaving the state, they are doing so primarily because of factors such as (1) the high cost of malpractice insurance in the state and (2) the ban on balance bills that Blue Shield of Massachusetts has instituted under its private insurance policies.

Rhode Island: The Law and Its Effects

The Rhode Island law effectively prohibits physicians from collecting balance bills from aged beneficiaries with income below specified limits. Balance bills decreased following implementation of the law, but there was little change in assignment rates. The volume of services declined somewhat, and intensity of services remained constant. An increase in the number of physicians providing patient care and in the number of beneficiaries treated subsequent to the law suggest that access to care was not affected.

Provisions of the Law

Rhode Island's law became effective July 1, 1987. The law expressly makes it unprofessional conduct for physicians to collect balance bills from Medicare beneficiaries who are single and have an income of $12,000 or less or who are married and have an income of $15,000 or less. As implemented, income is defined as adjusted gross income for federal income tax purposes plus Social Security and other nontaxable income. Medical and pharmaceutical expenditures that exceed 3 percent of the beneficiary's income are not considered in determining eligibility. Rhode Island officials estimate that in 1987, approximately 49 percent (72,429) of the 148,045 Medicare beneficiaries in the state met the income limit and thus were protected from balance billing under the law.

At the time of our review, the Rhode Island law covered Medicare beneficiaries 65 years of age or over, but did not apply to disabled beneficiaries under 65 years of age. At the time of the law's implementation, about 12,600 disabled beneficiaries lived in Rhode Island. In 1989,

Rhode Island amended its law to provide coverage to all beneficiaries, regardless of age or income. This amendment will take effect January 1, 1990.

A beneficiary who meets the state's income limits may self-certify income to a physician. Since the law's income limits were the same as those of the Rhode Island Pharmaceutical Assistance to the Elderly Program, a beneficiary could obtain an enrollment card for this program and present it to a physician to prove eligibility. As of March 10, 1989, the state had issued 17,715 cards to those who met the income guidelines of the Rhode Island program. There is no information available on the number of Rhode Island Medicare beneficiaries who have self-certified their eligibility to physicians.

Rhode Island legislation states that unlawful collection of balance bills is an act of "unprofessional conduct." State medical licensing board officials told us that as in Massachusetts, the board may impose various sanctions on physicians who illegally collect balance bills, including denial of a medical license. As of June 1989, no physician in the state had been charged with such conduct.

Changes in Rhode Island beneficiary out-of-pocket costs, use of services, and access to care for the last quarter of 1986 and the last quarter of 1987 are shown in table 3.2.

Table 3.2: Changes in Rhode Island Medicare Beneficiary Out-of-Pocket Costs, Use of Services, and Access to Care (Last Quarters of 1986 and 1987)

Category	Last quarter of 1986	Last quarter of 1987	Percentage change
Beneficiary out-of-pocket costs:			
Beneficiary liability for balance bills (millions)	$.5	$.4	−20.0
Unassigned claims	44,281	35,952	−18.8
Average balance bill per unassigned claim	$11.29	$11.13	−1.4
Percentage of beneficiaries with no unassigned claims	80.7%	81.4%	0.8
Assignment rate	94.3%	95.3%[a]	1.0
Comparable national rate	67.2%	74.0%	10.1
Use of health care services:			
Average services per beneficiary using services	5.1	4.4	−13.7
Allowed charges for six categories of services (in constant 1986 dollars—millions)	$5.0	5.0	0
Comparable national data (in constant 1986 dollars —millions)[b]	$4,017.8	$4,075.9	1.4
Beneficiary access to health care:			
Physicians providing patient care[c]	2,028	2,132	5.1
Comparable national data[c]	444,705	478,511	7.6
Beneficiaries receiving treatment	95,940	97,327	1.4

[a]By the last quarter of 1988, the assignment rate in Rhode Island was 96.9 percent as compared with 79.3 percent nationally.

[b]Represents annual rather than quarterly data.

[c]As of December 31 of each year.

Source: GAO analysis of carrier payment tapes, HCFA, and American Medical Association data.

