

APPENDIX E. MEDICARE REIMBURSEMENT TO
PHYSICIANS

PHYSICIAN PAYMENT REFORM

The Omnibus Budget Reconciliation Act of 1989 (OBRA 1989) provided for the implementation, beginning January 1, 1992, of a new payment system for physicians' services paid for by Medicare. A new fee schedule payment system replaces the previous reasonable charge payment system. The new system was enacted in response to two principal concerns. The first was the rapid escalation in program payments. Over the 1965-89 period, Medicare spending for physicians' services had increased at an average annual rate of 11.7 percent, outstripping both the increase in medical care inflation and the rate of growth in the number of Medicare enrollees. The second concern was that the use of the reasonable charge payment had led, in many cases, to payments which were not directly related to the resources used.

Under the new system, payments are made under a fee schedule which is based on a resource-based relative value scale (RBRVS). The new system is being phased in over the 1992-96 period. OBRA 1989 also created a volume performance standard to moderate the rate of growth in physician expenditures. Further, it increased protections for beneficiaries by placing more stringent limits on amounts that physicians can bill in excess of Medicare's approved payment amount. Taken together, these three elements are referred to as the three-part physician payment reform package. The legislation also authorized increased funding for research on patient

outcomes
for selected medical treatments and surgical procedures to
assess their appropriateness, necessity, and effectiveness.
The
Omnibus Budget Reconciliation Act of 1990 (OBRA 1990)
contained
several modifications and clarifications to the OBRA 1989
provisions. Further changes were included in the Omnibus
Budget
Reconciliation Act of 1993 (OBRA 1993).

The Department of Health and Human Services (DHHS)
issued
final implementing regulations on November 25, 1991.
Additional
regulations were issued on November 25, 1992 and December
2,
1993.

MEDICARE FEE SCHEDULE

The Secretary of DHHS is required to establish a fee
schedule before January 1 of each year that sets payment
amounts for all physicians' services furnished in all fee
schedule areas for the year. The fee schedule amount for a
service is equal to the product of:

The relative value for the service;
The geographic adjustment factor (GAF) for the
service for the fee schedule area; and
The national dollar conversion factor for the
year.

Relative value unit. The relative value unit (RVU) for
each
service has three components.

The physician work component reflects physician
time
and intensity, including activities before and
after
patient contact.

The practice expense or overhead component
includes
all categories of practice expenses (exclusive of

malpractice liability insurance costs). Included are

office rents, employee wages, physician compensation, and physician fringe benefits.

The malpractice expense component reflects costs of

obtaining malpractice insurance.

The proportion that each component represents of the total RVU

varies by service.

Geographic adjustment factor. The second major factor used

in calculation of the fee schedule is the geographic adjustment

factor (GAF) for the fee schedule area. There are currently 217

fee schedule areas nationwide.

The GAF is designed to account for geographic variations in the costs of practicing medicine and obtaining malpractice insurance as well as a portion of the difference in physicians' incomes that is not attributable to these factors.

The GAF is the sum of three indices. Separate geographic practice cost indices (GPCIs) have been developed for each of

the three components of the RVU, namely a work GPCI, a practice

expense or overhead GPCI, and a malpractice GPCI. In effect, a

separate geographic adjustment is made for each component. However, as required by law, only one-quarter of the geographic

variation in physician work resource costs is taken into account in the formula. (Table E-25 at the end of this chapter

shows the GAF values for each of the 217 fee schedule areas nationwide.)

The three GPCI-adjusted RVU values are summed to

produce an indexed RVU for each locality.

Conversion factor. The conversion factor is a dollar multiplier which converts the geographically adjusted relative value for a service to an actual payment amount for the service. The law requires the establishment of an initial dollar conversion factor. The conversion factor is updated annually beginning in 1992.

The law required the calculation of an initial dollar conversion factor which was budget neutral relative to 1991 predicted expenditure levels. This means that if the initial conversion factor had applied in 1991, Medicare spending would equal what was projected to be spent under the reasonable charge payment system in that year. The law also contained provisions relating to payment calculations during the 1992-96 phase-in period; these are the transition provisions. The Department's final implementing regulations included an adjustment to reconcile the calculations required under both the budget neutrality and transition provisions. (This adjustment to the ``adjusted historical payment basis'' is discussed under ``Transition rules'' below.)

The initial dollar conversion factor was set at \$30.42. The 1992 update was set at 1.9 percent. (See discussion of update calculation below.) Therefore the 1992 conversion factor was \$31.001.

In 1993 two conversion factors applied--one for surgical services and one for nonsurgical services. The 1993 conversion factor for surgical services was \$31.96, and the conversion factor for nonsurgical services was \$31.25.

Beginning in 1994, a third conversion factor applies for

primary care services. The 1994 conversion factor for surgical services is \$35.15; the conversion factor for primary care services is \$33.72; the conversion factor for other nonsurgical services is \$32.91.

Payment formula. In simplified terms the payment for each service is calculated as follows:

$$\text{PAYMENT} = \text{CF} \times [(\text{RVU}_{\text{work}} \times \text{GPCI}_{\text{work}}) + (\text{RVU}_{\text{practice expense}} \times \text{GPCI}_{\text{practice}}) + (\text{RVU}_{\text{malpractice}} \times \text{GPCI}_{\text{malpractice}})]$$

Where:

CF=conversion factor

RVU_{work}=physician work relative value units for the service;

GPCI_{work}=geographic practice cost index value for physician work in the locality (the value reflects only one-quarter of the variation in physician work as required by law);

RVU_{practice expense}=practice expense or overhead relative value units for the service;

GPCI_{practice expense}=geographic practice cost index value for practice expense or overhead applicable in the locality;

RVU_{malpractice}=malpractice relative value units for the service;

GPCI_{malpractice}=geographic practice cost index value for malpractice applicable in the locality.

Transition rules. The law establishes specific payment rules for the 1992-1996 phase-in period. To determine payments in 1992, comparisons were made between the fee schedule amount and the ``adjusted historical payment basis'' (AHPB) in the

payment locality. Generally, the AHPB was equal to the average Medicare allowance for the service in the locality in 1991, updated to 1992. Implementing regulations applied a 5.5 percent downward adjustment to this amount in order to maintain budget neutrality over the 5-year transition period.

If the reduced AHPB in a locality was less than 15 percent over or under the fee schedule amount, payments were made on the basis of the fee schedule beginning in 1992. A transition was provided in the case of differences larger than 15 percent. In 1992, the reduced AHPB amounts were increased or decreased by 15 percent of the fee schedule amount, whichever was appropriate. Thus, for a service more than 15 percent below the fee schedule the payment equaled the reduced AHPB plus 15 percent fee schedule amount. For a service more than 15 percent above the fee schedule, the payment equaled the reduced AHPB minus 15 percent fee schedule amount.

For 1993-95, payment is based on a blend of the previous year's amount (updated to the current year) and the fee schedule amount; over the period, a gradually increasing portion is based on the fee schedule. In 1993, 75 percent was based on the previous year's amount adjusted by the update factor specified for the year and 25 percent was based on the fee schedule amount for the year. The percentage attributable to the previous year's fee is reduced to 67 percent in 1994 and 50 percent in 1995. All services are paid on the basis of

the
fee schedule beginning in 1996.

MEDICARE VOLUME PERFORMANCE STANDARDS; CONVERSION FACTOR UPDATE

A key element of the fee schedule is the conversion factor.

One consideration in establishing the annual update in the conversion factor is whether efforts to stem the annual rate of growth in physician payments have succeeded. This is measured by the Medicare volume performance standard (MVPS).

Medicare volume performance standards. The law requires the calculation of annual MVPSs, which are standards for the rate of expenditure growth. The purpose of these standards is to provide an incentive for physicians to get involved in efforts to stem expenditure increases. The relationship of actual expenditures to the MVPS is one factor used in determining the annual update in the conversion factor.

Implementation of the MVPS provision began in fiscal year 1990. OBRA 1989 effectively set a performance standard rate of increase for fiscal year 1990 for all physicians' services and specified a process for determining the standard in future years. OBRA 1990 specified that the fiscal year 1991 MVPS rates of increase were to be set at the estimated baseline percentage increase in expenditures, minus 2 percentage points. The amount of this reduction is referred to as the ``performance standard factor.'' OBRA 1993 increased the performance standard

factor
from 2.0 to 3.5 percentage points for 1994, and to 4
percent
points for each succeeding year. OBRA 1990 also provided,
beginning for fiscal year 1991, for the calculation of a
standard for all physicians' services, and for two
subcategories of physicians' services: surgical services
and
other services. Beginning in fiscal year 1994, OBRA 1993
required separate MVPS rates of increase for surgical,
primary
care, and other nonsurgical services.

Generally, the Congress is expected to specify the
performance standard rates of increase. The Secretary of
DHHS
is required to make a recommendation to the Congress by
April
15 each year. In making the recommendation, the Secretary
is to
consider inflation, changes in the number of part B
enrollees,
changes in technology, appropriateness of care, and access
to
care. The Physician Payment Review Commission (PhysPRC), a
Congressional advisory body, is required to review the
Secretary's recommendation and submit its own
recommendation by
May 15.

The Congress is then expected to establish the standard
rates of increase. If the Congress does not specify the
MVPS,
however, the rates of increase are determined based on a
default formula. The default standard is the product of the
following four factors reduced by a performance standard
factor:

Secretary's estimate of the weighted average
percentage increase in physicians' fees for
services
for the portions of the calendar years included in
the
fiscal year involved;

Secretary's estimate of the percentage change from the previous year in the number of part B enrollees; Secretary's estimate of the average annual percentage growth in volume and intensity of physicians' services for the preceding 5 fiscal years; and Secretary's estimate of the percentage change in physician expenditures in the fiscal year (not taken into account above) which will result from changes in law or regulations.

In fiscal year 1991, the performance standard factor was 1 percentage point; this increased to 1.5 percentage points in fiscal year 1992, to 2 percentage points in fiscal year 1993, to 3.5 percentage points in fiscal year 1994, and to 4.0 percentage points in subsequent years.

The MVPS for fiscal year 1994 is based on the default formula. It is set at 8.6 percent for surgical services, 10.5 percent for primary care services, 9.2 percent for other nonsurgical services, and 9.3 percent for all physicians' services (see table E-1).

TABLE E-1.--MEDICARE VOLUME PERFORMANCE STANDARDS
[In percent]

		Surgical	Nonsurgical
Primary	Fiscal year		
Care	All		
1990.....		(\1\)	(\1\)

(\2\)	9.1		
1991.....		3.3	8.6
(\2\)	7.3		
1992.....		6.5	11.2
(\2\)	10.0		
1993.....		8.4	10.8
(\2\)	10.0		
1994.....		8.6	9.2
10.5	9.3		

 \1\Separate performance standards for surgical and nonsurgical services not required for fiscal year 1990.
 \2\Separate performance standards for primary care services not required for fiscal years 1990-93.

TABLE E-2.--CBO PROJECTIONS OF MEDICARE VOLUME PERFORMANCE STANDARDS\1\
 [Fiscal years, in percent]

	1993	1994	1995	1996	1997	1998	1999
MVP standard overall\2\.....	10.0	9.3	10.0	4.8	5.0	4.0	4.1
Growth in overall expenditures.....	5.5	8.9	11.2	10.7	11.1	9.6	9.1
Difference.....	4.5	0.4	-1.3	-6.0	-6.1	-5.6	-5.1
Maximum allowable reduction.....	-2.0	-2.5	-5.0	-5.0	-5.0	-5.0	-5.0
MEI adjustment.....	-1.3	9.3	4.5	0.4	-1.3	-5.0	-5.0
Legislative adjustments\3\.....	0.0	-2.3	-2.2	0.0	0.0	0.0	0.0

Projected MEI (calendar year).....	2.7	2.3	2.9	2.8	2.7	2.6	2.5
Adjusted overall MEI (calendar year).....	1.4	9.3	5.2	3.2	1.4	-2.4	-2.5

 \1\Because of uncertainty over the redistributive effects of the physician fee schedule on the categories of services, CBO projects only an overall default standard for 1995-99.

\2\The 1993 and 1994 Standards were announced by the Secretary of HHS. Standard values for 1995-99 are CBO projections.

\3\The increase in physician's fees in 1994 and 1995 were reduced by OBRA 1993 legislation. Surgical services were reduced by 3.6% in 1994 and 2.7% in 1995. Medical services (other than primary care) were reduced by 2.6% in 1994, 2.7% in 1995. The numbers shown in this table reflect a weighted reduction across all physician services that were used by CBO to calculate an overall update.

Source: Congressional Budget Office.

Table E-2 shows CBO projections of the MVPS and components of the MVPS through fiscal year 1999.

Conversion factor update. Annual updates in payments under the fee schedule are made by updating the dollar conversion factor. The Congress is generally expected to specify the percentage increase in the conversion factor. In April of each year (beginning in 1991), the Secretary of DHHS is required to recommend to the Congress an update (or updates) in the conversion factor for the following year.

In making the update recommendation, the Secretary is required to consider a number of factors including the percentage change in actual expenditures in the preceding fiscal year compared to the MVPS for that year, changes in volume and intensity of services, beneficiary access to

care,
and the increase in the Medicare Economic Index (MEI). The
MEI
is a percentage figure which is revised annually; it has
been
used in the program to limit annual increases in recognized
fees. The MEI is generally intended to reflect annual
increases
in the costs of operating a medical practice; however, for
several years the MEI percentage was set by the Congress.
(See
table E-3 for a history of MEI updates.)

The PhysPRC is required to review the Secretary's
update
recommendation and submit its own recommendation to
Congress by
May 15 of each year.

For 1993, separate updates were required for surgical
and
nonsurgical services. Beginning with the 1994 update, OBRA
1993
required separate updates for surgical services, primary
care
services, and other nonsurgical services. OBRA 1993 also
modified the MVPS by including anesthesia services in the
MVPS
for surgical services.

The Congress either specifies the update to the
conversion
factor or a default formula, specified in law, applies. The
default fee update is equal to the Secretary's estimate of
the
MEI increased or decreased by the percentage difference
between
the increase in actual expenditures and the MVPS for the
second
preceding fiscal year. (Thus, the 1994 updates reflect
actual
fiscal year 1992 experience.) However, the law specifies a
lower limit on the default update. Before the enactment of
OBRA

1993, the maximum downward adjustment in the update was 2 percentage points in 1992 and 1993, 2.5 percentage points in calendar years 1994 and 1995, and 3 percentage points for any succeeding calendar year. However, OBRA 1993 changed for maximum downward adjustment for 1995 and any succeeding year to 5.0 percentage points. There is no restriction on upward adjustments to the MEI.

OBRA 1993 required the MEI for calendar year 1994 to be reduced by 3.6 percentage points for surgical services and 2.6 percentage points for nonsurgical services other than primary care services. OBRA 1993 also required the MEI to be reduced by 2.7 percentage points in 1995 for both surgical and nonprimary care nonsurgical services. Primary care services were exempt from the statutory reductions in the MEI in 1994 and 1995.

The default formula was used to calculate the update for calendar year 1994. The 1994 MEI is 2.3 percent. The conversion factor was increased to 10 percent for surgical services, 7.9 percent for primary care services, and 5.3 percent for other nonsurgical services. The fee updates were set above the MEI because the growth rates in spending for both surgical and nonsurgical services were less than the fiscal year 1992 volume performance standards. (See table E-3 for previous fee schedule updates.

