

APPENDIX D. MEDICARE REIMBURSEMENT TO HOSPITALS AND PHYSICIANS

CONTENTS

Part I: Hospitals

- General Summary
- Basic Payment System
 - Update Factors
 - Prospective Payment System Update Factors and Increases in Operating Payments
 - Source and Calculation of the Hospital Wage Index
 - Sample Payment Calculation
- Additional Payment Amounts
 - Graduate Medical Education
 - Disproportionate Share Hospitals
 - ESRD Beneficiary Discharges
 - Outliers
- Payment for Capital
- Payments on a Reasonable Cost Basis
 - Physicians in Teaching Hospitals
 - Qualified Nonphysician Anesthetists in Certain Rural Hospitals
 - Organ Acquisition Costs
 - Passthrough Payments for Hemophilia Inpatients
 - Bad Debts of Medicare Beneficiaries
- Special Treatment of Certain Facilities Under PPS
 - Sole Community Hospitals
 - Medicare Dependent Hospitals
 - Referral Centers
 - Critical Access Hospitals
 - Geographic Reclassification of Hospitals
- Hospitals Excluded From the Prospective Payment System
 - PPS-Exempt Hospitals
 - State Systems
- Administration
 - Prospective Payment Assessment Commission/Medicare Payment Advisory Commission
 - Administrative and Judicial Review
 - Review Activities
- Historical Trends in PPS Payments, Costs, and Margins
 - Medicare Payments to Hospitals
 - Trends in PPS Operating Payments and Costs
 - PPS Inpatient Margins
 - Inpatient Margins by Hospital Type
 - Total Margins
 - Additional Hospital Data

Part II: Physicians

Physician Payment Reform
Medicare Fee Schedule
 Relative Value Unit
 Geographic Adjustment Factor
 Conversion Factor
 Payment Formula
Sustainable Growth Rate and Conversion Factor Updates
Limits on Beneficiary Liability
Initial Impact of the Balanced Budget Act on Medicare Payments to Physicians
Historical Data
 Assignment Rate Experience
 Participating Physician Program Data
 Distribution of Physician Services
References

PART I: HOSPITALS

GENERAL SUMMARY

Medicare pays for inpatient hospital care using prospectively set rates established by the prospective payment system (PPS). PPS started for hospital cost reporting periods beginning on or after October 1, 1983. PPS was enacted by the Social Security Amendments of 1983 (Public Law 98-21). This appendix describes the major reimbursement provisions of PPS.

Medicare payments are made at predetermined, specific rates which represent the average cost, nationwide, of treating a Medicare patient according to his or her medical condition. The classification system used to group hospital inpatients according to their diagnoses is known as diagnosis-related groups (DRGs). Payments to hospitals will vary depending on whether a hospital is located in a large urban area (greater than 1 million population, or 970,000 in New England) or other area of the country, as determined by the Office of Management and Budget metropolitan statistical area (MSA) system.

During a 4-year transition period, a declining portion of the total prospective payment was based on a hospital's historical reasonable costs and an increasing portion was based on a combination of regional and national Federal DRG rates. Since the fifth year of the program (fiscal year 1988), Medicare payments have been generally determined under a national DRG payment methodology. If a hospital can treat a patient for less than the payment amount, it can keep the savings. If the treatment costs more, the hospital must absorb the loss. A hospital is prohibited from charging Medicare beneficiaries any amounts (except for deductibles, copayment amounts, and services not covered by Medicare) which represent any difference between the hospital's cost of providing covered care and the Medicare DRG payment amount.

Certain hospital costs are excluded from the PPS and are paid on a reasonable cost basis, subject to rate of increase limits. Au-

thority is provided for States to establish their own all-payer hospital payment systems if they meet certain Federal requirements.

BASIC PAYMENT SYSTEM

Unless excluded from PPS, each Medicare participating hospital is paid a predetermined payment rate per discharge for each type of patient treated. Types of patients are defined by the DRG patient classification system which assigns each hospital inpatient to one of 499 patient categories (DRGs) based on the diagnosis and the type of treatment received (medical or surgical).