Changes in Out-of-Pocket Costs

Balance bills in Rhode Island decreased by about one-fifth, as did the number of unassigned claims. The percentage of beneficiaries with no unassigned claims also increased from 80.7 to 81.4 percent. At the same time, the assignment rate increased by 1.0 percent, but nationally by 10.1 percent. Rhode Island's 94.3 percent assignment rate in the last quarter of 1986, however, was second only to that of Massachusetts and left little room for increase. The high assignment rate in Rhode Island is noteworthy since the Rhode Island law covers only about half the state's beneficiaries; about 82 percent of Rhode Island beneficiaries had no unassigned claims during the last quarter of 1987, indicating that Rhode Island physicians accept assignment for many beneficiaries the law does not cover. Blue Shield's ban on balance billing under its private insurance plan, said a Blue Shield of Rhode Island official, contributes to physicians' accepting assignment for Medicare beneficiaries.

Changes in the Use of Physician Services

It does not appear that the law affected the use of services in the state during the period we examined. The average number of services per beneficiary decreased slightly, suggesting that the law did not motivate physicians to provide beneficiaries more services. The total allowed charges for the services that we analyzed remained constant between 1986 and 1987, but increased nationally. Again, this suggests that Rhode Island physicians have not responded to the law by increasing the intensity of services provided Medicare beneficiaries. We believe the small increase in the assignment rate following the law would provide little incentive to increase either the average number of services per beneficiary or the intensity of services.

Changes in Beneficiary Access to Health Care

The number of physicians providing patient care in Rhode Island increased, but at about one-third less than the national rate. Rhode Island had a large number of physicians providing patient care per 100,000 population both before and after the law was implemented; according to American Medical Association data, the state ranked sixth of the 50 states in 1986 and seventh in 1987. The number of beneficiaries receiving treatment increased by 1.4 percent for the period, about double the 0.8 percent increase in the number of Rhode Island beneficiaries enrolled in part B from 1986 to 1987. These indicators suggest that access to care was not reduced during the period we examined.

The people we spoke with did not indicate that the law had reduced access to care for Medicare beneficiaries. In Rhode Island, the law would not reduce access to care, said an official of the state medical society, nor would physicians leave the state because of the law. Problems in beneficiary access to care, said the vice chairman of a special Rhode Island legislative commission to study mandatory assignment, did not exist in the state.

Vermont: The Law and Its Effects

The Vermont law covers most beneficiaries in the state, but excludes coverage of physician home and office visits. Significant reductions in beneficiary out-of-pocket costs took place following implementation of the law. The volume of services increased at a rate consistent with national trends, and the intensity of services remained constant. Following implementation of the law, more physicians provided patient care in the state and more beneficiaries received treatment, suggesting that access to care was not reduced.

Provisions of the Law

Vermont's law became effective July 1, 1987. The law states that physicians who agree to treat Medicare or general assistance beneficiaries may not collect balance bills from beneficiaries, but includes two exceptions. First, beneficiaries must meet an income test to qualify for coverage. Vermont's 1987 income limits were $25,000 for a single Medicare beneficiary and $32,000 for a married couple. The limits are based on the income level at which Social Security benefits are taxed under federal income tax law. Vermont state officials estimate that in 1987, about 90 percent of the 69,418 beneficiaries in the state were covered by the law.

Second, physicians may collect balance bills for office and home visits, regardless of the beneficiary's income. These services represented about 21 percent of those that Vermont physicians provided to Medicare beneficiaries during 1986. This exception, Vermont State Medical Society officials stated, especially helps primary care physicians—internists, general practitioners, and family practitioners—since most of their Medicare charges are for these services. According to these officials, Medicare's approved amount for these services is low in comparison with their normal fee.

A beneficiary annually certifies eligibility to a physician by signing a form available in the physician's office. If a beneficiary does not sign the form when asked to by a physician, the physician may collect balance bills. The law requires a physician to prepare the Medicare claims form for the beneficiary regardless of whether the physician accepts assignment.

Under Vermont's law, physicians who illegally collect balance bills may be ordered to make restitution of the money received from such billing. The medical licensing board, state medical licensing board officials said, may impose various other sanctions on physicians who illegally collect balance bills, including denial of a medical license. As of June 1989, no physician had been charged with violating Vermont's law.

Changes in Vermont beneficiary out-of-pocket costs, use of services, and access to care for the last quarter of 1986 and the last quarter of 1987 are shown in table 3.3.