TABLE E-3.--MEDICARE UPDATE FACTORS FROM 1973-1994

Annual increase (percent)	Medicare economic index	Index value
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July 1, 1973.....	1.000	NA
July 1, 1975 to June 30, 1976.....	1.179	17.90
July 1, 1976 to June 30, 1977.....	1.276	8.23
July 1, 1977 to June 30, 1978.....	1.357	6.35
July 1, 1978 to June 30, 1979.....	1.426	5.08
July 1, 1979 to June 30, 1980.....	1.533	7.50
July 1, 1980 to June 30, 1981.....	1.658	8.15
July 1, 1981 to June 30, 1982.....	1.790	7.96
July 1, 1982 to June 30, 1983.....	1.949	8.88
July 1, 1983 to June 30, 1984.....	2.063	5.85
July 1, 1984 to Apr. 30, 1986.....	2.063	\1\0
May 1, 1986 to Dec. 31, 1986.....	2.148	\2\4.15
Jan. 1, 1987 to Mar. 31, 1988.....	2.217	\3\3.20

Anesthesiology,
 radiology, &
 overvalued
 procedures\8\

Primary Other
 care services
 services

Apr. 1, 1988 to Dec. 31, 1988 1.00	\4\3.60	\4\1.00
Jan. 1, 1989 to Mar. 31, 1990 1.00	\5\3.00	\5\1.00
Apr. 1, 1990 to Dec. 31, 1990 0	\6\4.20	\7\2.00
Jan. 1, 1991 to Dec. 31, 1991 0	2.00	0

Other
 Physician fee schedule update
 nonsurgical
 services

Primary
 care Surgical
 services services

Jan. 1, 1992 to Dec. 31, 1992. 1.90	1.90	1.90
Jan. 1, 1993 to Dec. 31, 1993. 0.80	0.80	3.10
Jan. 1, 1994 to Dec. 31, 1994. 5.30	7.90	10.00

\1\MEI was held constant during fee freeze.

\2\Percentage increase was mandated by Public Law 99-272 and applied

only to participating physicians.

\3\Percentage increase was mandated by Public Law 99-509 and applied to

both participating and nonparticipating physicians.

Prevailing charges

of nonparticipating physicians were 96 percent of the prevailing

charges for participating physicians.

\4\Percentage increase was mandated by Public Law 100-203.

Prevailing

charges for services provided by nonparticipating physicians are 95.5

percent of the prevailing charges for participating physicians.

\5\Percentage increase was mandated by Public Law 100-203.

Prevailing

charges for services provided by nonparticipating physicians are 95

percent of the prevailing charges for participating physicians.

\6\Prevailing charges for services provided by nonparticipating

physicians are 95 percent of the prevailing charges for participating

physicians.

\7\Percentage increase was mandated by P.L. 100-239.

Prevailing charges

for services provided by nonparticipating physicians are 95 percent of

the prevailing charges for participating physicians.

\8\Services considered overpriced are specified in table 2 in the

``Joint Explanatory Statement of the Committee of Conference''

submitted with the conference report to accompany P.L. 100-239.

NA--Not applicable.

Source: Health Care Financing Administration, Office of the

Actuary,

Office of Medicare and Medicaid Cost Estimates.

LIMITS ON BENEFICIARY LIABILITY

Medicare pays 80 percent of the fee schedule amount after the beneficiary has met the \$100 deductible for the year. The beneficiary is responsible for the remaining 20 percent, known as coinsurance. If a physician does not accept assignment on a claim, the beneficiary may be liable for additional charges known as balance billing charges. However, the law places certain limits on these balance billing charges.

Assignment/participation. The new payment system retains the Medicare concepts of assignment and participation. As under the previous reasonable charge payment system, a physician is able to choose whether or not to accept assignment on a claim paid under the fee schedule. In the case of an assigned claim, the physician bills the program directly and is paid an amount equal to 80 percent of the fee schedule amount (less any unmet deductible). The physician may not charge the beneficiary more than the applicable deductible and coinsurance amounts. In the case of nonassigned claims, the physician still bills the program directly; however, Medicare payment is made to the beneficiary. In addition to the deductible and coinsurance amounts, the beneficiary is liable for the difference between the fee schedule amount and the physician's actual charge, subject to certain limits. This is known as the balance

billed
amount.

A physician may become a participating physician. A participating physician is one who voluntarily enters into an agreement with the Secretary of DHHS to accept assignment on all claims for the forthcoming year. Medicare patients of these physicians never face balance billing charges.

The law includes a number of incentives for physicians to become participating physicians, chief of which is higher recognized fee schedule amounts. The fee schedule amount for a nonparticipating physician is only 95 percent of the recognized amount for a participating physician.

The law specifies that physicians are required to accept assignment on all claims for persons who are dually eligible for Medicare and Medicaid. This includes ``qualified Medicare beneficiaries'' (QMBs); these are persons with incomes below poverty for whom Medicaid is required to pay Medicare premiums and cost-sharing charges.

Balance billing limits. For several years, the law has placed limits on balance billing charges. From 1987-90, the program placed a physician-specific limit on actual charges of physicians which was known as the maximum allowable actual charge or (MAAC). Beginning in 1991, new limits were phased in.

The new limiting charges are set at a maximum percentage above the recognized payment amount (the prevailing charge in 1991 or the Medicare fee schedule amount in subsequent

years)
for nonparticipating physicians. Recognized payment amounts
for
nonparticipating physicians are 95 percent of such amounts
for
participating physicians. The limiting charges are
therefore a
percentage of this reduced amount.

In 1991, a physician's limiting charge was the same
percentage (not to exceed 25 percent) above the 1991
recognized
payment amount as their 1990 MAAC was above the 1990
recognized
payment amount. This was referred to as the 125-percent
limit.
In 1991 only, the limit for evaluation and management
services
was 140 percent.

In 1992, a physician's limiting charge was the same
percentage (not to exceed 20 percent) above the 1992
payment
amount as their 1991 limiting charge was above the 1991
recognized payment amount. This was referred to as the 120-
percent limit. For 1993 and subsequent years, the limiting
charge for nonparticipating physicians is 115 percent of
the
fee schedule amount.

Because certain items and services are excluded from
the
physician fee schedule, beneficiaries do not have limiting
charge protection for them. OBRA 1993 expanded the scope of
the
limiting charge protection, however. Beginning in 1994, the
limiting charge provision applies to drugs and biologicals
that
are furnished incident to physicians' services. In
addition,
the limiting charge provisions now apply to
nonparticipating
suppliers.

MEDICAL CARE OUTCOMES AND EFFECTIVENESS

RESEARCH

In the fourth part of the physician payment reform package, Congress created a new agency, the Agency for Health Care Policy and Research, which replaced the then existing National Center for Health Services Research in the Public Health Service. The mission of the new agency is to enhance the quality, appropriateness and effectiveness of health care services and access to such services. These goals are to be accomplished by establishing a broad base of scientific research and promoting improvements in the clinical practice of medicine and the organization, financing and delivery of health care services.

Specifically, the agency is directed to conduct and support research, demonstration projects, evaluations, training, guideline development and the dissemination of information on health care services and delivery systems, including activities on: (1) the effectiveness, efficiency, and quality of health care services; (2) the outcomes of health care services and procedures; (3) clinical practice, including primary care and practice-oriented research; (4) health care technologies, facilities and equipment; (5) health care costs, productivity and market forces; (6) health promotion and disease prevention; (7) health statistics and epidemiology; and (8) medical liability.

IMPACT OF MEDICARE FEE SCHEDULE

The Medicare Fee Schedule was designed to remove many

of
the inequities of the previous payment system by shifting
payment away from tests and procedures toward evaluation
and
management services. Because the fee schedule was intended
to
be implemented in a budget-neutral fashion, total outlays
under
the new system were expected to match the outlays that
would
have occurred under the previous payment system. In
general,
under the new payment system, primary care physicians were
expected to receive higher payments per service, and
specialty
physicians were expected to receive lower payments per
service.

The overall payment level under the Medicare Fee
Schedule
is established through the conversion factor. In effect,
the
conversion factor translates the relative value units for
individual procedures into actual dollar payments. Increases
or
decreases in the overall level of payments are accomplished
by
adjusting the level of the conversion factor. In moving
from
the former payment system to the fee schedule, DHHS was
required to set the initial conversion factor in a budget-
neutral manner. Inaccuracies in setting the conversion
factor
could result in either underpayment to physicians or in
excess
outlays by the Medicare program. This calculation of the
conversion factor required DHHS to make a number of
important
assumptions regarding both the number and type of services
that
would be provided. Of particular importance was the
projected

increase in the volume and intensity of services in response to changes in payment rates. The Department contended that past experience suggested that implementation of the new payment system would be accompanied by increases in volume and intensity of services. To account for these increases, DHHS made a ``baseline adjustment'' in the conversion factor.

Using data from 1991, 1992, and 1993, PhysPRC has examined the initial impact of the Medicare Fee Schedule on physicians. Table E-4 shows the change in Medicare payment to physicians between 1991 and 1993, by specialty. Changes in payment measured from 1991 to 1993 reflect four aspects of payment reform: two years of transition to the Medicare Fee Schedule, the uniform update for 1992, the differential update for surgical and nonsurgical services for 1993, and refinements to the relative values for 1993.

From 1991 to 1993, physicians' payments per service declined by 4 percent. Surgical specialties had about an 8 percent reduction in payment per service compared with the 2 percent increase for medical specialties. Specialties that predominantly provide evaluation and management services fared better. Payments to general and family practitioners increased by 17 percent over the two-year period, while those to internists rose by 2 percent. Pathologists and thoracic surgeons had the largest reduction of 16 percent, followed by gastroenterologists, radiologists, and cardiologists with reductions ranging from 10 percent to 12 percent.

The total Medicare payment a physician receives depends not only on the payment per service but also on changes in the number and intensity of services billed. Although

physicians
had about a 4 percent reduction in payment overall, a 6
percent
increase in the number and intensity of services per
physician
led to about a 4 percent increase in total Medicare payment
per
physician over the 2-year period.

While payment rates to a majority of specialties fell,
on
average, most of these specialties provided more services.
These increases, however, did not completely offset the
reductions for most surgical specialties which had net
reductions in Medicare payment. With restrictions on
balance
billing and higher participation rates, most surgical
specialties had total reductions in Medicare revenue
ranging
from 6 percent to 12 percent over the 2-year period. Only
urologists saw no change from 1991 to 1993. With increases
in
both payment per service and the number of services
provided,
family and general practitioners saw total Medicare payment
increase by 23 percent from 1991 to 1993, while total
Medicare
revenue increased by 19 percent.

Using data from 1991 and 1993, PhysPRC also examined
the
initial impact of the Medicare Fee Schedule on physicians
by
state. Table E-5 shows the estimated change in Medicare
payment
rates by state and service category between 1991 and 1993.
Overall, payment rates for all services declined by 3
percent
from 1991 to 1993, while those for primary care services
increased by 11 percent. Medicare payment rates for all
services declined in all but 13 states. In contrast,
payment
rates for primary care services increased in all but 4

states.

Changes in payment rates for all services ranged from a 5 percent increase in Colorado to a 9 percent decrease in Alaska

and Nevada. Payment rates for primary care services increased

substantially in many states, with 19 states experiencing increases of 20 percent or more. Payment rate changes for primary care services ranged from a 32 percent increase in Mississippi to a 9 percent decrease in Alaska.

TABLE E-4.--CHANGE IN MEDICARE
PAYMENT, BY SPECIALTY, 1991-93

[Percentage
change]

Volume and

	Medicare intensity payment per service	of services per physician	Medicare Specialty payment per physician	Medicare revenue per physician\1\
--	--	---------------------------------	---	---

Medical.....	2	8	8	4
Cardiology.....	-10	19	8	4
Family/general practice.....	17	6	23	19
Gastroenterology.....	-12	21	8	6
Internal medicine.....	2	-4	-2	-6
Other medical.....	0	19	16	12

Surgical.....			
-8	4	-4	-8
General surgery.....			
-6	4	-2	-6
Ophthalmology.....			
-8	2	-8	-10
Orthopedic surgery.....			
-8	4	-4	-10
Thoracic surgery.....			
-16	10	-8	-12
Urology.....			
-4	8	4	0
Other surgical.....			
-2	4	2	-2
Radiology/Pathology.....			
-12	16	2	0
Radiology.....			
-12	15	0	0
Pathology.....			
-16	32	10	6
All Physicians.....			
-4	6	4	0

 \1\Includes balance billing.

Note.--For these analyses, ER physicians were redesignated as general practitioners, which lead to substantial changes in estimates of payments per service for family and general practitioners and for internists. In addition, vascular surgeons were combined with general surgeons, while cardiac surgeons were combined with thoracic surgeons.

Source: Physician Payment Review Commission analysis of 1991 and 1993 Medicare claims, 5 percent sample of beneficiaries.

TABLE E-5.--ESTIMATED PERCENT CHANGE IN MEDICARE PAYMENT RATES, BY

STATE AND CATEGORY OF SERVICE, 1991-93

Primary	State	All	care
Other		services	
services	services		

Alabama.....			-1
14	-5		
Alaska.....			-9
-9	-9		
Arizona.....			-6
-3	-7		
Arkansas.....			-3
21	-8		
California.....			-6
0	-7		
Colorado.....			5
21	2		
Connecticut.....			-5
0	-6		
Delaware.....			0
16	-4		
District of Columbia.....			-3
6	-5		
Florida.....			-7
1	-9		
Georgia.....			-2
19	-6		
Hawaii.....			-6
-3	-8		
Idaho.....			2
21	-2		
Illinois.....			-2
15	-6		

Indiana.....		-1
19	-6	
Iowa.....		3
28	-1	
Kansas.....		-1
21	-5	
Kentucky.....		1
23	-3	
Louisiana.....		-3
23	-8	
Maine.....		0
18	-5	
Maryland.....		-5
7	-8	
Massachusetts.....		-3
2	-4	
Michigan.....		1
21	-3	
Minnesota.....		1
24	-3	
Mississippi.....		4
32	-1	
Missouri.....		-1
17	-4	
Montana.....		-1
17	-4	
Nebraska.....		-1
21	-5	
Nevada.....		-9
-6	-10	
New Hampshire.....		4
27	-1	
New Jersey.....		0
17	-3	
New Mexico.....		-2
15	-7	
New York.....		-2

8	-4	
North Carolina.....		0
18	-4	
North Dakota.....		-1
19	-5	
Ohio.....		-3
11	-6	
Oklahoma.....		-1
17	-4	
Oregon.....		1
13	-2	
Pennsylvania.....		-3
12	-6	
Puerto Rico and Virgin Islands.....		-5
1	-7	
Rhode Island.....		0
17	-4	
South Carolina.....		2
28	-3	
South Dakota.....		-1
19	-4	
Tennessee.....		0
21	-4	
Texas.....		-2
20	-6	
Utah.....		4
28	-1	
Vermont.....		2
22	-4	
Virginia.....		1
20	-3	
Washington.....		0
15	-3	
West Virginia.....		-2
9	-5	
Wisconsin.....		0
14	-3	

Wyoming.....		4
21	0	
All States.....		-3
11	-5	

 Note.--CPT codes for visit services were converted from 1991 to 1993 coding before calculating fee changes. Therapeutic radiology services and dialysis services were omitted due to difficulties calculating fees per unit of service.

Source: PPRC analysis of Medicare 1993 BMAD procedure file and 1993 5 percent beneficiary Standard Analytic File data. 1993 data are calculated from claims incurred in the first six months of 1993 only.