A hospital's DRG payment is the product of two components: (1) a standardized amount which is adjusted by the hospital's area average wage level; and (2) the DRG's relative weight. The standardized amount is intended to represent the cost of a typical (average) Medicare inpatient case. Two separate standardized amounts are calculated: one amount applies to hospitals in large urban areas and the other amount applies to hospitals in other areas. The DRG weight represents the relative costliness of an average case in the particular DRG compared to the cost of the average Medicare case.

UPDATE FACTORS

PPS payment rates are updated each year using an "update factor." The annual update factor applied to the standardized amounts is determined, in part, by the projected increase in the hospital market basket index (MBI). The MBI measures the cost of goods and services purchased by hospitals, yielding one price inflator for all hospitals in a given year. Table D-1 shows the categories of expense used in developing the index. The update factor may include adjustments for increases in hospital productivity, technological change, and other factors that affect the level of operating cost per discharge. The annual update factor may also be adjusted to correct for increases in average payments per case attributable to increases in case mix due to improvements in coding and reporting accuracy.

Before fiscal year 1988, the same factor was used for all hospitals; however, in subsequent years separate factors were applied to hospitals according to their locations. However, beginning October 1, 1995, a single update factor applied for all hospitals in all areas. Table D-2 compares the hospital market basket increases to actual updates for past years and shows the increases in PPS payments per case that resulted from the updates and other policy changes.

The Balanced Budget Act of 1997 (BBA 1997) sets the update for fiscal year 1998 at 0 percent; fiscal year 1999 at the MBI minus 1.9 percent; fiscal year 2000 at the MBI minus 1.8 percent; fiscal years 2001 and 2002 at the MBI minus 1.1 percent; and for fiscal year 2003 and each subsequent fiscal year, at the MBI percentage increase for all hospitals in all areas.

TABLE D-1.—HOSPITAL PROSPECTIVE PAYMENT SYSTEM INPUT PRICE INDEX (“THE MARKET BASKET”) EXPENSE CATEGORIES AND RATES OF PRICE CHANGE, FISCAL YEARS 1993–2001

Expense category	Base-year 1992 weights ¹ (percent)	Federal fiscal year percentage rates of price change								
		1993 ²	1994 ²	1995 ²	1996 ²	1997 ²	1998 ²	1999 ²	2000 ³	2001 ³
Wages and salaries ⁴	50.24	3.1	3.0	2.7	2.9	2.8	3.5	3.2	3.5	3.4
Employee benefits ⁴	11.15	5.7	4.2	2.7	2.1	1.5	2.4	2.6	3.5	3.3
Professional fees: Nonmedical ⁴	2.13	4.2	3.4	2.6	3.0	2.6	3.2	3.0	3.4	3.6
Utilities	1.54	3.7	2.5	0.3	1.4	2.3	0.3	-0.6	2.9	1.7
Electricity	0.93	2.2	1.5	2.4	0.2	0.1	-0.8	-1.1	1.5	1.0
Fuel oil, coal, etc	0.37	6.1	3.2	-6.7	2.6	7.7	0.2	-1.7	6.4	1.3
Water and sewerage	0.25	5.9	5.2	3.5	3.9	2.5	3.8	2.3	2.4	4.2
Liability insurance	1.19	3.4	-0.7	-3.4	-1.1	-1.5	-0.4	1.3	2.3	2.3
All other	33.75	2.1	1.6	4.5	1.9	1.1	2.3	1.5	2.7	2.6
All other products	24.83	1.8	1.2	5.1	1.8	0.3	1.9	1.1	2.5	2.4
Pharmaceuticals	4.16	5.0	3.5	2.5	3.8	2.6	13.8	8.4	2.8	3.6
Food: Direct purchase	2.31	1.0	1.9	0.1	5.0	1.8	-1.7	-0.7	1.3	2.2
Food: Contract service	1.07	1.7	1.7	2.2	2.3	2.9	2.6	2.5	2.7	3.7
Chemicals	3.67	1.4	0.5	14.7	-1.0	0.3	-2.8	-4.2	6.0	3.8
Medical instruments	3.08	2.3	0.8	1.1	1.4	-0.8	-1.3	-0.3	-0.6	0.8
Photographic supplies	0.39	-1.0	0.4	0.6	2.9	0.3	-0.4	-0.5	-1.3	0.7
Rubber and plastics	4.75	0.9	0.8	5.6	0.6	-0.6	-0.4	-0.5	2.1	1.7
Paper	2.08	-0.3	0.1	13.3	2.5	-4.9	2.3	0.0	4.3	2.0
Apparel	0.87	1.3	0.2	0.5	0.7	0.5	0.7	0.5	-0.3	0.5
Machinery and equipment	0.21	0.4	0.8	1.0	0.5	-0.5	-0.8	-0.6	-0.2	0.1
Miscellaneous	2.24	1.6	0.4	1.7	2.4	1.3	-0.9	1.0	2.9	1.1
All other services	8.93	2.9	2.6	2.6	2.0	3.2	3.3	2.7	3.2	3.3
Telephone	0.58	0.2	1.8	0.8	1.2	1.9	0.4	-0.4	0.8	0.8