Table 3.3: Changes in Vermont Medicare Beneficiary Out-of-Pocket Costs, Use of Services, and Access to Care
(Last Quarters of 1986 and 1987)

Category	Last quarter of 1986	Last quarter of 1987	Percentage change
Beneficiary out-of-pocket costs:			
Beneficiary liability for balance bills (millions)	$.8	$.4	−50.0
Unassigned claims (thousands)	61.5	46.9	−23.7
Average balance bill per unassigned claim	$13.01	$8.53	−34.4
Percentage of beneficiaries having no unassigned claims	36%	41%	13.9
Assignment rate[a]	64.1%	86.0%	34.2
Comparable national rate[a]	67.2%	74.0%	10.1
Use of health care services:			
Average services per beneficiary using services	6.6	7.1	7.6
Allowed charges for six categories of services (in constant 1986 dollars—millions)	$1.8	$1.8	0
Comparable national data (in constant 1986 dollars —millions)[b]	$4,017.8	$4,075.9	1.4
Beneficiary access to health care:			
Physicians providing patient care[c]	1,129	1,177	4.3
Comparable national data[c]	444,705	478,511	7.6
Beneficiaries receiving treatment	46,065	49,456	7.4

[a]By the end of 1988, the assignment rate in Vermont was 92.0 percent as compared with 79.3 percent nationally.

[b]Represents annual rather than quarterly data.

[c]As of December 31 of each year.

Source: GAO analysis of carrier payment tapes, HCFA, and American Medical Association data.

Changes in Out-of-Pocket Costs

A significant reduction took place in beneficiary out-of-pocket costs subsequent to implementation of the Vermont law. Total balance bills decreased by one-half, and the average amount of a balance bill decreased by about one-third. Assignment rates increased at three times the national rate, and the number of unassigned claims decreased by nearly one-quarter. By the fourth quarter of 1987, 41 percent of Vermont's beneficiaries experienced no unassigned claims, compared with 36 percent in the fourth quarter of 1986. The reductions in balance bills and the number of unassigned claims are noteworthy, given that the law had been in effect just 6 months by the end of 1987.

On the basis of physician assignment rates, Vermont moved from 21st to 7th in its relative ranking among the states. It should also be noted that the assignment rate for physician office and home visits increased by

almost 21 percent for the period examined, even though these services were exempted under the law. In the last quarter of 1987, 61.4 percent of the claims for these services were assigned versus 50.8 percent in the last quarter of 1986.

Changes in the Use of Physician Services

Our analysis indicates that the use of services increased at just above the national rate subsequent to the law. The average number of services per beneficiary increased by 7.6 percent. This growth is consistent with that experienced nationally; between 1980 and 1987, the Physician Payment Review Commission estimates that the average number of services per Medicare enrollee increased by 7 percent annually.

Total allowed charges for the services analyzed remained constant in Vermont, while it increased slightly throughout the country. This indicates that for the period examined, Vermont physicians did not increase their intensity of services for the services analyzed.

Changes in Beneficiary Access to Health Care

Considering the increase in the number of physicians providing patient care in the state and in the number of beneficiaries treated, it does not appear that Vermont beneficiaries experienced reduced access to care during the period examined. The state added to its supply of physicians in 1987 at a rate exceeding that of the nation as a whole. Additionally, 7.4 percent more beneficiaries received treatment in 1987 than in 1986. This compares with a 1.2 percent increase in part B enrollment in the state for the same period.

The people we spoke with in the state were not aware of any indications that beneficiary access to care had been affected by the law. In Vermont, there were no apparent adverse impacts from the law, the director of the state medical society said, such as physicians leaving the state or declining to treat Medicare beneficiaries. There was no evidence, said one of the co-chairmen of the Vermont legislature's health and welfare committee, of physicians leaving the state because of the law.

Connecticut: The Law and Its Effects

About two-thirds of the beneficiaries in Connecticut are eligible for coverage under the law, but enrollment procedures have resulted in the law's actually protecting a smaller percentage of beneficiaries from balance bills. Following implementation of the law, out-of-pocket costs for beneficiaries were reduced. Increases in the number of physicians providing patient care in the state indicate no reduction in access to care.

Provisions of the Law

Connecticut's law became effective June 29, 1987. At first, the state medical society administered the program, but it was not able to meet certain legislated goals concerning assignment rates and physician participation. Program administration reverted to the Connecticut department on aging in July 1988.