SELECTED FEE SCHEDULE ISSUES

Establishment of relative values. Relative value units (RVUs) for physician work were based primarily on work done by a Harvard University research team. DHHS used panels of carrier medical directors to review comments received on the values contained in the proposed regulations to fill gaps in the Harvard relative value scale (RVS), and to resolve identified anomalies.

In recognition of that fact that further refinements might be necessary, DHHS designated the relative work values implemented on January 1, 1992 as ``initial'' values. Final RVUs for existing procedure codes under the fee schedule and

interim RVUs for new and revised codes were issued in November 1992 and again in December 1993.

Due to changes in RVUs for codes reviewed as part of the refinement process, the addition of new codes to the fee schedule, and the revisions in payment policies, DHHS determined that net increases would have added a projected \$45 million in expenditures in calendar year 1994. Because certain revisions to the fee schedule are to be made in a budget-neutral manner, a uniform adjustment factor of -1.3 percent was added to all RVUs for 1994. This budget-neutral adjustment factor is the sum of two different adjustment factors that were necessary. The \$45 million that would have been added to Medicare payments required an adjustment to all RVUs of -0.1 percent to ensure budget neutrality. Two additional OBRA 1993 changes, elimination of electrocardiogram (EKG) reductions and new physician reductions, required an adjustment to all RVUs of -1.2 percent to ensure budget neutrality for these issues.

OBRA 1993 required that an adjustment be made to practice expense RVUs for services for which practice expense RVUs exceed 128 percent of the corresponding work RVUs (and whose services are performed less than 75 percent of the time in an office setting). For services meeting these criteria, the 1994 practice expense RVUs were reduced by 25 percent of the amount by which the practice expense RVUs exceed the 1994 work RVUs.

In 1995 and 1996, the excess, as determined for 1994, will

be reduced an additional 25 percent each year. Practice expense RVUs will not be reduced to an amount less than 128 percent of the 1994 work RVU for a service. Certain services that are provided in office settings at least 75 percent of the time are exempt from cuts in practice expense RVUs.

Visit codes. Approximately one-third of Medicare expenditures for physicians' services are made for medical visits and consultations; these are referred to as evaluation and management services. Physicians bill for these services based on current procedure and terminology (CPT) codes developed by the American Medical Association (AMA).

Historically, there were wide variations in the way physicians used visit codes. To a degree, these differences could be accommodated under the old reasonable charge payment system. However, uniform definitions were needed under the new fee schedule. This is because a single relative value is assigned to each code nationwide.

The CPT editorial panel adopted new definitions and new code numbers for all visit categories, effective January 1, 1992. The physician work relative value units are based on these new definitions. The new definitions rely primarily on the clinical content of the visit to differentiate among levels of care. Most codes also indicate the typical amount of time spent by a physician in performing the service; this is an ancillary factor in code selection.

PhysPRC's analysis of claims data for all of 1992 and the first half of 1993 reveals some important successes concerning the new coding system. Physicians appear to be using the new

codes in a more discriminating fashion. For all classes of visits (for example, office visit with a new patient) fewer physicians used only one level of service in coding, and more physicians used all the levels of service. The most substantial improvements came in hospital visits. Tracking the average level of service within classes of visits over the first six quarters demonstrated stable patterns of coding over time.

Global surgery policy. Medicare carriers have typically bundled payment for services associated with a surgery into one code, which is referred to as a global surgical service. Historically, there have been differences among carriers in the scope and duration of services included in the global surgery payment.

A uniform global surgery policy has been in effect since January 1992. The services included in the package are all preoperative services provided on the day before the surgery, all intraoperative services that are a normal and necessary part of the surgical procedure, and all related services provided during a 90-day postoperative period (with the exception of services provided in connection with return trips to the operating room). The initial consultation with the surgeon is outside the global surgical package.

Specific rules also apply for minor surgeries and endoscopies. No payment will generally be made for a visit on the same day as the procedure unless a separately identifiable service is furnished. A zero or 10 day postoperative period applies for minor surgeries. (Those with a 10 day period are listed in an addendum to the final regulations.) There is no

postoperative period for endoscopies performed through an existing body orifice. Other endoscopies are subject to either the major or minor surgical service policy, whichever is appropriate.

Anesthesia services. For several years, payments to anesthesiologists were made on the basis of a fee schedule which predated the RBRVS fee schedule. This anesthesia fee schedule used a separate set of relative values, known as the relative value guide, for anesthesia services which were developed by the American Society of Anesthesiology. Generally, the number of relative value units was the sum of base units and time units.

Generally, the allowable base units from the relative value guide were used when anesthesia services were integrated into the overall fee schedule. Unlike the policy for other services, DHHS temporarily retained the use of actual time in the final regulations; this was done pending further study of the issue. The retention of actual time requires that anesthesia services have a separate conversion factor. The anesthesia conversion factor in 1994, which reflects updates and budget neutrality adjusters, is \$14.20.

Anesthesia services may be performed directly by the anesthesiologist, by a certified registered nurse anesthetist (CRNA) under the medical direction of an anesthesiologist or by a nonmedically directed CRNA. If a physician personally performs the anesthesia service, payment is based on the anesthesia-specific conversion factor and unreduced base

units
and time units with each time unit equivalent to 15
minutes. If
a physician medically directs an anesthesia service on or
after
January 1, 1994, the allowance is 60 percent of the
allowance
for the same service personally performed by the
anesthesiologist. This percentage is reduced each year so
that
beginning January 1, 1998, it is 50 percent.

The allowance for an anesthesia service furnished by a
medically directed CRNA on or after January 1, 1994 is
calculated at 60 percent of the allowance for the same
service
personally performed by the anesthesiologist. This
percentage
is reduced each year so that beginning January 1, 1998, it
is
50 percent. Anesthesia services furnished by a nonmedically
directed CRNA are calculated based on allowable base and
time
units, the same as for anesthesia services personally
furnished
by an anesthesiologist, and a statutorily mandated national
conversion factor, that is geographically adjusted. The
nonmedically directed conversion factor is limited by the
physician anesthesia conversion factor for the same payment
area.

Beginning in 1994, the allowance for the teaching
anesthesiologist's involvement in a single anesthesia case
with
an anesthesia intern or resident is determined in the same
manner as the allowance for the anesthesia service
personally
furnished by the nonteaching anesthesiologist.

Radiology services. Prior to 1992, radiology services
performed by radiologists (or physicians for whom radiology
services accounted for at least 50 percent of their
Medicare
billings) were paid under a radiology fee schedule. The

relative values were based on values developed by the American College of Radiology. In 1992, as required by law, the radiologist fee schedule was integrated into the overall physician fee schedule. Prior relationships among radiology services were preserved, while appropriate modifications were made to develop consistent relationships between the physician work involved in radiology services and all other physician services. The work, practice expense, and malpractice RVUS were integrated separately.

Special payment rules apply to certain categories of radiology services. For portable x-ray services, national relative value units have been established which reflect equipment set-up costs per procedure. Associated transportation costs will continue to be priced locally.

The use of complete procedure codes has been discontinued for interventional radiological services; this is consistent with CPT changes. Payment of the full fee schedule amount is made for the radiological portion (supervision and interpretation code) of an interpretive radiologic service and for the primary nonradiologic service (the surgical code). For any other procedure codes, a reduction applies.

Payments for electrocardiograms (EKGs). For the 1994 fee schedule, separate payment for EKG interpretations performed in conjunction with visits and consultations is restored. (Separate payment had been barred since January 1, 1992.) The RVUs for visits and consultations will be reduced by the number of RVUs that were added to account for EKG interpretations.

To ensure budget neutrality, a 0.3 percent reduction will be made to all RVUs including EKGs, visits, and consultations. (The 0.3 percent reduction corrects an error made in HCFA's original calculation in adding EKG RVUs to visit and consultation RVUs.) To ensure the provision is budget neutral throughout the remainder of the transition to the physician fee schedule, HCFA will reduce the 1994 transition payment amount by 0.7 percent.

New physicians. Prior to January 1, 1994, new physicians were paid at a reduced rate for the first four years of practice. This policy did not apply to primary care services or services furnished in health manpower shortage areas. This policy was first incorporated in OBRA 1987; it was subsequently expanded and modified by OBRA 1989 and OBRA 1990. The payment adjustment was rescinded by OBRA 1993, so Medicare payments for services furnished by new physicians and practitioners are now the same as payments made for the same services furnished by established physicians. To maintain budget neutrality, a 0.9 percent reduction was applied to all fee schedule RVUs and transition amounts for physician services (but not anesthesia services), anesthesia conversion factors, and the prevailing charge or fee schedule amount for practitioner services.

Physician pathology services. A limited number of the services listed in the pathology section of the CPT are identified as physician pathology services. The remainder are

generally clinical diagnostic laboratory services which are paid under a separate fee schedule.

The law requires an adjustment to reflect the technical component of furnishing physician pathology services through a laboratory that is independent of a hospital and separate from a physician's office. DHHS set the technical component at 15 percent of the professional component amount. DHHS also identified a new category of services--clinical laboratory interpretation services. Fifteen clinical laboratory codes have been identified for which a separate payment may be made if the interpretation is requested by the patient's attending physician, results in a written narrative report, and requires exercise of medical judgment by the pathologist.

Defining geographic payment localities. Under the reasonable charge system, Medicare used 240 payment localities nationwide. These payment localities have been retained under the fee schedule except in five States (Nebraska, North Carolina, Ohio, Oklahoma, and Minnesota) where physicians demonstrated overwhelming support for using statewide localities. There are currently 217 payment localities under the fee schedule.

OBRA 1989 required PhysPRC to conduct a study to determine the feasibility of using an alternative configuration, such as States or metropolitan statistical areas, for payment purposes under the fee schedule. PhysPRC recommended use of statewide fee schedule areas except in States with high intrastate price variation; in these States, up to five areas would be

defined.

DHHS is examining this and other recommendations. A change in the current locality structure would require a statutory change.

PAYMENT FOR CLINICAL LABORATORY SERVICES

Since 1984, payment for clinical laboratory services has been made on the basis of a fee schedule established on a regional, statewide or carrier service area basis. As a matter of practice, the Secretary has established fee schedules on a carrier service area basis. The law set the initial fee schedule payment amount for services performed in physicians' offices or independent laboratories at the 60th percentile of the prevailing charge level established for the fee screen year beginning July 1, 1984. Similarly, the initial fee schedule payment amount for services provided by hospital-based laboratories serving hospital outpatients was set at the 62nd percentile of the prevailing charge level. Subsequent amendments limited the percentage differential to `qualified hospitals.' A qualified hospital is a sole community hospital (as that term is used for payment under Medicare's hospital prospective payment system) which provides some clinical diagnostic tests 24 hour a day in order to serve a hospital emergency room which is available to provide services 24 hours a day, 7 days a week.

The fee schedule payment amounts have been increased periodically since 1984 to account for inflation, though scheduled increases have in some instances been delayed and in

one case did not occur. Allowable annual increases in 1991, 1992, and 1993 are limited to 2 percent. Allowable annual increases in 1994 and 1995 would be 0 percent.

Effective April 1, 1988, the law reduced the fee schedule amounts by 8.3 percent for certain automated tests and tests (except for cytopathology tests) that were subject to lowest charge level limits prior to implementation of the fee schedule. The reduced payment amounts serve as the basis for all future updates for these services.

Beginning in 1988, the law established national ceilings on payment amounts. Initially the ceiling was set at 115 percent of the median for all fee schedules established for that test. This percentage has been lowered several times. Beginning January 1, 1991, the level is set at 88 percent of the median of all fee schedules for that test. The national ceiling on payment amounts would be lowered to 84 percent beginning January 1, 1994, 80 percent beginning January 1, 1995 and 76 percent beginning January 1, 1995.

Payment for clinical laboratory services (except for those provided by a rural health clinic) may only be made on the basis of assignment. The law specifically applies the assignment requirement to clinical laboratory services provided in physicians offices. Payment for clinical laboratory services equals 100 percent of the fee schedule amount; no beneficiary cost-sharing is imposed.

Laboratories are required to meet the requirements of the Clinical Laboratory Improvement Act (CLIA). This

legislation,
which focuses on the quality and reliability of medical tests,
was substantially revised in 1988 (CLIA 1988). CLIA 1988 strengthened Federal regulation of laboratories and expanded Federal oversight to virtually all laboratories in the country,
including physicians office laboratories. Implementing regulations were issued February 28, 1992; technical and clarifying corrections were issued January 19, 1993.

HISTORICAL DATA

ASSIGNMENT RATE EXPERIENCE

The total number of assigned claims as a percentage of total claims received by medicare carriers for physicians and other medical services is known as the total assignment rate. Initially, the net assignment rate was computed in the same manner except that it omitted hospital-based physicians and group-practice prepayment plans which were considered assigned by definition (this distinction is no longer made). The net assignment rate declined until the mid-1970's when the rate leveled off at about 50 percent. Since 1985, the rate has increased significantly rising to 89.2 percent in 1993. This reflects both the impact of the participating physician program as well as the requirement that laboratory services must be paid on an assigned basis. Chart E-1 and table E-6 show the net assignment rates for fiscal years 1969-93.

<CHART E-1>

TABLE E-6.--NET ASSIGNMENT RATES,\1\ BY YEAR, 1969-93

[In percent]

Covered

Fiscal year

Claims charges

1969.....	61.0	NA
1970.....	61.2	NA
1971.....	60.1	NA
1972.....	56.4	NA
1973.....	53.4	49.0
1974.....	52.2	47.8
1975.....	51.9	47.7
1976.....	51.0	47.8
1977.....	50.5	47.9
1978.....	50.6	49.3
1979.....	51.1	50.4
1980.....	51.4	51.3
1981.....	52.2	52.9
1982.....	52.8	53.8
1983.....	53.5	55.3
1984.....	56.4	57.7

1985.....		
67.7	67.4	
1986.....		
68.0	69.5	
1987.....		
71.7	73.7	
1988.....		
76.3	79.4	
1989.....		
79.3	82.6	
1990.....		
80.9	84.8	
1991.....		
82.5	87.6	
1992.....		
85.5	90.8	
1993.....		
89.2	94.0	

\1\Both measures of assignment exclude claims from hospital-based physicians and group-practice prepayment plans that are considered assigned by definition.

Source: Health Care Financing Administration, Bureau of Program Operations.

The statistics included in table E-6 are program-wide data. Assignment rates vary geographically. For example, the assignment rate (taken as a percent of dollars) for physician services in fiscal year 1993 ranged from a low of 50.2 percent in South Dakota to a high of 99.8 percent in Rhode Island. The national average assignment rate for physicians services during

this period was 93.2 percent (see table E-7).

TABLE E-7.--PHYSICIAN ASSIGNMENT RATES AS PERCENT OF ALLOWED CHARGES, BY STATE, FOR SELECTED YEARS\1\

[In

percent]

Fiscal year--

Census division/State

1985 1987\2\ 1989 1990 1991 1992 1993

National.....

65.5 70.8 80.6 83.0 86.1 89.4 93.2

New England:

 Maine.....

81.5 84.3 91.4 92.4 94.4 96.7 98.0

 New Hampshire.....

56.5 58.3 67.8 69.9 80.8 89.4 93.9

 Vermont.....

64.3 71.7 93.4 94.7 95.9 97.8 98.6

 Massachusetts\3\.....

93.7 98.2 99.3 99.5 99.5 99.6 99.7

 Rhode Island.....

94.0 95.1 97.1 98.7 99.7 99.7 99.8

 Connecticut.....