Postage ⁴	0.27	0.0	0.0	7.7	2.4	0.0	0.0	2.2	0.7	2.3
All other labor intensive ⁴	7.28	3.2	2.7	2.5	2.0	3.5	3.8	3.0	3.5	3.6
All other nonlabor intensive	0.80	3.0	2.6	2.8	2.8	2.7	1.6	1.9	2.9	2.4
Total	100.00	3.1	2.6	3.1	2.4	2.0	2.9	2.5	3.2	3.1

¹Weights may not sum due to rounding.

²Historical data, subject to revision of underlying series.

³Projected data, subject to change in future forecasts.

⁴Considered labor related.

Source: Health Care Financing Administration, Office of the Actuary.

TABLE D-2.—COMPARISON OF INCREASE IN PPS HOSPITAL MARKET BASKET INDEX, AVERAGE PPS UPDATE, AND INCREASE IN PPS PAYMENTS PER CASE, FISCAL YEARS 1984-97

[In percent]

Fiscal year	Forecasted increase in market basket index ¹	Average update ²	Increase in operating payments per case ³
1984	4.9	4.7	18.5
1985	4.0	4.5	10.5
1986	4.3	0.5	3.2
1987	3.7	1.2	5.4
1988	4.7	1.5	6.0
1989	5.4	3.3	6.6
1990	5.5	4.7	6.5
1991	5.2	3.4	6.0
1992	4.4	3.0	5.2
1993	4.1	2.7	3.8
1994	4.3	2.0	3.6
1995	3.6	2.0	4.0
1996	3.5	1.5	4.2
1997	2.5	2.0	2.5

¹Based on data available when final prospective payment system rates were set.

²From 1988 to 1995, there were separate updates for hospitals in large urban, other urban, and rural areas. Update for 1990 adjusted to reflect 1.22 percent across-the-board reduction in DRG weights.

³Data on prospective payment system operating payments for 1984 through 1997 are for hospital accounting years beginning during each Federal fiscal year. Changes are based on cohorts of hospitals with Medicare Cost Reports in two consecutive years.

Source: Medicare Payment Advisory Commission.

PROSPECTIVE PAYMENT SYSTEM UPDATE FACTORS AND INCREASES IN OPERATING PAYMENTS

Public Law 98-21 required the Secretary to adjust the DRG definitions and relative weights in fiscal year 1986 and at least every 4 years thereafter to reflect changes in treatment patterns, technology, and other factors which may change the relative use of hospital resources. Public Law 99-509, however, required the Secretary to adjust the DRG definitions and relative weights each year, beginning in fiscal year 1988.

The Omnibus Budget Reconciliation Act (OBRA) of 1989 required the Secretary to reduce the relative weight for each DRG by 1.22 percent for discharges in fiscal year 1990. In addition, the Secretary was prohibited from adjusting DRG relative weights on other than a budget neutral basis beginning in fiscal year 1991.

Table D-3 shows the 25 DRGs accounting for the largest numbers of Medicare inpatient discharges during fiscal year 1997. DRG relative weights appear in table D-17 at the end of part I of this appendix.