By Connecticut law, physicians treating Medicare beneficiaries cannot collect balance bills from beneficiaries. In 1987, single beneficiaries with income of $19,950 or less and married couples with income of $24,000 or less qualified for coverage under the law. Beneficiary income is generally defined as adjusted gross income as would be reported for federal income taxes plus certain nontaxable income, such as certain retirement and Social Security benefits. The income limits are set at 150 percent of the qualifying income for the Connecticut Pharmaceutical Assistance Program. Of the 437,357 Medicare beneficiaries in the state in 1987, state officials estimate that 299,000 (68 percent) qualified for coverage.

Beneficiaries must apply for coverage and submit proof of income (such as federal income tax information) to the department on aging, which issues an identification card that is valid for 2 years. A beneficiary presents this card to a physician to show coverage under the state program. An official in Connecticut told us that in practice, the state's requirement that beneficiaries apply for a card has limited the number of beneficiaries who have benefited because only a fraction of the eligible beneficiaries have actually obtained cards. Physicians may collect balance bills from beneficiaries who do not enroll even though they otherwise qualify. As of February 1989, 66,700 Medicare beneficiaries, 22 percent of the estimated number eligible, had enrolled in the program.

Connecticut's law does not explicitly provide for denying or revoking the medical licenses of physicians who violate the law, but provides for a fine that may not exceed $1,000. As of June 1989, no physician had been charged with violating the law.

Changes in beneficiary out-of-pocket costs and beneficiary access to care in Connecticut from the last quarter of 1986 to the last quarter of 1987 are shown in table 3.4.

Table 3.4: Changes in Connecticut Medicare Beneficiary Out-of-Pocket Costs and Access to Care (Last Quarters of 1986 and 1987)

Category	Last quarter of 1986	Last quarter of 1987	Percentage change
Beneficiary out-of-pocket costs:			
Average balance bill per unassigned claim	$23.69	$21.85	−7.8
Percentage of beneficiaries with no unassigned claims	40%	44%	10.0
Assignment rate	58.5%	66.9%[a]	14.4
Comparable national rate	67.2%	74.0%	10.1
Beneficiary access to health care:			
Physicians providing patient care[b]	7,908	8,221	4.0
Comparable national data[b]	444,705	478,511	7.6

[a]By the last quarter of 1988, the assignment rate in Connecticut was 77.0 percent as compared with 79.3 percent nationally.

[b]As of December 31 of each year.

Source: GAO analysis of carrier payment tapes, HCFA, and American Medical Association data.

Changes in Out-of-Pocket Costs

During the period examined, the average value of a balance bill decreased but the assignment rate increased. Both measures indicate that beneficiaries, in general, experienced reductions in their out-of-pocket health care costs subsequent to the law. In addition, the 14.4 percent increase in Connecticut's assignment rate is about 43 percent greater than the 10.1 percent increase in the assignment rate nationally. This too indicates savings to beneficiaries in their out-of-pocket costs.

Changes in Beneficiary Access to Health Care

The data do not indicate that beneficiary access to health care deteriorated subsequent to the law. Connecticut has many physicians; in both 1986 and 1987, the state ranked fourth in the country based on the number of physicians providing patient care per 100,000 population. It therefore is not surprising that the percentage increase in the number of physicians in Connecticut was below the national increase.

The people we spoke with in the state indicated that the law would not reduce access to care for beneficiaries. In Connecticut, the law would not reduce access to care, said state medical society officials, or cause physicians to leave the state. We discussed the law with several state legislators, who told us that they knew of no instances where physicians had left the state because of the law.

Summary and Conclusions

Four states have adopted laws that effectively require physicians to accept Medicare's approved amount as payment in full, thereby reducing out-of-pocket costs for Medicare beneficiaries. Physicians are not required to treat Medicare beneficiaries covered by the laws, but, if they do, they may not collect balance bills. With the exception of Massachusetts, the state laws do not cover beneficiaries with income in excess of specified limits.

Physician penalty provisions for violating the laws vary from state to state. In Connecticut, the law explicitly provides for physicians to be fined if they balance bill. In other states, such conduct is explicitly considered one for which physicians may lose their medical licenses. No physician in any of the four states, as of June 1989, had been charged with not complying with the applicable requirements.