57.6 62.8 80.4 84.7 87.7 91.7 94.7

Middle Atlantic:

 New York.....

70.3 73.9 81.1 81.9 84.4 87.7 90.7

 New Jersey.....

62.3 63.8 70.4 73.0 76.3 80.5 85.4

 Pennsylvania.....

88.1 91.0 94.9 95.7 98.5 99.1 99.4

East North Central:

 Ohio.....

50.8 58.8 77.8 82.6 87.3 92.5 97.7

Indiana.....						
49.6	59.2	74.7	77.2	81.5	85.7	92.9
Illinois.....						
51.7	59.9	72.4	75.9	78.8	83.2	89.2
Michigan.....						
88.2	89.7	93.6	94.5	94.4	95.9	97.8
Wisconsin.....						
51.7	54.6	65.6	68.2	71.7	78.2	86.8
West North Central:						
Minnesota.....						
30.6	39.9	46.1	47.6	52.3	57.1	67.1
Iowa.....						
46.9	53.2	67.5	69.8	73.4	78.8	85.6
Missouri\4\.....						
50.1	61.2	72.3	74.9	78.5	83.7	91.6
North Dakota.....						
30.5	36.3	50.3	55.0	67.1	72.1	74.9
South Dakota.....						
18.7	26.7	38.7	39.2	40.2	43.3	50.2
Nebraska.....						
47.3	43.4	59.6	64.9	70.3	76.8	83.8
Kansas\5\.....						
72.7	78.7	87.2	88.8	91.9	94.5	96.2
South Atlantic:						
Delaware.....						
81.8	81.9	88.1	90.5	92.9	95.2	96.8
Maryland\6\.....						
81.6	84.6	91.6	91.4	92.8	94.3	96.7
District of Columbia\7\.....						
78.1	80.5	86.5	87.5	89.4	92.1	94.1
Virginia\8\.....						
66.4	73.4	85.1	87.3	89.6	92.5	95.7
West Virginia.....						
66.7	76.9	90.3	93.2	95.5	97.2	98.4
North Carolina.....						
60.3	66.2	79.2	80.8	83.9	88.8	93.7
South Carolina.....						
64.9	75.4	85.8	87.1	88.9	91.6	94.4
Georgia.....						
63.9	69.1	80.5	83.5	86.6	90.3	94.0
Florida.....						

62.2	68.6	80.3	84.1	87.6	91.0	95.0
East South Central:						
Kentucky.....						
50.3	63.5	80.8	84.8	88.8	91.9	95.5
Tennessee.....						
55.6	65.5	80.9	84.0	89.5	93.1	96.3
Alabama.....						
74.6	91.7	90.1	92.3	94.9	96.6	98.0
Mississippi.....						
63.5	73.5	85.4	88.1	90.6	93.1	95.6
West South Central:						
Arkansas.....						
72.6	81.1	90.3	92.0	93.7	95.4	96.6
Louisiana.....						
51.0	67.8	84.8	88.0	91.0	93.8	95.2
Oklahoma.....						
39.0	48.6	66.0	68.2	72.8	77.8	85.0
Texas.....						
63.0	67.2	78.0	79.9	83.0	87.4	91.6
Mountain:						
Montana.....						
42.6	42.9	50.7	53.0	54.8	61.3	72.7
Idaho.....						
25.2	26.4	33.7	36.1	40.2	40.1	54.1
Wyoming.....						
33.8	30.4	40.2	43.9	48.9	57.5	69.0
Colorado.....						
56.0	56.8	67.6	70.4	74.1	79.7	86.8
New Mexico.....						
58.3	57.6	71.7	76.1	80.1	84.9	91.5
Arizona.....						
52.8	57.1	72.0	76.2	80.3	84.4	89.6
Utah.....						
63.1	69.4	79.9	80.4	83.1	88.4	92.8
Nevada.....						
81.6	86.8	94.4	96.0	97.4	98.4	99.0
Pacific:						
Washington.....						
45.5	46.6	50.8	54.8	60.8	69.2	74.3
Oregon.....						
38.7	46.9	58.4	59.9	63.2	69.3	82.1

California.....	71.3	74.0	87.7	84.4	87.4	90.2	93.8
Alaska.....	54.4	64.3	78.5	79.6	83.2	89.1	93.9
Hawaii.....	61.2	72.0	80.7	82.9	85.8	93.1	96.1

 \1\Rates reflect covered charges for physician claims processed during the period.

\2\The actual participation period was January 1987 through March 1988, and the participation agreements were in effect for that time.

\3\Massachusetts enacted a Medicare mandatory assignment provision, effective April 1986. The fact that the assignment rates shown here are not 100 percent may be explained by the inclusion in the data base of billings by practitioners other than allopathic and osteopathic physicians, which are included in the Medicare statutory definition of ``physician''.

\4\For fiscal year 1993, includes data for all counties in Missouri plus two counties on the State border located in Kansas.

\5\For fiscal year 1993, includes data for all counties in Kansas excluding two counties on the State border.

\6\For fiscal year 1993, includes data for all counties in Maryland excluding two counties on the State border.

\7\For fiscal year 1993, includes data for DC plus two counties in Maryland located on the State border plus a few counties and cities located in Virginia, near the State border.

\8\For fiscal year 1993, includes data for all counties in Virginia excluding a few counties and cities near the State border.

Source: Health Care Financing Administration, Bureau of Program Operations.

PARTICIPATING PHYSICIAN PROGRAM DATA

Physician participation rates have increased

significantly since the inception of the program (see tables E-8 and E-9). For the calendar year 1993 participation period, the physician participation rate (including limited licensed practitioners) had risen to 59.8 percent accounting for 85.5 percent of allowed charges for physician services during the period.

TABLE E-8.--MEDICARE PHYSICIAN PARTICIPATION RATES: PERCENT OF PHYSICIANS AND LIMITED LICENSED PRACTITIONERS WITH AGREEMENTS AND THEIR SHARE OF ALLOWED CHARGES, 1984-1993

Participating physicians' covered charges as a percent of total\1\	Percent of physicians signing agreements
October 1984-September 1985..... 36.0	30.4
October 1985-April 1986..... 36.3	28.4
April 1986-December 1986\2\..... 38.7	28.3
January 1987-March 1988..... 48.1	30.6
April 1988-December 1988..... 57.9	37.3

January 1989-March 1990.....	40.2
62.0	
April 1990-December 1990.....	45.5
67.2	
January 1991-December 1991.....	47.6
72.3	
January 1992-December 1992.....	52.2
78.8	
January 1993-December 1993.....	59.8
85.5	

 \1\Rates reflect covered charges for physician services processed during period.

\2\The actual participation period was May through December of 1986, and participation agreements were in effect for that time. However, charge data are generally collected by quarter; thus, the data for the last three quarters of 1986 are used as a proxy for the participation period.

Source: Health Care Financing Administration, Bureau of Program Operations.

Table E-10 shows the percentage of participating physicians and limited licensed practitioners as a percentage of total physicians and limited licensed practitioners for each State.

The national average of participating physicians and limited licensed practitioners continues to increase. By the calendar year 1993 participation period, this percentage had risen to 59.8.

TABLE E-9.--PARTICIPATION RATES AS PERCENTAGE OF PHYSICIANS, BY SPECIALTY, FOR SELECTED PARTICIPATION PERIODS

		Oct. 1985- Jan. 1992-	Jan. 1987- Jan. 1993-	Jan. Mar.
1989- 1990	Apr. 1990- Dec. 1990	Jan. 1991- Dec. 1991	Apr. 1986 Dec. 1992	Mar. 1988 Dec. 1993
Specialty				
Physicians (M.D.s and D.O.s):				
	General practice.....		27.3	25.6
35.8	39.7	44.0	48.0	55.1
	General surgery.....		33.9	37.2
52.2	55.8	60.5	66.3	73.8
	Otology, laryngology, rhinology.....		24.6	27.0
41.2	45.2	49.6	57.0	66.2
	Anesthesiology.....		21.1	20.3
28.3	30.8	36.5	49.3	64.6
	Cardiovascular disease..		35.6	43.2
55.5	60.6	65.4	72.0	78.7
	Dermatology.....		34.0	38.1
48.7	53.4	57.0	61.6	69.8
	Family practice.....		25.5	27.1
39.7	47.2	50.8	57.7	66.1
	Internal medicine.....		32.5	33.6
45.2	48.8	52.6	57.8	66.2
	Neurology.....		34.8	39.2
49.2	53.1	56.1	63.8	71.8
	Obstetrics-gynecology...		29.1	31.5
44.2	48.8	52.6	58.0	65.7
	Ophthalmology.....		27.3	35.1
50.5	55.6	60.0	66.1	73.2
	Orthopedic surgery.....		29.0	32.6
49.2	53.7	58.4	65.5	74.9
	Pathology.....		39.6	41.2

50.6	53.4	59.2	65.8	73.3
Psychiatry.....			30.0	28.6
37.8	41.6	44.1	48.8	53.5
Radiology.....			41.3	39.8
49.6	55.6	62.0	68.2	74.7
Urology.....			27.8	30.9
45.6	49.6	53.6	61.7	71.8
Nephrology.....			50.8	49.7
60.0	66.5	71.7	76.3	82.4
Clinic or other group practice--not GPPP.....			33.8	50.6
67.8	68.7	73.9	77.0	75.5
Other medical specialties.....			32.4	
30.1	.....	.....	.....	.....
.....				
Other surgical specialties.....			18.2	
14.8	.....	.....	.....	.....
.....				
Other physicians.....			.....	.....
29.2	.....	35.9	50.5	
Total physicians.....			.....	.....
45.5	49.6	55.3	63.5	
Limited license practitioners (LLP):				
Chiropractor.....			25.4	19.7
24.8	26.2	28.6	31.4	35.6
Podiatry-surgical chiropody.....			38.2	33.4
52.6	54.0	59.6	64.2	70.9
Optometrist.....			44.0	44.1
48.9	54.0	56.9	59.0	62.7
Other limited license practitioners (audiologist, psychologist, physical therapist).....			36.8	30.9

35.3	38.4	36.4	35.8	43.9
Certified registered				
midwife.....				
15.2	23.8	40.7	51.0	
Certified registered				
nurse				
anesthetist.....				
12.5	26.3	31.3	43.8	
Total limited license				
practitioners.....				
40.0	40.0	41.0	47.4	
Suppliers:				
Independent laboratory..				
20.1	45.4	49.7	52.4	37.2
Durable medical				
equipment suppliers....				
30.1	21.7	23.1	24.2	16.6
Ambulance service				
suppliers.....				
43.8	32.1	32.3	34.4	27.9
Miscellaneous suppliers				
(orthotists,				
prosthetists, portable				
x ray suppliers).....				
17.5	17.5	17.7	18.2	15.5
Total				
supplies.....				
21.8	22.6	23.7	29.5	

Source: Health Care Financing Administration, Bureau of
Program Operations.

TABLE E-10.--PHYSICIAN AND LIMITED LICENSED PRACTITIONER
PARTICIPATION RATES AS PERCENTAGE OF PHYSICIANS AND
LIMITED LICENSED PRACTITIONERS, BY STATE,
FOR SELECTED PARTICIPATION PERIODS

1989-	Apr. 1990-	Jan. 1991-	Oct. 1985-	Jan. 1987-	Jan.
1990	State	Dec. 1991	Jan. 1992-	Jan. 1993-	Mar.
	Dec. 1990	Dec. 1991	Apr. 1986	Mar. 1988	
			Dec. 1992	Dec. 1993	

Alabama.....			58.2	68.8	
75.9	74.6	82.7	83.4	85.1	
Alaska.....			10.4	27.1	
38.8	48.0	53.8	55.1	60.4	
Arizona.....			15.4	28.1	
41.2	53.5	61.3	64.5	76.2	
Arkansas.....			45.2	42.0	
53.1	53.9	59.9	57.8	62.1	
California.....			30.0	38.9	
54.0	57.7	60.8	62.6	65.9	
Colorado.....			28.1	19.5	
28.1	33.9	35.3	48.0	55.7	
Connecticut.....			22.2	17.4	
29.3	32.8	40.8	48.1	55.4	
Delaware.....			23.9	31.2	
37.5	42.5	43.9	51.9	57.4	
District of Columbia.....			30.5	28.0	
34.4	37.9	39.8	45.9	50.6	
Florida.....			25.7	24.9	
32.8	34.4	36.5	41.5	55.6	
Georgia.....			33.1	25.8	
49.7	49.5	53.6	57.2	74.9	
Hawaii.....			20.6	47.8	
53.7	56.8	57.3	64.1	75.9	
Idaho.....			11.0	10.4	
16.0	17.3	19.5	22.9	37.1	
Illinois.....			23.1	26.7	
40.0	42.3	46.9	50.8	57.6	
Indiana.....			18.2	26.9	
40.0	42.6	45.1	49.3	55.8	
Iowa.....			29.7	25.1	
45.3	48.1	51.9	58.8	61.8	
Kansas.....			45.4	51.4	

61.6	57.1	62.6	70.3	73.2
Kentucky.....			24.3	34.2
50.5	56.4	59.5	64.0	73.6
Louisiana.....			18.8	18.1
32.6	34.6	42.9	44.6	44.0
Maine.....			35.4	34.2
51.2	48.7	50.3	51.6	52.0
Maryland.....			30.4	30.1
42.8	45.9	45.3	58.7	72.5
Massachusetts.....			48.1	43.8
46.9	50.5	50.8	50.0	50.2
Michigan.....			44.0	32.7
41.7	44.7	53.7	51.7	58.1
Minnesota.....			18.5	22.4
25.4	27.5	29.3	34.4	44.4
Mississippi.....			19.1	23.6
33.4	38.0	42.7	47.9	53.6
Missouri.....			35.2	24.5
39.6	45.7	49.0	51.8	67.5
Montana.....			24.3	17.0
21.5	23.4	24.8	23.7	54.7
Nebraska.....			20.0	25.7
42.5	49.2	56.5	61.1	70.6
Nevada.....			21.7	33.5
57.0	69.8	72.9	75.4	84.9
New Hampshire.....			26.9	25.9
28.0	30.9	32.7	38.5	43.0
New Jersey.....			18.0	22.7
26.0	27.6	29.6	36.5	42.6
New Mexico.....			17.7	30.8
36.3	45.6	49.7	53.6	66.8
New York.....			20.8	24.1
29.8	30.4	34.6	36.9	40.7
North Carolina.....			39.1	31.4
54.2	52.9	58.1	68.2	72.8
North Dakota.....			10.9	20.5
31.7	42.2	43.9	45.8	55.0
Ohio.....			21.7	28.9
46.8	50.8	52.5	57.3	76.6
Oklahoma.....			13.8	20.8
31.6	36.4	39.0	44.4	53.9

Oregon.....			18.5	26.1
36.9	41.7	46.7	51.7	59.2
Pennsylvania.....			50.8	32.1
39.0	42.1	45.9	53.0	59.7
Rhode Island.....			46.7	50.8
58.8	67.0	67.8	70.3	80.9
South Carolina.....			17.9	25.3
42.1	55.5	57.9	63.0	67.3
South Dakota.....			8.0	12.7
20.0	19.6	20.6	23.7	31.6
Tennessee.....			21.1	43.4
57.6	58.4	63.7	67.6	70.5
Texas.....			19.7	19.4
28.9	36.4	38.9	52.9	61.3
Utah.....			29.3	42.2
54.7	65.1	65.6	69.5	80.3
Vermont.....			41.5	34.1
40.5	43.8	45.4	54.2	56.5
Virginia.....			29.6	33.6
40.9	46.0	48.1	49.7	52.2
Washington.....			23.6	26.9
31.4	34.7	46.1	53.1	64.7
West Virginia.....			22.9	37.5
59.1	63.2	66.3	68.4	75.9
Wisconsin.....			31.0	35.1
40.0	46.5	46.8	55.5	66.8
Wyoming.....			18.3	20.3
19.3	34.6	39.1	50.2	53.3
National.....			28.4	30.6
40.7	44.1	47.6	52.2	59.8

 Source: Health Care Financing Administration, Bureau of
 Program Operations.