TABLE D-3.—MEDICARE SHORT-STAY HOSPITAL DIAGNOSIS-RELATED GROUPS RANKED BY DISCHARGE, FISCAL YEAR 1997

[In thousands of dollars]

Rank	DRG number	Description	Discharges ¹	Percent	Total payments ²	Total Medicare payments	Total beneficiary payments ³
1	127	Heart failure and shock	725,256	6.1	\$3,617,653	\$3,255,544	\$362,109
2	089	Simple pneumonia and pleurisy ⁴	472,587	4.0	2,486,332	2,214,672	271,660
3	088	Chronic obstructive pulmonary disease	391,747	3.3	1,784,597	1,568,248	216,348
4	014	Specific cerebrovascular disorders except transient ischemic attack	377,861	3.2	2,209,676	1,979,829	229,846
5	209	Major joint and limb reattachment procedures	365,405	3.1	3,785,782	3,540,052	245,731
6	430	Psychoses	303,463	2.5	1,988,671	1,789,701	189,971
7	174	Gastrointestinal hemorrhage with complicating conditions ..	250,987	2.1	1,199,479	1,060,110	139,370
8	079	Respiratory infections and inflammations ⁴	248,773	2.1	1,967,563	1,836,680	130,884
9	296	Nutritional and miscellaneous metabolic disorders ⁴	238,230	2.0	1,057,169	938,326	118,843
10	112	Vascular procedures except major reconstruction without pump	238,146	2.0	2,470,711	2,345,799	124,912
11	182	Esophagitis, gastroenteritis, and miscellaneous digestive diseases ⁴	237,375	2.0	877,168	747,053	130,115
12	416	Septicemia, age +17	232,695	1.9	1,717,950	1,593,369	124,581
13	462	Rehabilitation	225,553	1.9	2,240,215	2,187,896	52,319
14	138	Cardiac arrhythmia and conduction disorders, with complicating condition	210,855	1.8	813,788	698,436	115,351
15	320	Kidney and urinary tract infections ⁴	179,001	1.5	796,524	697,926	98,598
16	132	Atherosclerosis with complicating conditions	175,844	1.5	552,874	461,773	91,101
17	121	Circulatory disorders with acute myocardial infarction, with cardiovascular catheter discharged alive	166,418	1.4	1,123,013	1,121,533	1,480
18	124	Circulatory disorders excluding acute myocardial infarction, with cardiovascular catheter with complex diagnosis	155,525	1.3	992,867	909,723	83,143

1087

TABLE D-3.—MEDICARE SHORT-STAY HOSPITAL DIAGNOSIS-RELATED GROUPS RANKED BY DISCHARGE, FISCAL YEAR 1997—Continued

[In thousands of dollars]

Rank	DRG number	Description	Discharges ¹	Percent	Total payments ²	Total Medicare payments	Total beneficiary payments ³
19	148	Major small and large bowel procedures with complicating conditions	148,685	1.2	2,572,174	2,478,138	94,036
20	015	Transient ischemic attack and precerebral occlusions	146,785	1.2	505,418	414,602	90,817
21	143	Chest pain	145,286	1.2	367,102	278,867	88,235
22	210	Hip and femur procedures except major joint ⁴	142,808	1.2	1,253,713	1,164,275	89,438
23	478	Other vascular procedures with complicating conditions	126,327	1.1	1,528,418	1,461,624	66,793
24	475	Respiratory system diagnosis with ventilator support	110,465	0.9	2,132,273	2,065,892	66,381
25	140	Angina pectoris	108,593	0.9	302,437	242,698	59,739
Total, all DRGs			11,952,088	100.0	88,340,773	81,588,972	6,751,802

¹Based on the stay records for 100 percent of Medicare aged and disabled beneficiaries as recorded in the MEDPAR file.

²Total payments represent total hospital revenue for Medicare enrollee utilization, including Medicare payments and beneficiary obligations. Excluded bills for no pay, at-risk managed care utilization and no-pay Medicare secondary payer bills.

³Beneficiary payments are the responsibility of the beneficiary or other third party payor.

⁴Age +17 with complicating conditions.

Source: Health Care Financing Administration.