In addition to the four states with mandatory programs, voluntary programs to encourage Medicare assignment have been initiated in 26 states. Generally, these programs are administered by state or county medical societies and cover lower-income beneficiaries.

Balance Bills for Beneficiaries Eliminated

Eligible beneficiaries covered under the laws in the four states have seen their liability for balance bills eliminated. Since the Massachusetts law covers all beneficiaries in the state, liability was completely eliminated. In 1985, the year before Massachusetts adopted its law, balance bills totaled $12.5 million. Vermont's law covers about 90 percent of the state's Medicare beneficiaries, and total beneficiary liability for balance bills decreased by approximately 50 percent between the last quarter of 1987 and the last quarter of 1986. Benefits were not as great in Rhode Island, where the law covers about 49 percent of Medicare beneficiaries, and in Connecticut, where it covers 68 percent. Total beneficiary liability for balance bills decreased by 20 percent in Rhode Island; the average balance bill per unassigned claim decreased by 7.8 percent in Connecticut for the period examined. The number of beneficiaries actually participating in the Rhode Island and Vermont programs is not known; 22 percent of those eligible in Connecticut had obtained a required identification card as of February 1989.

Physician assignment rates—the percentage of covered charges represented by assigned claims—increased in the four states since passage of the laws. Increases in both Vermont and Connecticut significantly exceeded the increase nationally during the period examined. Increases in Massachusetts and Rhode Island were less than the national increase,

in part because these states had the highest physician assignment rates in the nation before passage of the laws.

Use of Services and Access to Care

In Massachusetts and Vermont, the average number of services per beneficiary increased during the period examined; the increases do not, however, appear attributable to the laws. The high assignment rate in Massachusetts prior to the law's implementation makes it unlikely that physicians reacted to the law with an increase of 21 percent to the average number of services per beneficiary during the period. The increase noted in Vermont is in keeping with increases experienced by Medicare as a whole for most of the 1980s. The average number of services per beneficiary decreased in Rhode Island for the period, indicating that the law has not resulted in increased volume of physician services to offset income losses resulting from reductions in balance bills.

We did not observe increases in intensity of services that might be linked to physician reactions to the laws. No intensity changes occurred in Rhode Island or Vermont for the period. Although the intensity increase noted in Massachusetts slightly exceeded that of the country as a whole, the state's earlier high assignment rate suggests that the law had little direct effect on the intensity of services. Data limitations prevented us from addressing changes in the average number of services per beneficiary and intensity of services in Connecticut.

The number of physicians providing patient care increased in all four states subsequent to passage of the laws, providing, we believe, a broad-based indicator that beneficiary access to care had not been reduced. In addition, each state has a comparatively high number of physicians providing patient care compared with the rest of the country. This may help to explain why, for the period examined, the rate of increase in the number of physicians providing patient care in three states did not match the national increase.

In all states, a greater number of beneficiaries received treatment subsequent to the laws' implementation. In each state, the increase exceeded the growth in the number of Medicare beneficiaries enrolled in part B. This is another indicator of continued beneficiary access to health care in the four states.

Conclusions

Beneficiaries covered by the four state laws saved on out-of-pocket costs for their health care. Savings were greatest in Massachusetts since its

law applies to all beneficiaries and to all physician services. Savings also occurred in the three other states, but since the carrier payment information used in our analysis did not identify which beneficiaries were covered under the law, we could not specifically determine how much they saved. In Rhode Island, however, physicians accepted assignment for beneficiaries not covered by the law, and Vermont physicians increased their assignment rates for services not covered by the law.

Some feared that mandatory assignment would lead to (1) greater numbers of services per beneficiary, (2) increases in more intensive levels of service provided, or (3) reduced beneficiary access to health care. It does not appear, however, that the laws have produced these results. Certain factors in the four states—such as the assignment rate before implementation of the laws, the physician supply in each state, and differences in provisions of the four laws—preclude predicting the effects of mandatory assignment in other states.

Our review in Connecticut, Rhode Island, and Vermont covered just the 6-month period after the laws were implemented, which, we believe, is too short a time to determine whether physicians modified their behavior in response to the laws. Physicians in these states might respond by providing more services on average per beneficiary or by increasing the intensity of services provided; if so, the reduced out-of-pocket costs resulting from the laws for covered beneficiaries could be offset by increased amounts beneficiaries would have to pay because of copayment requirements. Additionally, physician responses of this nature will result in greater overall expenditures. Our analysis of Massachusetts data, which cover claims for services rendered from 10 and 22 months after the law was implemented, does not indicate that physicians responded in these ways.