Table E-11 shows the allowed charges of participating physicians as a percent of total allowed charges, by State, for several participation periods. This percentage increased substantially, rising from 36 percent in the October 1984 to

September 1985 period to 85.5 percent in the calendar 1993 participation period.

TABLE E-11.--ALLOWED CHARGES OF PARTICIPATING PHYSICIANS AS A PERCENT OF TOTAL ALLOWED CHARGES, BY STATE, FOR SELECTED PARTICIPATION PERIODS\1\

[In percent]

Census division/State	1989-1990	Apr. 1990- Dec. 1990	Jan. 1991- Dec. 1991	Oct. 1984- Jan. 1992- Sept. 1985 Dec. 1992	Jan. 1987- Jan. 1993- Mar. Dec. 1993 1988\2\	Jan. Mar.
National.....	62.0	67.2	72.3	36.0	48.1	78.8
New England:						85.5
Maine.....	79.4	80.5	84.2	50.9	64.8	89.9
New Hampshire.....	42.8	46.2	68.3	40.1	36.0	80.7
Vermont.....	81.4	85.9	90.2	37.3	46.8	93.4
Massachusetts.....	95.4	95.0	96.7	70.7	89.1	96.3
Rhode Island.....	88.8	95.2	97.6	68.7	85.8	98.5
Connecticut.....	65.9	67.9	76.2	30.7	45.3	82.4
Middle Atlantic:						87.9
New York.....	51.7	58.0	63.7	31.5	40.8	72.2
New Jersey.....	42.3	49.6	55.2	21.5	32.8	61.8
Pennsylvania.....	81.6	87.9	92.3	71.4	75.1	95.4
East North Central:						98.0

Ohio.....			24.9	41.5
61.9	70.9	79.1	86.3	94.6
Indiana.....			18.9	43.3
60.6	65.2	70.2	80.9	89.1
Illinois.....			29.4	42.0
58.1	61.8	66.1	72.2	82.2
Michigan.....			55.4	71.9
85.6	86.0	86.5	92.0	95.1
Wisconsin.....			31.3	31.7
42.7	48.9	45.6	61.5	76.9
West North Central:				
Minnesota.....			9.9	14.6
20.2	25.4	28.6	35.5	49.5
Iowa.....			28.5	41.0
54.2	57.8	61.9	71.0	80.8
Missouri\3\.....			26.7	37.5
41.8	40.1	40.4	45.3	67.7
North Dakota.....			6.9	16.0
32.3	45.5	53.2	61.2	65.8
South Dakota.....			3.2	10.4
19.5	21.2	21.1	24.6	36.0
Nebraska.....			30.5	31.8
51.7	54.8	60.3	69.7	79.8
Kansas\4\.....			48.0	NA
82.5	82.3	86.8	91.3	94.6
South Atlantic:				
Delaware.....			57.0	58.5
70.8	76.6	81.7	87.2	93.5
Maryland\5\.....			57.8	67.4
80.4	83.3	85.6	86.4	87.1
District of Columbia\6\.			60.3	66.6
73.9	76.8	80.8	85.4	90.1
Virginia\7\.....			31.0	53.0
69.5	71.2	78.4	84.1	90.9
West Virginia.....			34.5	59.3
77.5	80.6	85.2	90.0	93.4
North Carolina.....			34.4	44.9
55.2	63.9	68.3	82.4	87.1
South Carolina.....			29.9	55.2
68.5	67.6	71.6	79.3	86.6
Georgia.....			29.3	43.0

50.7	65.9	74.9	82.8	81.6
Florida.....			30.0	41.9
61.6	68.8	74.9	81.8	89.0
East South Central:				
Kentucky.....			22.3	44.7
64.3	72.6	76.9	84.3	90.7
Tennessee.....			25.1	41.3
57.4	68.5	76.8	86.8	91.8
Alabama.....			42.5	66.9
81.3	84.9	88.5	91.7	94.9
Mississippi.....			14.3	44.9
65.3	68.3	73.9	82.1	88.6
West South Central:				
Arkansas.....			47.9	68.3
81.0	84.5	86.5	90.0	93.4
Louisiana.....			16.2	48.2
71.0	76.7	81.2	86.6	89.4
Oklahoma.....			16.6	24.9
39.1	50.0	57.7	62.8	74.0
Texas.....			26.2	38.9
52.5	56.9	63.6	72.6	81.5
Mountain:				
Montana.....			25.6	23.8
29.9	29.7	34.1	42.7	58.9
Idaho.....			8.6	9.3
13.2	17.5	21.1	23.5	41.2
Wyoming.....			15.7	14.1
19.7	25.8	31.9	44.1	61.0
Colorado.....			23.5	34.0
47.7	50.5	55.9	63.5	76.4
New Mexico.....			34.1	28.1
39.5	51.1	57.8	64.9	78.2
Arizona.....			32.7	38.3
49.8	60.2	67.8	75.2	83.7
Utah.....			43.8	58.4
68.9	65.1	75.1	81.8	83.1
Nevada.....			41.5	63.4
69.9	82.1	87.5	92.3	96.0
Pacific:				
Washington.....			17.5	20.2
26.9	31.8	37.9	45.2	50.7

Oregon.....			17.3	25.5
34.8	43.3	50.7	59.8	73.6
California.....			42.2	50.2
67.2	71.2	75.6	80.0	86.6
Alaska.....			17.2	34.3
50.0	49.3	58.0	70.9	81.3
Hawaii.....			39.7	53.5
58.6	70.1	74.3	84.7	90.6

 \1\Rates reflect covered charges for physician claims processed during the period.

\2\The actual participation period is January 1987 through March 1988, and the participation agreements were in effect for that time.

\3\For fiscal year 1993, includes data for all counties in Missouri plus two counties on the State border located in Kansas.

\4\For fiscal year 1993, includes data for all counties in Kansas excluding two counties on the State border.

\5\For fiscal year 1993, includes data for all counties in Maryland excluding two counties on the State border.

\6\For fiscal year 1993, includes data for DC plus two counties in Maryland located on the State border plus a few counties and cities located in Virginia, near the State border.

\7\For fiscal year 1993, includes data for all counties in Virginia excluding a few counties and cities near the State border.

Source: Health Care Financing Administration, Bureau of Program Operations.

PARTICIPATION, ASSIGNMENT, AND CHARGE REDUCTIONS

Historically the difference between the physician's billed charge and Medicare's approved or reasonable charge was referred to as the reasonable charge reduction. Beginning in

1992, with implementation of the fee schedule, the term reasonable charge reduction no longer applies. Instead, the term charge reduction refers to the difference between the physicians' billed charge and the fee schedule amount.

Charge

reductions were made on 85.5 percent of unassigned claims in

fiscal year 1993. The average amount of the reduction was 16.9

percent of billed charges, or \$17.26 per approved claim.

Beneficiaries were liable for these reduction amounts, although

it is not known how often physicians actually collected from

beneficiaries. The total reduced on all unassigned claims was

\$797.5 million in fiscal year 1993.

Through 1984, approximately the same proportions of assigned and unassigned claims were reduced (see table E-12),

and were reduced by similar proportions and amounts. From 1984

to 1993, the proportions of assigned and unassigned claims reduced remained about the same, but the percentage and amounts

of the reductions diverged. The percent and dollar reductions

on assigned claims continued to increase while the percent and

dollar reductions of unassigned claims decreased. This pattern

was due to the imposition of limits on the actual charges of

nonparticipating physicians. That is, the MAAC limits, and the

new balance billing limits beginning in 1991, limited the rate

of increase in prices for unassigned services relative to the

overall increase in reasonable charges. The substantial growth

in the overall percentage of services billed on an assigned basis also may have contributed to this pattern.

As a result, total beneficiary liability for charge reductions on unassigned claims fell. Total liability peaked in 1985 at \$2,812.7 million, and declined to \$797.5 million by 1993.

TABLE E-12.--REASONABLE CHARGE REDUCTIONS FOR MEDICARE PART B (EXCLUDES CLAIMS FROM HOSPITAL-BASED PHYSICIANS AND GROUP-PRACTICE PREPAYMENT PLANS)

FOR ASSIGNED AND NOT ASSIGNED CLAIMS, FISCAL YEARS 1975, 1980, AND 1985-1993					

					1975
1980	1985	1986	1987	1988	1989
1990	1991	1992	1993		

Percentage of claims reduced:					
Assigned.....					68.3
80.0	81.7	82.5	83.0	85.5	86.3
87.6	86.7	87.0	\1\88.2		
Not assigned.....					75.6
83.7	84.6	84.9	82.5	85.7	89.2
89.2	90.7	85.4	\1\85.5		
Percentage reduction in charges for covered services:					
Assigned.....					16.4
22.5	27.0	28.4	27.9	29.3	30.9
32.6	35.2	39.2	42.1		
Not assigned.....					16.6
22.3	25.6	26.6	25.5	24.7	25.2
25.3	24.0	19.7	16.9		
Amount reduced per approved claim:					
Assigned.....					\$11.13
\$21.81	\$33.19	\$36.43	\$36.98	\$39.97	\$43.72
\$48.22	\$54.20	\$63.60	\$79.49		

Not assigned.....					\$13.45
\$21.96	\$33.12	\$33.15	\$31.44	\$29.47	\$29.67
\$28.97	\$24.84	\$18.95	\$17.26		
Amount reduced on claims not assigned (in					
millions).....					
					\$450.1
\$1,454.0	\$2,571.9	\$2,812.5	\$2,677.8	\$2,312.6	\$2,213.7
\$2,198.0	\$1,948.5	\$1,317.0	\$797.5		

\1\Figure may be slightly overstated due to the possibility of a claim being counted more than once because more than one type of reduction is applied.

Source: Health Care Financing Administration, Bureau of Program Operations.

The impact of charge reductions on unassigned claims was spread unevenly across the population. Calendar 1993 data show a 16.4 percent national average reduction on unassigned claims (see table E-13). Beneficiary liability for these charge reductions ranged from a high of \$95.8 million in New York to a low of \$0.1 million in Rhode Island.

TABLE E-13.--CHARGE REDUCTIONS FOR UNASSIGNED CLAIMS, BY STATE,\1\

JANUARY-DECEMBER, 1993
[Dollar amounts in millions]

Amount Census division/State reduced, unassigned	Covered charges\2\ -----		Percent reduction in unassigned
	Total	Unassign	

			charges
charges\2\ ----- -----			
National.....	\$76,655.0	\$4,155.2	16.4
\$683.4			
New England:			
Maine.....	333.0	6.3	15.3
1.0			
New Hampshire.....	260.8	13.3	14.7
2.0			
Vermont.....	120.7	1.9	15.9
0.3			
Massachusetts\3\.....	2,356.7	10.2	14.2
1.4			
Rhode Island.....	369.2	1.5	9.1
0.1			
Connecticut.....	1,267.8	51.9	14.6
7.6			
Middle Atlantic:			
New York.....	6,201.3	495.1	19.3
95.8			
New Jersey.....	2,911.8	312.1	16.6
51.9			
Pennsylvania.....	5,821.7	36.3	15.0
5.4			
East North Central:			
Ohio.....	3,345.0	44.4	19.4
8.6			
Indiana.....	1,436.7	92.6	17.0
15.7			
Illinois.....	2,953.0	251.2	17.0
42.6			
Michigan.....	3,261.4	62.1	18.2
11.3			
Wisconsin.....	1,143.0	126.6	14.7
18.6			
West North Central:			
Minnesota.....	704.6	205.1	16.1
33.1			
Iowa.....	647.3	79.8	14.5

11.6	Missouri\4\.....	1,721.5	115.3	5.4
6.2	North Dakota.....	184.2	41.0	16.2
6.6	South Dakota.....	155.6	61.8	15.6
9.6	Nebraska.....	347.0	50.1	16.1
8.1	Kansas\5\.....	528.4	18.0	14.4
2.6	South Atlantic:			
	Delaware.....	243.8	6.5	14.6
0.9	Maryland\6\.....	1,281.3	35.9	16.4
5.9	District of Columbia\7\.....	1,015.6	49.9	17.9
9.0	Virginia\8\.....	1,253.0	46.6	14.7
6.8	West Virginia.....	549.7	7.5	17.7
1.3	North Carolina.....	2,061.8	97.5	16.6
16.3	South Carolina.....	840.9	43.9	21.4
9.4	Georgia.....	1,794.9	79.7	20.5
16.4	Florida.....	7,204.7	272.2	18.6
50.5	East South Central:			
	Kentucky.....	1,092.1	34.2	15.9
5.4	Tennessee.....	\$1,622.7	\$48.8	15.0
7.3	Alabama.....	1,398.5	22.7	17.0
3.9	Mississippi.....	660.8	23.0	16.5
3.8	West South Central:			

Arkansas.....	774.9	20.1	17.2
3.5			
Louisiana.....	1,319.5	44.4	17.4
7.7			
Oklahoma.....	723.2	81.9	16.9
13.9			
Texas.....	4,181.9	270.8	17.1
46.4			
Mountain:			
Montana.....	159.6	35.7	17.7
6.3			
Idaho.....	140.6	53.6	16.1
8.7			
Wyoming.....	50.2	11.2	15.1
1.7			
Colorado.....	626.0	57.8	17.1
9.9			
New Mexico.....	252.3	17.2	17.1
3.0			
Arizona.....	1,018.4	87.7	16.3
14.2			
Utah.....	256.9	15.9	17.0
2.7			
Nevada.....	452.4	4.8	18.5
0.9			
Pacific:			
Washington.....	769.6	144.1	4.5
6.4			
Oregon.....	553.1	82.6	16.5
13.6			
California.....	7,677.3	377.9	18.2
68.8			
Alaska.....	46.7	2.4	17.6
0.4			
Hawaii.....	219.4	7.6	20.0
1.5			

 \1\Rates reflect covered charges for physician claims
 processed during
 the period. National data exclude data for Puerto Rico,

the Virgin

Islands, the Railroad Retirement Board, and Parenteral and Enteral

Claims. As a result of report changes effective April 1, 1992, charge

reductions include: reasonable charge medical necessity and global fee/
rebundling.

\2\Amounts in millions.

\3\Massachusetts enacted a Medicare mandatory assignment provision,

effective April 1986. The fact that the assignment rates shown here

are not 100 percent may be explained by the inclusion in the database

of billings by practitioners other than allopathic and osteopathic

physicians, which are included in the Medicare statutory definition of

``physician''.

\4\For fiscal year 1993, includes data for all counties in Missouri plus

two counties on the State border located in Kansas.

\5\For fiscal year 1993, includes data for all counties in Kansas

excluding two counties on the State border.

\6\For fiscal year 1993, includes data for all counties in Maryland

excluding two counties on the State border.

\7\For fiscal year 1993, includes data for DC plus two counties in

Maryland located on the State border plus a few counties and cities

located in Virginia, near the State border.

\8\For fiscal year 1993, includes data for all counties in Virginia

excluding a few counties and cities near the State border.

Source: Health Care Financing Administration, Bureau of Program

Operations.