SOURCE AND CALCULATION OF THE HOSPITAL WAGE INDEX

The hospital wage index is used to adjust the national standardized amount to account for the wage level in the hospital's area. This is accomplished by multiplying the labor-related component of the national standardized payment amount by a wage index. The wage index is intended to measure the average wage level for hospital workers in each urban area (metropolitan statistical area or MSA) or rural area (non-MSA parts of States) relative to the national average wage level.

The Secretary is required to update the wage index annually beginning October 1, 1993. The Secretary is required to base the update on a survey of wages and wage-related costs of short-term acute care hospitals. Tables D-14, D-15, and D-16, at the end of part I of this appendix, give the current wage index values for urban areas, for all rural areas in a State, and a special index for hospitals that are reclassified.

Calculation of the index begins with the area average hospital hourly wage. For each MSA or non-MSA area (i.e., all non-MSA counties in a State), total county compensation and total paid hours data are summed separately over all counties included in the area. Then aggregate hospital compensation for the area is divided by aggregate paid hours of hospital employment in the area to produce the area average hourly wage. The hospital wage index is calculated by dividing the average hourly wage for each area by the national average hourly wage (determined by dividing national aggregate compensation by national aggregate paid hours of employment).

This procedure results in an index number, such as 0.8884 (Asheville, North Carolina) or 1.2284 (Sacramento, California), for each MSA or non-MSA area in the United States. Since the national average wage level is represented by an index value of 1.000, the wage index value for any area has a direct and simple interpretation. The value of 1.2284 for Sacramento means that the hourly wage rate for hospital workers is 22.84 percent higher in the Sacramento MSA than nationwide.

Thus, in computing the hospital payment rates applicable for hospitals in the Sacramento MSA, the labor-related component of the national large urban adjusted standardized payment amount (\$2,809.18) is multiplied by 1.2284 in order to adjust for the higher level of hourly wage rates in this area. Similarly, the calculation of the labor portion of the rates for hospitals in Asheville would involve a reduction in the published labor-related component of the national adjusted standardized payment amount, to reflect the fact that hourly wage levels in this MSA are 11.16 percent lower than the national average (as indicated by the wage index value of 0.8884).

SAMPLE PAYMENT CALCULATION

The Federal large urban and other area payment amounts per discharge for fiscal year 2000 were published in the *Federal Register* on July 30, 1999 (table D-4). The payment rates for most hospitals are computed using the national adjusted operating standardized amounts. Puerto Rico has its own adjusted operating stand-

ardized amounts for DRG payment purposes. BBA 1997 changes the way the standardized amount for Puerto Rico is determined from a 25 percent Federal, 75 percent local blend rate, to a 50 percent Federal, 50 percent local rate.

TABLE D-4.—NATIONAL AND REGIONAL ADJUSTED STANDARDIZED AMOUNTS, LABOR/NONLABOR, FISCAL YEAR 2000

	Large urban areas		Other areas	
	Labor related	Nonlabor related	Labor related	Nonlabor related
National average	\$2,809.18	\$1,141.85	\$2,764.70	\$1,123.76
Puerto Rico:				
National	2,785.40	1,132.18	2,785.40	1,132.84
Puerto Rico	1,336.54	538.00	1,315.38	529.48

Source: Federal Register, 1999.

Each payment amount is divided into a labor-related component and a nonlabor-related component. The sum of these components represents the standardized amount that would apply for a hospital located in an area with a wage index of 1.0 (i.e., average wage rates for hospital workers in the area match the national average of hospital wage rates across all areas).

The basic payment to a hospital for a case in a particular DRG is the applicable national payment amount, adjusted by the local wage index value and multiplied by the weighting factor for the DRG.

For an example of a payment calculation, assume a hospital is located in Washington, DC. Such a hospital would be in a large urban area. Payment is based on the large urban national standardized amount. First, the labor-related portion of this amount (\$2,809.15 in fiscal year 2000) is multiplied by the appropriate wage index (1.1053 for Washington, DC):

$$\$2,809.18 \times 1.1053 = \$3,104.99$$

To this total is added the nonlabor-related portion of the standardized amount:

$$\$3,104.99 + \$1,141.85 = \$4,246.84$$

For each discharge, this new total is then multiplied by the relative weight factor for the DRG to which the case has been assigned. These weights range from a low of 0.0968 for DRG 448 (allergic reactions, age 0–17) to a high of 17.7902 for DRG 103 (heart transplant). The payment rates for the sample hospital in fiscal year 2000 would therefore vary from a low of \$411.09 (\$4,246.84 \times 0.0968) to a high of \$75,552.13 (\$4,246.84 \times 17.7902).