Voluntary Assignment Programs in the States

Voluntary programs to promote assignment were operational in 26 states as of June 1989; many cover Medicare beneficiaries with income ranging from about 125 to 200 percent of the federal poverty level.[1] These programs preclude physicians from collecting balance bills from eligible Medicare beneficiaries, and nearly all require physicians to accept assignment. For those beneficiaries that are covered by the programs, each program provides participating physicians and beneficiaries with a structured approach to knowing when assignment will be accepted. All but one of the voluntary programs were initiated after passage of the Massachusetts law in 1985.[2]

Most of the voluntary assignment programs are operated by state or county medical societies; some also enlist the assistance of advocacy groups for the elderly, such as area agencies on aging, or are actually operated by such groups. As of June 1989, 15 were operated statewide and programs in 11 states were in operation only for certain counties within a state. A total of 20 states, as of June 1989, did not have a mandatory or voluntary assignment program.

Information on voluntary programs currently in operation or planned for the future is presented in tables I.1-I.3: statewide, table I.1; county-wide, table I.2; and the future, table I.3. Each table provides information on (1) the effective date of the program, (2) income eligibility limits for single beneficiaries as well as couples, if applicable, and (3) information on whether beneficiaries are required to document income and (if an identification card is issued) prove eligibility for participation in the program.

[1] In 1987, the federal poverty level was $5,447 for a single elderly person and $6,872 for a couple; 125 percent of the single amount would be $6,809 and the couple, $8,590.

[2] The program in Idaho began in 1984.

Table I.1: Characteristics of Voluntary Assignment Programs Operating Statewide

	Effective date of program	Income eligibility limits		Beneficiaries must	
		Singles	Couples	Document income	Obtain enrollment card
Wisconsin	Mar. 1987	$12,500	$16,500	Yes	Yes
New Jersey	May 1987	13,650	16,750	No	Yes
South Carolina	Sep. 1987	8,250	11,100	Yes	Yes
Minnesota	Dec. 1987	12,500	16,000	Yes	Yes
New York	Jan. 1988	15,000	20,000	Yes	Yes
Colorado	Feb. 1988	None	None	[a]	Yes
Pennsylvania	Apr. 1988	12,000	15,000	No	No
Oklahoma	May 1988	8,000	11,000	[b]	Yes
Oregon	May 1988	10,100	13,525	Yes	No
South Dakota	July 1988	8,250	11,100	Yes	No
Iowa	Oct. 1988	13,000	17,400	No	Yes
Maryland	Oct. 1988	None	None	[a]	No
Montana	Dec. 1988	9,000	11,000	No	Yes
New Hampshire	Jan. 1989	8,100	11,200	No	Yes
Nebraska	Mar. 1989	None	None	[a]	No

[a]Not applicable.

[b]Varies.

Table I.2: Characteristics of Voluntary Assignment Programs Operating in Selected Counties in a State

	Effective date of program	Income eligibility limits		Beneficiaries must	
		Singles	Couples	Document income	Obtain enrollment card
Idaho	May 1984	[a]	[a]	No	No
Ohio	Oct. 1986	$5,360	$7,240	Yes	No
Virginia	Sep. 1987	[a]	[a]	[b]	Yes
California	Dec. 1987	[a]	[a]	Yes	Yes
Mississippi	Aug. 1988	6,875	9,250	Yes	Yes
Indiana	Oct. 1988	8,655	11,595	Yes	Yes
Washington	Oct. 1988	[a]	[a]	[b]	Yes
Michigan	Nov. 1988	13,000	15,000	Yes	Yes
New Mexico	Jan. 1989	10,000	12,000	Yes	Yes
Texas	Jan. 1989	[a]	[a]	No	Yes
Tennessee	Jun. 1989	8,250	11,000	Yes	Yes

[a]Varies by county.

[b]Varies.