The changing pattern of charge reductions reflects, in part, overall changes in participation and assignment rates. As shown in table E-14, participating physicians accounted for a growing share of total physician charges. During the first participation period (fiscal year 1985), participating physicians (30.4 percent of all physicians) accounted for 36.0 percent of all physician charges. In 1993, the proportion of physicians participating grew to 59.8 percent, and accounted for 85.5 percent of all physician charges. Total covered charges represented by unassigned claims declined from 34.5 percent to 6.0 percent over the same period. The proportion of charges billed by participation and assignment status varies by State; these data are shown in table E-15.

TABLE E-14.--DISTRIBUTION OF ALLOWED CHARGES FOR SERVICES BILLED, BY PARTICIPATION STATUS OF PHYSICIAN AND ASSIGNMENT STATUS OF CLAIM, 1984-

		1993\1\ [In percent]	

Nonparticipants		Participants	

Time period		Total	
Assigned	Unassigned		
-----		-----	
Oct. 1984-Sept. 1985.....		100.0	36.0

29.5	34.5		
Oct. 1985-Mar. 1986.....		100.0	36.3
29.4	34.3		
Apr. 1986-Dec. 1986\2\.....		100.0	39.1
28.0	32.9		
Jan. 1987-Mar. 1988\3\.....		100.0	48.1
25.2	26.7		
Apr. 1988-Dec. 1988.....		100.0	57.9
21.0	21.1		
Jan. 1989-Mar. 1990.....		100.0	62.0
19.0	18.5		
Apr. 1990-Dec. 1990.....		100.0	67.2
16.7	16.1		
Jan. 1991-Dec. 1991.....		100.0	72.3
14.6	13.1		
Jan. 1992-Dec. 1992.....		100.0	78.8
11.6	9.7		
Jan. 1993-Dec. 1993.....		100.0	85.5
8.5	6.0		

 \1\Rates reflect covered charges for physician claims processed during the period. Data for up to seven carriers missing from various quarters.
 \2\The actual participation period was May through December 1986, and the participation agreements were in effect for that time.
 \3\The actual participation period is January 1987 through March 1988, and the participation agreements are in effect for that time.

Source: Health Care Financing Administration, Bureau of Program Operations.

TABLE E-15.--DISTRIBUTION OF ALLOWED CHARGES FOR SERVICES

BILLED, BY
 PARTICIPATION STATUS OF PHYSICIAN AND ASSIGNMENT STATUS
 OF CLAIM, BY

STATE, JANUARY-DECEMBER 1993\1\
 [In percent]

Census division/State	Total	Participating	Assigned
		physician	
Nonparticipating			
Unassigned			
National.....	100.0	85.5	
8.5 6.0			
New England:			
Maine.....	100.0	92.4	
5.8 1.8			
New Hampshire....	100.0	88.1	
6.5 5.3			
Vermont.....	100.0	94.8	
4.0 1.2			
Massachusetts....	100.0	95.9	
3.7 0.3			
Rhode Island.....	100.0	98.9	
0.9 0.2			
Connecticut.....	100.0	87.9	
7.4 4.7			
Middle Atlantic:			
New York.....	100.0	77.7	
13.7 8.7			
New Jersey.....	100.0	72.6	
14.0 13.4			
Pennsylvania.....	100.0	98.0	
1.5 0.5			
East North Central:			
Ohio.....	100.0	94.6	

4.4	1.1		
	Indiana.....	100.0	89.1
4.8	6.1		
	Illinois.....	100.0	82.2
8.6	9.2		
	Michigan.....	100.0	95.1
3.0	1.9		
	Wisconsin.....	100.0	76.9
11.8	11.3		
West North Central:			
	Minnesota.....	100.0	49.5
19.6	30.9		
	Iowa.....	100.0	80.8
6.4	12.8		
	Missouri\2\.....	100.0	67.7
25.3	7.1		
	North Dakota.....	100.0	65.8
9.9	24.3		
	South Dakota.....	100.0	36.0
16.5	47.5		
	Nebraska.....	100.0	79.8
5.8	14.5		
	Kansas\3\.....	100.0	94.6
2.0	3.4		
South Atlantic:			
	Delaware.....	100.0	93.5
3.5	3.0		
	Maryland\4\.....	100.0	87.1
9.9	3.1		
	District of Columbia\5\.....	100.0	90.1
4.4	5.6		
	Virginia\6\.....	100.0	90.9
5.4	3.7		
	West Virginia....	100.0	93.4
5.2	1.4		
	North Carolina...	100.0	87.1
7.1	5.9		
	South Carolina...	100.0	86.6
8.3	5.1		
	Georgia.....	100.0	81.6

13.3	5.1		
	Florida.....	100.0	89.0
6.8	4.3		
East South Central:			
	Kentucky.....	100.0	90.7
5.5	3.7		
	Tennessee.....	100.0	91.8
4.9	3.3		
	Alabama.....	100.0	94.9
3.3	1.7		
	Mississippi.....	100.0	88.6
7.5	4.0		
West South Central:			
	Arkansas.....	100.0	93.4
3.6	3.0		
	Louisiana.....	100.0	89.4
6.3	4.3		
	Oklahoma.....	100.0	74.0
12.8	13.2		
	Texas.....	100.0	81.5
11.0	7.5		
Mountain:			
	Montana.....	100.0	58.9
16.1	25.0		
	Idaho.....	100.0	41.2
16.1	42.7		
	Wyoming.....	100.0	61.0
10.7	28.3		
	Colorado.....	100.0	76.4
12.1	11.6		
	New Mexico.....	100.0	78.2
14.4	7.4		
	Arizona.....	100.0	83.7
7.0	9.4		
	Utah.....	100.0	83.1
10.9	6.0		
	Nevada.....	100.0	96.0
3.1	0.9		
Pacific:			
	Washington.....	100.0	50.7
25.2	24.0		

	Oregon.....	100.0	73.6
11.1	15.3		
	California.....	100.0	86.6
8.1	5.4		
	Alaska.....	100.0	81.3
13.1	5.6		
	Hawaii.....	100.0	90.6
6.0	3.3		

\1\Rates reflect covered charges for physician claims processed during the period.
\2\For fiscal year 1993, includes data for all counties in Missouri plus two counties on the State border located in Kansas.
\3\For fiscal year 1993, includes data for all counties in Kansas excluding two counties on the State border.
\4\For fiscal year 1993, includes data for all counties in Maryland excluding two counties on the State border.
\5\For fiscal year 1993, includes data for DC plus two counties in Maryland located on the State border plus a few counties and cities located in Virginia, near the State border.
\6\For fiscal year 1993, includes data for all counties in Virginia excluding a few counties and cities near the State border.

Source: Health Care Financing Administration, Bureau of Program Operations.

DISTRIBUTION OF PHYSICIAN SERVICES

Tables E-16 to E-24 show the distribution of physicians'

services for calendar year 1992. These tables provide data from the first year of the implementation of the Medicare Fee Schedule. As noted earlier, the fee schedule appears to be having its intended effect. The projected pattern of redistribution from the procedurally oriented specialties to the primary care specialties has begun taking place.

The 1992 data are tabulations from the 1992 National Claims History Procedure Summary, which is a summary of all claims filed with the Medicare carriers.

The totals shown will differ from total SMI outlay figures for 1992 shown in the budget for several reasons:

The amounts shown in these tables are allowed amounts, rather than reimbursements--that is, they include both Medicare's and the enrollee's share of approved charges.

The amounts shown are for services rendered during calendar year 1992; budget figures are for payments made during the fiscal year regardless of when the services were rendered.

The amounts shown are only for services reimbursed by carriers under the fee schedule; hence, they do not include Part B payments to hospital outpatient departments or to risk-based prepaid medical plans.

Further, the amounts shown underestimate what they are supposed to represent by a small amount because some claims for services rendered in 1992 had not been processed by carriers at the time the 1992 files were submitted to HCFA, and because some claims recorded had to be eliminated due to recording errors.

Table E-16 illustrates that in 1992, 77.2 percent of allowed amounts under the fee schedule were for physicians' services, and another 3.0 percent were for the services of limited license practitioners--psychologists, podiatrists, optometrists, audiologists, chiropractors, dentists, and physical therapists. About 4.7 percent went to independent

laboratories in 1992, while 15.1 percent went to suppliers of medical equipment, prosthetics, and ambulance services.

TABLE E-16.--ALLOWED AMOUNTS FOR CLAIMS, BY TYPE OF PROVIDER, 1992

Type of provider		Allowed	Percent
of	Percent	amounts	
		(millions)	total
inpatient			
Physicians.....		\$33,941.0	
77.2	39.3		
Limited license practitioners\1\....		1,307.0	
3.0	1.7		
Laboratories.....		2,072.0	
4.7	.2		
Medical suppliers\2\.....		6,625.0	
15.1	.8		
All providers\3\.....		43,944.0	
100.0	30.6		

\1\Includes psychology, podiatry, optometry, audiology, chiropractic, dentistry, and physical therapy.

\2\Includes suppliers of medical equipment, prosthetics, and ambulance services.

\3\Total does not include charges for hospital outpatient department facility fees or for risk-based prepaid medical plans since these are not reimbursed under the CPR system.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, National Claims History Procedure Summary.

Almost 31 percent of all allowed amounts were for hospital inpatient services, and almost 40 percent of allowed amounts for physicians' services were inpatient. The share of physicians' services that are inpatient has dropped in recent years, from nearly 64 percent in 1981.

Table E-17 shows the distribution of spending for physicians' services by specialty. (It excludes limited license practitioners, labs, and suppliers.) In 1992, generalists accounted for 27.8 percent of spending, nonsurgical specialists for 24.1 percent, and surgical specialists for 31.7 percent. Radiologists, anesthesiologists, and pathologists together accounted for 13.6 percent of allowed amounts. Radiation oncologists, osteopathic manipulative therapists, intensivists, and emergency medicine physicians each accounted for less than 1 percent of total allowed amounts for physicians' services.

The major physician specialties treating the Medicare population, in descending order of importance as measured by total allowed amounts, were general internists (14.9 percent of allowed amounts), ophthalmologists (10.9 percent), radiologists (8.6 percent), cardiologists (8.4 percent) and family practitioners (6.0 percent).

The share of services provided on an inpatient basis varied by specialty, generally increasing with specialization. About

33 percent of the services of generalists were inpatient in 1992. The inpatient share for nonsurgical specialists was 46.6 percent and 39.3 percent for surgical specialists.

TABLE E-17.--ALLOWED AMOUNTS FOR PHYSICIANS' SERVICES, BY MEDICAL SPECIALTY, 1992

Percent	Specialty	Allowed amounts (millions)	Percent of total

inpatient			

Generalists:			
18.6	General practice.....	\$1,114.0	3.3
25.6	Family practice.....	2,048.0	6.0
38.6	Internal medicine.....	5,054.0	14.9
25.6	Pediatrics.....	28.0	.1
34.9	Clinics.....	1,186.0	3.5

32.9	All generalists.....	9,430.0	27.8
=====			
Nonsurgical specialists:			
10.6	Allergy/Immunology.....	95.0	.3
58.2	Cardiology.....	2,860.0	8.4
1.4	Dermatology.....	682.0	2.0

	Gastroenterology.....	950.0	2.8
45.2			
	Neurology.....	486.0	1.4
48.7			
	Psychiatry.....	664.0	2.0
41.2			
	Physical medicine and rehabilitation.....	217.0	.6
60.6			
	Pulmonary disease.....	639.0	1.9
68.3			
	Nuclear medicine.....	62.0	.2
27.1			
	Geriatric medicine.....	52.0	.2
34.3			
	Nephrology.....	539.0	1.6
52.8			
	Infectious disease.....	127.0	.4
74.6			
	Endocrinology.....	94.0	.3
37.4			
	Rheumatology.....	132.0	.4
16.2			
	Peripheral vascular disease..	22.0	.1
61.8			
	Hematology/oncology.....	440.0	1.3
24.3			
	Medical oncology.....	117.0	.3
22.1			

All nonsurgical specialists 8,176.0 24.1
46.6

=====
Surgical specialists:
General surgery..... 1,870.0 5.5
64.9
Otolaryngology..... 404.0 1.2
17.1
Neurosurgery..... 287.0 .8

84.3			
	Gynecology/Obstetrics.....	261.0	.8
41.7			
	Ophthalmology.....	3,689.0	10.9
3.6			
	Orthopedic surgery.....	1,611.0	4.7
61.1			
	Plastic and reconstructive surgery.....	164.0	.5
32.4			
	Colorectal surgery.....	69.0	.2
34.0			
	Thoracic surgery.....	718.0	2.1
89.3			
	Urology.....	1,362.0	4.0
35.9			
	Hand surgery.....	21.0	.1
21.4			
	Vascular surgery.....	141.0	.4
74.3			
	Cardiac surgery.....	164.0	.5
96.4			
	Surgical oncology.....	13.0	.....
60.5			

	All surgical specialists...	10,774.0	31.7
39.3			
=====			
	Radiology.....	2,912.0	8.6
29.9			
	Radiation oncology.....	268.0	.8
5.3			
	Anesthesiology.....	1,198.0	3.5
71.0			
	Pathology.....	519.0	1.5
46.0			
	Osteopathic manipulative therapy.	30.0	.1
15.6			
	Critical care (Intensivists).....	28.0	.1

76.5		
Emergency medicine.....	215.0	.6
6.8		
Other Physician specialties.....	389.0	1.1
49.3		

Total--all physicians.....	33,941.0	100.0
39.3		

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, National Claims History Procedure Summary.

Table E-18 shows the distribution of spending for physicians' services by type of service. About 36.8 percent of spending was for medical care (nonsurgical) in 1992. About 35.5 percent of spending was for surgical procedures in total, adding together the amounts for surgeons, assistant surgeons, and anesthesiologists. About 10.6 percent was for diagnostic laboratory tests, which would include not only blood chemistry analysis and urinalysis, but also tests such as EKGs. About 10.3 percent of spending was for radiology, and 4.8 percent was for consultations.

TABLE E-18.--ALLOWED AMOUNTS FOR PHYSICIANS' SERVICES, BY TYPE OF SERVICE, 1992

Type of service	Allowed amounts	Percent of
Percent	(millions)	total

inpatient

Medical care.....	\$12,503.0	36.8
36.1		
Surgery.....	10,490.0	30.9
49.9		
Assistance at surgery.....	246.0	.7
89.2		
Anesthesia.....	1,319.0	3.9
68.7		
Diagnostic laboratory tests.....	3,597.0	10.6
18.7		
Diagnostic radiology.....	2,775.0	8.2
26.8		
Therapeutic radiology.....	698.0	2.1
5.0		
Consultations\1\.....	1,641.0	4.8
62.0		
Other\2\.....	672.0	2.0
1.5		
<hr/>		
All services.....	33,941.0	100.0
39.3		

\1\Includes first and second opinions for surgery.
 \2\Includes treatment for renal patients, pneumococcal vaccine, and medical supplies, among other things.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, National Claims History Procedure Summary.

Table E-19 lists the top 20 individual services, ranked by total allowed amounts on claims submitted by selected physicians for 1992. The most important exclusion is amounts

for the services of anesthesiologists, since there would typically be a charge for anesthesiology for the surgical procedures. The amounts for surgical procedures include claims by both the primary surgeon and any assistant surgeons, but not the amounts for anesthesiologists.

The top 20 services (out of more than 7,000) accounted for 36.9 percent of all spending for all physicians' services in 1992. Cataract extraction with implantation of an intraocular lens was the highest-ranked surgical procedure, accounting by itself for 5.7 percent of total allowed amounts for physicians' services. Other surgical procedures in the top 20 included total knee replacement and heart catheterization and coronary angiography. Most of the remaining services in the top 20 were evaluation and management services (that is, visits and consultations).

Table E-20 presents total allowed amounts for selected groups of generic services, and shows the percent of total allowed amounts for all physicians' services accounted for by each group. As in table E-19, certain physicians' services--most notably for anesthesiologists--are not included in the allowed amounts for each service group. No attempt was made to define and rank all possible service groups, so that there may be other important service groups that do not appear in the table. For example, diagnostic radiology accounts for 8.2 percent of allowed amounts for physicians' services (from table E-18), but radiological services do not appear in table E-20.

TABLE E-19.--THE TOP 20 SERVICES BILLED BY PHYSICIANS
UNDER

MEDICARE, 1992

Percent		Allowed amounts
\1\	Service code and description of total	(millions)

Top 20 services:		
	99213--Office/outpatient visit, EST.....	\$2,103
6.2	66984--Remove cataract, insert lens.....	1,947
5.7	99232--Subsequent hospital care.....	1,271
3.7	99214--Office/outpatient visit, EST.....	1,087
3.2	99231--Subsequent hospital care.....	1,027
3.0	99212--Office/outpatient visit, EST.....	675
2.0	99233--Subsequent hospital care comprehensive.....	514
1.5	93307--Echo exam of heart.....	419
1.2	99223--Initial hospital care.....	382
1.1	99215--Office/outpatient visit, EST.....	368
1.1	99254--Initial inpatient consult.....	357
1.1	66821--After cataract laser surgery.....	343
1.0	90844--Psychotherapy 45-50 Min.....	
313	.9	

272	99222--Initial hospital care.....	.8	
264	92014--Eye exam & treatment.....	.8	
262	27447--Total knee replacement.....	.8	
250	99238--Hospital discharge day.....	.7	
245	93547--Heart catheter & angiogram.....	.7	
224	99244--Office consultation.....	.7	
212	99255--Initial inpatient consult.....	.6	
36.9	Total.....		12,536

 \1\Amounts for surgical procedures include fees for primary and assistant surgeons, but not for anesthesiologists.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, National Claims History Procedure Summary.

The 21 service groups shown in table E-20 accounted for 44.1 percent of all allowed amounts for all physicians' services in 1992. The single most costly group was office visits (accounting for 14.4 percent of total allowed amounts for physicians' services), followed by hospital visits (11.1 percent). Cataract surgery of all types accounted for 5.8 percent of total allowed amounts for physicians' services. It should also be noted that the amount for hemodialysis includes only physician services and does not include the much larger amounts for the facility charges for hemodialysis that were

not
 billed under the fee-for-service reimbursement system.

TABLE E-20.--ALLOWED AMOUNTS FOR SELECTED GROUPS OF
 PHYSICIANS'

SERVICES, 1992

1991

Service group		Allowed amounts
Percent of total		(millions)
Hospital visits (99221-99238).....	11.1	\$3,764
Office visits (99201-99215).....	14.4	4,896
Cataract surgery (66830-66985).....	5.8	1,985
EKGs (93000-93018, 93015-26).....	1.1	364
Transurethral surgery (52601).....	159 .5	
Coronary artery bypass (33510-33516).....	1.5	495
Hip arthroplasty (27130-27132).....	144 .4	
Cardiac catheterization (93501-93553).....	1.8	598
Colonoscopy (45378-45385, 44388-44393, 45355)	1.4	485
Hemodialysis/CAPD (90935-90947).....	165 .5	
Thromboendarterectomy (35301-35381).....	100 .3	

Knee arthroplasty (27446, 27447, 29881).....	
293	.9
Pacemaker implant/removal (33200-33210, 33232).....	
89	.3
Vein bypass (35501-35587).....	
71	.2
Emergency room visits (99281-99285).....	610
1.8	
SNF visits (99301-99313).....	455
1.3	
Nursing home visits (99321-99333).....	
36	.1
Home visits (99341-99353).....	
56	.2
Prostatectomy (55801-55845).....	
82	.2
EEGs (95816-95827, 95950, 95955).....	
33	.1
Pacemaker tests (93731-93736).....	
71	.2

Total.....	14,951
44.1	

\1\Amounts for surgical procedures include fees for primary and assistant surgeons, but not for anesthesiologists.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, National Claims History Procedure Summary.

In recent years, there have been many changes in the delivery of health care services. Some of the more significant changes affecting Medicare services have been in the delivery of surgical services. First, there has been significant

growth

in the amount of surgical care provided by some specialties.

Second, there has been a dramatic shift in the place of surgical care; that is, surgical care is now frequently provided in outpatient settings, whereas previously, most surgical care was provided in inpatient settings.

As shown in table E-21, the most significant shift in site of surgical care between 1980 and 1992 was out of inpatient settings and into other settings. Outpatient hospital settings benefited most from this shift, growing from only 3.3 percent of all surgical charges in 1980 to 25.5 percent in 1992. The proportions of surgery taking place in a physician's office and in other nonhospital settings also grew somewhat. In 1992 the proportion of all surgical care provided in inpatient settings had dropped to 47.9 percent.

TABLE E-21.--CHARGES SUBMITTED TO MEDICARE FOR ALL PHYSICIAN SURGICAL SERVICES, BY PLACE OF SERVICE, 1980, 1990-92

Place of service		Amount in	Percent
of	of total	millions	surgical
settings			charges
			Surgical
			charges\1\

charges

1980:
Total..... \$3,828
100.0 31.8

Office..... 445
11.6 12.2
Outpatient hospital..... 129
3.3 29.5
Inpatient hospital..... 3,231
84.4 44.1
Other\2\..... 23
6 3.7

=====
1990:
Total..... 11,048
100.0 33.3

Office..... 2,004
18.1 16.2
Outpatient hospital\1\..... 2,867
26.0 54.3
Inpatient hospital..... 5,563
50.4 40.6
Ambulatory surgical center..... 488
4.4 51.2
Other\2\..... 127
1.1 14.5

=====
1991:
Total..... 11,773
100.0 32.9

Office..... 2,230

18.9	16.1	
Outpatient hospital\1\.....		2,993
25.4	52.5	
Inpatient hospital.....		5,834
49.6	41.1	
Ambulatory surgical center.....		514
4.4	54.2	
Other\2\.....		201
1.7	18.9	

=====

1992:		
Total.....		10,958
100.0	31.3	

Office.....		2,103
19.2	14.8	
Outpatient hospital\1\.....		2,791
25.5	50.3	
Inpatient hospital.....		5,249
47.9	39.2	
Ambulatory surgical center.....		622
5.7	90.3	
Other\2\.....		193
1.8	16.6	

\1\May include some services rendered in an ambulatory surgical center.

\2\Includes homes, nursing homes, and other places of service.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, Part B Extract Summary System.

Table E-22 shows the percent of total surgical charges by specialty in 1980 and 1992. In 1980, three specialties (ophthalmology, general surgery, and orthopedic surgery)

accounted for nearly half of all Medicare surgical care. These same three specialties accounted for close to the same proportion of total surgical care in 1992, but the shares among these specialties changed. While ophthalmologists accounted for only 13.6 percent in 1980, by 1991 their share had increased to 22.7 percent due primarily to the substantial growth in cataract surgery during the 1980s. For two specialties, gastroenterology and otology, laryngology and rhinology (or ENT), surgical care represented much larger proportions of their total Medicare practice in 1992 than in 1980. On the other hand, surgical charges for urologists represented much smaller proportions of their total Medicare practice in 1992 than in 1980.

TABLE E-22.--SUBMITTED SURGICAL CHARGES UNDER MEDICARE AS A SHARE OF

TOTAL SURGICAL CHARGES AND AS A PERCENT OF TOTAL PRACTICE CHARGES, BY

MEDICAL SPECIALTY, 1980 AND 1992

Specialty	Percent	
	1980	1992
Surgical charges as a percent of total practice charges	13.6	22.7
Ophthalmology	13.6	22.7
Gastroenterology	13.6	22.7
Otology, laryngology and rhinology (or ENT)	13.6	22.7
Urology	13.6	22.7

1980	1992		

	All physicians.....	100.0	100.0
31.8	31.3		

Ophthalmology.....		13.6	22.7
62.1	67.5		
General surgery.....		22.1	11.9
71.6	70.0		
Orthopedic surgery.....		13.0	10.6
73.6	71.9		
Urology.....		10.7	6.5
75.6	52.6		
Thoracic surgery.....		8.0	5.4
82.2	81.9		
Clinic and other group practice.		4.7	2.4
25.8	22.5		
Internal medicine.....		4.2	3.3
6.9	7.1		
Cardiovascular disease.....		2.7	7.3
22.4	28.0		
Podiatry.....		3.0	4.0
53.5	61.4		
Gastroenterology.....		1.7	5.6
45.9	65.2		
Dermatology.....		2.4	4.3
60.9	69.3		
Neurological surgery.....		2.9	2.0
70.2	78.2		
Othology, laryngology, rhinology		1.9	.0
49.7	66.0		
Plastic surgery.....		1.3	1.3
88.1	85.8		
Other.....		8.4	
12.6	..... 9.9		

Source: Health Care Financing Administration, Bureau of Data Management

and Strategy, Part B Extract Summary System.

As shown in table E-23, many different medical specialties participated in the shift to outpatient surgery. In 1980, only two specialties (dermatology and podiatry) performed the majority of their surgical services in outpatient settings; in these cases, the care was generally provided in the physician's office. In 1992, seven specialties provided a majority of their surgical care in outpatient settings: ophthalmology, podiatry, gastroenterology, dermatology, ENT, internal medicine, and plastic surgery. Podiatrists and dermatologists continued primarily to work in their offices; internist split their non-inpatient work between office and outpatient settings, while the other specialties provided their surgical services in outpatient hospital and ambulatory surgical facilities. Most surgical specialties, such as general, orthopedic, cardiovascular, neurological and thoracic surgeons, remained closely tied to inpatient hospital settings.

TABLE E-23.--SUBMITTED SURGICAL CHARGES UNDER MEDICARE, BY MEDICAL SPECIALTY AND PLACE OF SERVICE, 1980 AND 1992

[In percent]

1980
1992

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-----
-----
Specialty
Inpatient Outpatient
Inpatient Outpatient
All
All
settings Office
hospital hospital Other\1\ settings Office
hospital hospital\2\ ASC\3\ Other\1\
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All physicians..... 100.0 11.6
84.4 3.3 0.5 100.0 19.2 47.9
25.5 5.7 1.8
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General surgery..... 100.0 4.4
92.6 2.9 .1 100.0 6.0 73.7
18.8 1.0 0.5
Cardiovascular disease..... 100.0 1.7
97.9 .4 (\4\) 100.0 2.6 86.4
10.3 0.1 0.6
Dermatology..... 100.0 94.6
4.0 .9 .6 100.0 97.5 0.5
1.3 0.4 0.3
Gastroenterology..... 100.0 12.0
75.6 12.3 .1 100.0 9.5 38.9
46.9 4.3 0.5
Internal medicine..... 100.0 17.5
76.6 5.7 .2 100.0 25.4 44.5
28.2 1.5 0.5
Neurological surgery..... 100.0 1.1
98.5 .5 (\4\) 100.0 1.6 94.8
3.2 0.1 0.3
Obstetrics/Gynecology.....
100.0 ..... 100.0
14.3 72.5 12.1 .8 0.3
Otology, Laryngology, Rhinology..... 100.0 12.6
83.7 3.7 (\4\) 100.0 14.0 4.0
55.2 25.4 1.4

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Ophthalmology.....				100.0		7.9
87.1	5.0	.1	100.0	18.8		4.7
53.3	20.7	2.5				
Orthopedic Surgery.....				100.0		6.3
90.2	3.4	.1	100.0	7.7		78.0
12.9	1.0	0.4				
Plastic Surgery.....				100.0		13.0
67.2	19.7	.1	100.0	22.0		33.8
37.3	5.8	1.0				
Thoracic surgery.....				100.0		.8
98.7	.5	(\4\)	100.0	1.3		95.8
2.6	0.1	0.2				
Urology.....				100.0		8.0
90.6	1.4	.1	100.0	23.5		57.5
17.6	1.0	0.3				
Podiatry.....				100.0		71.3
13.5	.9	14.3	100.0	70.4		1.6
5.3	1.3	21.4				
Clinic and other group practice.....				100.0		10.1
85.3	4.5	.1	100.0	14.1		57.8
25.7	1.9	0.5				
Other.....						
100.0	.....	.....	.....	.....		100.0
21.0	54.7	22.2		1.5		0.6

\1\Includes homes, nursing homes, and other places of service.

\2\May include some services rendered in an ASC.

\3\Ambulatory surgical center.

\4\Less than .05.

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, Part B Extract Summary System.

TABLE E-24.--PERCENT DISTRIBUTION OF ALLOWED SURGICAL CHARGES UNDER MEDI- CARE, BY MEDICAL SPECIALTY AND PLACE OF SERVICE,

1992

Place of service

Percent

Inpatient hospital:

 General surgery.....

18.4

 Orthopedic surgery.....

17.2

 Thoracic surgery.....

10.7

 Urology.....

7.9

 Cardiovascular disease.....

13.2

 Clinic and other group practice.....

2.9

 Gastroenterology.....

4.6

 Internal medicine.....

3.0

 Ophthalmology.....

2.2

 Neurological surgery.....

4.1

 Other medical and surgical specialties.....

15.8

 Total.....

100.0

=====

Office:

 Ophthalmology.....

22.2

 Dermatology.....

21.9

	Podiatry.....	14.7
	Urology.....	8.0
	Internal medicine.....	4.3
	General surgery.....	3.7
	Orthopedic surgery.....	4.3
	Gastroenterology.....	2.8
	Family practice.....	1.4
	Clinic and other group practice.....	1.8
	Other medical and surgical specialties.....	14.9

Total.....
100.0

=====
Outpatient hospital:

	Ophthalmology.....	47.6
	Gastroenterology.....	10.4
	General surgery.....	8.8
	Orthopedic surgery.....	5.4
	Internal medicine.....	3.8
	Urology.....	4.5
	Clinic and other group practice.....	2.5
	Otology, larynology, rhinology.....	0.9

Plastic surgery.....	1.9
Other medical and surgical specialties.....	14.3

Total.....	100.0

Source: Health Care Financing Administration, Bureau of Data Management and Strategy, Part B Extract Summary System.

In 1992, ophthalmologists provided most (47.6 percent) of the surgery done in outpatient hospital settings (see table E-24). The predominance of ophthalmologists in this setting is due to cataract surgery. Ophthalmologists also accounted for the largest proportion of office surgical charges, 22.2 percent. However, dermatologists and podiatrists also represented significant percentages of office surgical charges, 21.9 and 14.7 percent respectively. In inpatient settings, the traditional surgical specialties--general surgery, orthopedic surgery, cardiovascular surgery, thoracic surgery and urology accounted for 67.4 percent of all surgical charges.