Table I.3: Characteristics of Voluntary Assignment Programs Planned for Future Implementation

	Effective date of program	Income eligibility limits		Beneficiaries must	
		Singles	Couples	Document income	Obtain enrollment card
Programs planned to apply statewide:					
Kentucky	1989–90	$8,100	$11,200	Undecided	Undecided
Arizona	July 1989	None	None	[a]	Yes
Utah	Unknown	11,000	15,000	No	No
West Virginia	Dec. 1989	10,100	20,000	No	Yes
Nevada	Oct. 1989	Unknown	Unknown	Yes	Yes
Programs planned to apply for selected counties in the state:					
North Carolina	July 1989	11,540	15,460	No	Yes
Wyoming	Unknown	Unknown	Unknown	Unknown	Unknown
Programs for which the area of applicability has not been determined:					
Louisiana	1989–90	Unknown	Unknown	Unknown	Unknown
Georgia	Unknown	Unknown	Unknown	Unknown	Unknown
North Dakota	Unknown	Unknown	Unknown	Unknown	Unknown
Kansas	Unknown	Unknown	Unknown	Unknown	Unknown

[a]Not applicable.

By way of comparison, we examined changes in the relative ranking of the four states that implemented statewide voluntary assignment programs during 1987—Minnesota, New Jersey, South Carolina, and Wisconsin. The relative ranking of each is based on their physician assignment rates for the quarter before implementation of the programs and the last quarter of 1988 (see table I.4).

Table I.4: Relative Ranking of Selected States With Voluntary Programs

State	Quarter before implementation	Last quarter of 1988
Minnesota	46	47
New Jersey	28	34
South Carolina	13	14
Wisconsin	39	40

Changes in the relative ranking of each of the four states with voluntary programs was, with the exception of New Jersey, minimal after implementation of the program. In each case, the state's relative ranking actually declined.

Information on the number of physicians and beneficiaries enrolled in the four programs is limited. For Minnesota, state medical society officials said, the Senior Partners Care Program, initiated in December 1987, currently has between 4,000 and 5,000 beneficiaries enrolled and approximately 1,000 participating physicians. For Wisconsin, state medical society officials said, approximately 10,000 beneficiaries were enrolled as of March 1989 and approximately 5,500 physicians were participating. For New Jersey, state medical society officials said, 6,911 beneficiaries and 3,782 physicians were participating as of April 1989; these numbers are, however, understated because several county medical societies had not yet reported their participation information to the state medical society. Information on the number of beneficiaries enrolled in the South Carolina program is not available from the state medical society; approximately 950 physicians were participating as of April 1989.

GAO Calculated Changes in Intensity of Services Using Office Visits in Massachusetts as an Example

The example that follows explains how we calculated changes in intensity in Massachusetts, Rhode Island, and Vermont for the six services reviewed—office visits, hospital visits, emergency room visits, consultations, skilled nursing facility visits, and nursing home visits. Our objective was to develop comparable data exclusive of changes in fees and volume of services. The example is based on office visit data in Massachusetts for 1985 and 1987. In the two other states, we used data from the last quarters of 1986 and 1987.

Step 1. Using GAO's analysis of carrier payment tapes, we calculated total allowed charges for the six levels of office visits in 1985—each level has a separate charge. This amount totaled $64,741,900.

Step 2. We calculated the average value of a 1987 office visit in 1985 dollars by multiplying the number of services for each of the six levels of office visit by the 1985 average dollar charge. We totaled this figure—$66,602,123—and divided it by the total number of 1987 office visits for the six levels—2,676,382—resulting in an average value of $24.89. The amount isolates the effects of physician decisions to bill for higher-level rather than lower-level office visits during 1987 and is not affected by changes in fees or volume of services.

Step 3. We calculated the adjusted total allowed charges for 1985 office visits by multiplying the total number of 1985 office visits—2,709,984—times the $24.89 average value calculated in step 2. This amount totals $67,451,502 and represents the value of all 1985 office visits, adjusted for changes in the level of office visits provided in 1987. It reflects what all 1985 office visits would cost if the mix of services provided was the same as that in 1987.

Step 4. We subtracted the total allowed charges of $64,741,900, calculated in step 1, from the total allowed charges of $67,451,502, calculated in step 2, to arrive at the change in intensity of office visits in Massachusetts from 1985 to 1987. This amount equals $2,709,602. Since the number of services and the basis of the dollars used are the same (both reflect 1985 figures), changes in the total allowed charges are due to shifts in the levels of services provided. For Massachusetts, the $2,709,602 represents shifts from lower levels of service to higher levels of service.

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