TABLE E-25.--GEOGRAPHIC PRACTICE COST INDICES, BY MEDICARE CARRIER

LOCALITY		
Carrier	Locality	Practice

number Malpractice	number	Locality name	Work	expense
510.... 0.824	5	Birmingham, AL.....	0.981	0.913
510.... 911	4	Mobile, AL.....	.964	.
510.... 867	2	North Central Alabama	.970	.
510.... 869	1	Northwest Alabama....	.985	.
510.... 851	6	Rest of Alabama.....	.975	.
510.... 869	3	Southeast Alabama....	.972	.
1020... 1.042	1	Alaska.....	1.106	1.255
1030... 1.255	5	Flagstaff (City), AZ.	.983	.911
1030... 1.255	1	Phoenix, AZ.....	1.003	1.016
1030... 1.255	7	Prescott (City), AZ..	.983	.911
1030... 1.255	99	Rest of Arizona.....	.987	.943
1030... 1.255	2	Tucson (City), AZ....	.987	.989
1030... 1.255	8	Yuma (City), AZ.....	.983	.911
520.... 856	13	Arkansas.....	.960	.
2050... 1.370	26	Anaheim-Santa Ana, CA	1.046	1.220
542.... 1.370	14	Bakersfield, CA.....	1.028	1.050
542.... 1.370	11	Fresno/Madera, CA....	1.006	1.009
542.... 1.370	13	Kings/Tulare, CA.....	.999	1.001
2050...	18	Los Angeles, CA (1st		

		of 8).....	1.060	1.196
1.370				
2050...	19	Los Angeles, CA (2d of 8).....	1.060	1.196
1.370				
2050...	20	Los Angeles, CA (3d of 8).....	1.060	1.196
1.370				
2050...	21	Los Angeles, CA (4th of 8).....	1.060	1.196
1.370				
2050...	22	Los Angeles, CA (5th of 8).....	1.060	1.196
1.370				
2050...	23	Los Angeles, CA (6th of 8).....	1.060	1.196
1.370				
2050...	24	Los Angeles, CA (7th of 8).....	1.060	1.196
1.370				
2050...	25	Los Angeles, CA (8th of 8).....	1.060	1.196
1.370				
542....	3	Marin/Napa/Solano, CA	1.012	1.198
1.370				
542....	10	Merced/Surrounding Counties, CA.....	1.018	1.009
1.370				
542....	12	Monterey/Santa Cruz, CA.....	1.023	1.108
1.370				
542....	1	North Coastal Counties, CA.....	1.003	1.072
1.370				
542....	2	Northeast Rural California.....	1.001	.990
1.370				
542....	7	Oakland-Berkeley, CA.	1.028	1.258
1.370				
542....	27	Riverside, CA.....	1.026	1.080
1.370				

542....		4	Sacramento/Surroundin g Counties, CA.....	1.026	1.088
1.370					
542....		15	San Bernardino/East Central, CA.....	1.025	1.077
1.370					
2050...		28	San Diego/Imperial, CA.....	1.026	1.090
1.370					
542....		5	San Francisco, CA....	1.038	1.303
1.370					
542....		6	San Mateo, CA.....	1.038	1.303
1.370					
2050...		16	Santa Barbara, CA....	1.012	1.073
1.370					
542....		9	Santa Clara, CA.....	1.048	1.286
1.370					
542....		8	Stockton/Surrounding Counties, CA.....	1.019	1.027
1.370					
2050...		17	Ventura, CA.....	1.034	1.132
1.370					
550....		1	Colorado.....	.999	.
988	.683				
10230..		4	Eastern Connecticut..	.999	1.053
1.036					
10230..		1	Northwest and North Central Connecticut.	1.002	1.071
1.025					
10230..		3	South Central Connecticut.....	1.018	1.103
1.188					
10230..		2	Southwest Connecticut	1.053	1.139
1.231					
570....		1	Delaware.....	1.026	
1.018	.664				
580....		1	D.C.+MD/VA suburbs...	1.059	
1.168	.947				
590....		3	Fort Lauderdale, FL..	.993	.981
1.376					
590....		4	Miami, FL.....	1.034	1.025

1.641				
590....	2	North/North central Florida cities.....	.975	.932
1.108				
590....	1	Rest of Florida.....	.966	.871
1.108				
1040...	1	Atlanta, GA.....	.975	
1.022	.752			
1040...	4	Rest of Georgia.....	.956	.
841	.752			
1040...	2	Small Georgia cities 02.....	.962	.
895	.752			
1040...	3	Small Georgia cities 03.....	.961	.
869	.752			
1120...	1	Hawaii.....	1.003	1.094
1.025				
5130...	12	North Idaho.....	.965	.
917	.889			
5130...	11	South Idaho.....	.967	.
936	.889			
621....	10	Champaign-Urbana, IL.	.965	.920
1.137				
621....	16	Chicago, IL.....	1.044	1.114
1.773				
621....	3	De Kalb, IL.....	.978	.925
1.137				
621....	11	Decatur, IL.....	.981	.927
1.137				
621....	12	East St. Louis, IL...	.989	.958
1.579				
621....	6	Kankakee, IL.....	.972	.925
1.137				
621....	8	Normal, IL.....	.997	.968
1.137				
621....	1	Northwest, IL.....	.974	.896
1.137				
621....	5	Peoria, IL.....	1.009	1.031
1.137				
621....	7	Quincy, IL.....	.974	.896

1.137				
621....	4	Rock Island, IL.....	.995	.958
1.137				
621....	2	Rockford, IL.....	1.010	1.018
1.137				
621....	13	Southeast Illinois...	.974	.896
1.137				
621....	14	Southern Illinois....	.974	.896
1.137				
621....	9	Springfield, IL.....	.996	.966
1.137				
621....	15	Suburban Chicago, IL.	1.020	1.097
1.137				
630....	1	Metropolitan Indiana.	.998	.
963	.547			
630....	3	Rest of Indiana.....	.979	.
896	.516			
630....	2	Urban Indiana.....	.980	.
905	.516			
640....	5	Des Moines (Polk/ Warren), IA.....	.997	.
966	.666			
640....	3	North central Iowa...	.971	.
916	.666			
640....	2	Northeast Iowa.....	.972	.
918	.666			
640....	6	Northwest Iowa.....	.969	.
890	.666			
640....	4	South central Iowa (excludes Des Moines).....	.962	.
881	.666			
640....	1	Southeast Iowa (includes Iowa City)	.976	.
933	.666			
640....	7	Southwest Iowa.....	.968	.
900	.666			
740....	5	Kansas City, KS.....	.978	.964
1.134				
650....	1	Rest of Kansas.....	.953	.893
1.134				

740....		4	Suburban Kansas City, KS.....	.978	.964
1.134					
660....		1	Lexington and Louisville, KY.....	.984	.
917	.667				
660....		3	Rest of Kentucky.....	.974	.
875	.667				
660....		2	Small cities (city limits) KY.....	.976	.
898	.667				
528....		7	Alexandria, LA.....	.985	.
889	.808				
528....		3	Baton Rouge, LA.....	.991	.
966	.808				
528....		6	Lafayette, LA.....	.982	.
928	.808				
528....		4	Lake Charles, LA.....	.975	.
907	.808				
528....		5	Monroe, LA.....	.979	.
880	.808				
528....		1	New Orleans, LA.....	.994	1.003
1.185					
528....		50	Rest of Louisiana.....	.972	.
880	.824				
528....		2	Shreveport, LA.....	1.003	.
940	.808				
21200..		2	Central Maine.....	.942	.
903	.716				
21200..		1	Northern Maine.....	.947	.
912	.716				
21200..		3	Southern Maine.....	.956	.
980	.716				
690....		1	Baltimore/Surrounding Counties, MD.....	1.027	
1.040	.927				
690....		3	South+Eastern Shore, MD.....	1.011	
1.010	.820				
690....		2	Western Maryland.....	1.006	
1.013	.843				

700....	2	Massachusetts suburbs/ rural (cities).....	.997	
1.072	.855			
700....	1	Massachusetts Urban..	1.002	
1.131	.855			
710....	1	Detroit, MI.....	1.059	1.091
1.736				
710....	2	Michigan, not Detroit	1.010	.971
1.196				
720....	00	Minnesota (Blue Shield).....	.999	.
971	.748			
10240..	00	Minnesota (Travelers)	.999	.
971	.748			
10250..	1	Rest of Mississippi..	.960	.
838	.650			
10250..	2	Urban Mississippi (city limits).....	.966	.
902	.650			
740....	3	Kansas City (Jackson County), MO.....	.978	.964
1.179				
740....	2	North Kansas City (Clay/Platte), MO...	.978	.964
1.179				
11260..	3	Rest of Missouri.....	.950	.847
1.179				
740....	6	Rural Northwest counties, Missouri..	.953	.866
1.179				
11260..	2	Small Eastern Cities, MO.....	.954	.838
1.179				
740....	1	St. Joseph, MO.....	.950	.867
1.179				
11260..	1	St. Louis/Large Eastern Cities, MO..	.988	.964
1.352				
751....	1	Montana.....	.967	.
926	.718			
655....	00	Nebraska.....	.960	.

883	.435				
1290...		3	Elko and Ely (Cities), NV.....	.984	1.026
1.144					
1290...		1	Las Vegas, et al (cities), NV.....	1.036	1.082
1.144					
1290...		2	Reno, et al (cities), NV.....	1.008	1.141
1.144					
1290...		99	Rest of Nevada.....	1.020	1.079
1.144					
780....		40	New Hampshire.....	.962	
1.011	.602				
860....		2	Middle New Jersey....	1.034	1.070
1.153					
860....		1	Northern New Jersey..	1.040	1.131
1.153					
860....		3	Southern New Jersey..	1.016	1.030
1.153					
1360...		5	New Mexico.....	.981	.
925	.767				
801....		1	Buffalo/Surrounding Counties, NY.....	1.006	.
942	.963				
803....		1	Manhattan, NY.....	1.059	1.255
1.647					
801....		3	North central cities, New York.....	.997	.
952	.963				
803....		2	New York City suburbs/ Long Island, NY.....	1.060	1.229
1.929					
803....		3	Poughkpsie/N. New York City suburbs...	1.004	1.018
1.325					
14330..		4	Queens, NY.....	1.059	1.255
1.861					
801....		2	Rochester/Surrounding Counties, NY.....	1.021	
1.017	.963				

801....		4	Rest of New York.....	.988	.
935	.963				
5535...		00	North Carolina.....	.968	.
902	.378				
820....		1	North Dakota.....	.965	.
895	.688				
16360..		00	Ohio.....	.993	.
951	.920				
1370...		00	Oklahoma.....	.969	.
911	.516				
1380...		2	Eugene, et al (cities), OR.....	.968	
1.008	.951				
1380...		1	Portland, et al (cities), OR.....	.993	
1.033	.951				
1380...		99	Rest of Oregon.....	.979	.
997	.951				
1380...		3	Salem, et al (cities), OR.....	.974	.
990	.951				
1380...		12	Southwest Oregon cities (city limits)	.974	.
988	.951				
865....		2	Large Pennsylvania cities.....	1.008	1.001
1.440					
865....		1	Philly/Pitt Medium Schools/Hospitals...	1.014	1.014
1.552					
865....		4	Rest of Pennsylvania.	.975	.
929	.986				
865....		3	Small Pennsylvania cities.....	.984	.
945	.986				
973....		20	Puerto Rico.....	.882	.
763	.466				
870....		1	Rhode Island.....	1.009	.
998	.734				
880....		1	South Carolina.....	.971	.
874	.448				

820....	2	South Dakota.....	.951	.
857	.688			
5440...	35	Tennessee.....	.969	.
896	.407			
900....	29	Abilene, TX.....	.971	.
888	.504			
900....	26	Amarillo, TX.....	.972	.
900	.504			
900....	31	Austin, TX.....	.969	.
968	.504			
900....	20	Beaumont, TX.....	.998	.
955	.504			
900....	9	Brazoria, TX.....	1.025	.
955	.504			
900....	10	Brownsville, TX.....	.980	.
888	.504			
900....	24	Corpus Christi, TX...	.976	.
944	.504			
900....	11	Dallas, TX.....	.996	.
971	.504			
900....	12	Denton, TX.....	.996	.
971	.504			
900....	14	El Paso, TX.....	.995	.
894	.504			
900....	28	Fort Worth, TX.....	.973	.
936	.504			
900....	15	Galveston, TX.....	.982	.
968	.504			
900....	16	Grayson, TX.....	.964	.
903	.504			
900....	18	Houston, TX.....	1.014	.
982	.656			
900....	33	Laredo, TX.....	.968	.
856	.504			
900....	17	Longview, TX.....	.968	.
929	.504			
900....	21	Lubbock, TX.....	.950	.
881	.504			
900....	19	Mc Allen, TX.....	.945	.
873	.504			
900....	23	Midland, TX.....	1.023	.

998	.504				
900....		2	Northeast rural Texas	.968	.
883	.504				
900....		13	Odessa, TX.....	1.008	.
971	.504				
900....		25	Orange, TX.....	.998	.
955	.504				
900....		30	San Angelo, TX.....	.954	.
902	.504				
900....		7	San Antonio, TX.....	.973	.
929	.504				
900....		3	Southeast rural Texas	.973	.
895	.504				
900....		6	Temple, TX.....	.969	.
886	.504				
900....		8	Texarkana, TX.....	.953	.
883	.504				
900....		27	Tyler, TX.....	.984	.
931	.504				
900....		32	Victoria, TX.....	.976	.
973	.504				
900....		22	Waco, TX.....	.981	.
871	.504				
900....		4	Western rural Texas..	.961	.
852	.504				
900....		34	Wichita Falls, TX....	.969	.
896	.504				
910....		9	Utah.....	.993	.
952	.739				
780....		50	Vermont.....	.942	.
941	.533				
10490..		1	Richmond+Charlottesvi lle, VA.....	.975	.
953	.462				
10490..		4	Rest of Virginia.....	.967	.
888	.522				
10490..		3	Small town/Industrial Virginia.....	.971	.
892	.531				
10490..		2	Tidewater+North Virginia Counties...	.989	.

994	.703				
973....		50	Virgin Islands.....	1.000	1.000
1.000					
932....		4	East central+Northeast Washington (excludes Spokane).....	.991	.979
1.064					
932....		2	Seattle (King County), WA.....	1.019	1.049
1.064					
932....		3	Spokane+Richland (cities), WA.....	.996	.995
1.064					
932....		1	West+Southeast Washington (excludes Seattle).....	1.008	.992
1.064					
16510..		16	Charleston, WV.....	.987	.
962	.688				
16510..		18	Eastern Valley, WV...	.962	.
881	.688				
16510..		19	Ohio River Valley, WV	.962	.
881	.688				
16510..		20	Southern Valley, WV..	.960	.
876	.688				
16510..		17	Wheeling, WV.....	.975	.
900	.688				
951....		13	Central Wisconsin....	.960	.
888	.762				
951....		40	Green Bay, WI (Northeast).....	.979	.
913	.762				
951....		54	Janesville, WI (South- Central).....	.970	.
905	.762				
951....		19	La Crosse, WI (West- Central).....	.976	.
919	.762				
951....		15	Madison, WI (Dane County).....	.977	.

979	.762			
951....		46	Milwaukee suburbs, WI (SE).....	1.010
1.008	.762			
951....		4	Milwaukee, WI.....	1.008
1.009	.762			
951....		12	Northwest Wisconsin..	.966
898	.762			
951....		60	Oshkosh, WI (East- Central).....	.974
911	.762			
951....		14	Southwest Wisconsin..	.960
888	.762			
951....		36	Wausau, WI (North- Central).....	.971
898	.762			
825....		21	Wyoming.....	.988
938	.641			

Note: Work GPCI is the \1/4\ work GPCI required by Pub. L. 101-239.

Source: Federal Register, Vol. 58, No. 230, December 2, 1993; 63848-63851.