Certain hospitals receive other adjustments to their base payment rates under PPS. Hospitals in Alaska and Hawaii have a cost-of-living adjustment to recognize the higher cost of nonlabor input there. In addition, sole community hospitals (SCHs) have the

option of payments based on their own updated base-year costs or the PPS rate (see discussion of sole community hospitals below). Hospitals also can be reclassified into areas where they are not located for the purpose of qualifying for a higher standardized payment amount or wage index. These factors may substantially increase payments to some hospitals, although by definition they have no impact on total PPS payments.

In addition to the basic payment amount for each case, additional payments may be made to teaching hospitals and hospitals that serve a disproportionate share of low-income patients. Any hospital may receive additional payments for outliers (cases with extraordinarily high costs relative to other cases in the DRG) and for treatment of beneficiaries with end-stage renal disease (ESRD). Finally, certain hospital costs are excluded from PPS and reimbursed separately. The next sections of this appendix discuss additional PPS payments and the separate reimbursement of excluded costs.

ADDITIONAL PAYMENT AMOUNTS

In addition to the DRG prospective payment rates, Medicare payments are made to hospitals for four additional items or services.

GRADUATE MEDICAL EDUCATION

Financing of graduate medical education (GME), the period of training following medical school, is provided predominantly through inpatient revenues (both hospital payments and faculty physician fees) and a complex mix of Federal and State government funds. The Federal Government is the largest single explicit financing source for GME through the Medicare Program and through its support of residencies in Veterans Administration hospitals. Medicare recognizes the costs of GME under two mechanisms: direct medical education payments and an indirect medical education (IME) adjustment.

Direct medical education costs

The direct costs of approved medical education programs (such as the salaries of residents and teachers and other education costs for residents, for nurses, and for allied health professionals trained in provider-operated programs) are excluded from the PPS. The direct medical education costs for the training of nurses and allied health professionals in provider-operated programs are paid for on a reasonable cost basis. Residency training programs for physicians are funded through formula payments based on each hospital's per resident costs.

Medicare's payment to each hospital equals the hospital's cost per full-time equivalent (FTE) resident, times the weighted average number of FTE residents, times the percentage of inpatient days attributable to Medicare part A beneficiaries. Each hospital's per FTE resident amount is calculated using data from the hospital's cost reporting period that began in fiscal year 1984, increased by 1 percent for hospital cost reporting periods beginning July 1, 1985, and updated in subsequent cost reporting periods by the change in the Consumer Price Index (CPI). After July 1, 1986, only residents

in their initial residency period are counted as a full FTE. The number of years considered as an initial residency period varies by physician specialty. It includes the minimum number of years of formal training necessary to satisfy specialty requirements for board eligibility plus 1 year, but not to exceed 5 years; residents in geriatrics or preventive medicine are allowed 2 additional years. Residents who are not in their initial residency period are counted as one-half of an FTE. Residents who are foreign or international medical graduates are not counted as FTE residents unless they have passed certain examinations.

OBRA 1993 provided that the amounts paid per resident for the direct costs of GME would not be updated by the CPI for cost reporting periods beginning during fiscal years 1994 and 1995, except for primary care residents and residents in obstetrics and gynecology. Primary care residents are defined to include family medicine, general internal medicine, general pediatrics, preventive medicine, geriatric medicine, and osteopathic general practice. For fiscal year 1997, the per resident amount was updated by the CPI.

BBA 1997 made several changes to the way in which Medicare makes payments for direct GME costs. BBA 1997 includes: (1) a cap on the total number of residents reimbursed under Medicare at the level that existed for the cost reporting period ending on or before December 31, 1996; (2) payments (for both direct and indirect GME) to teaching hospitals for the utilization attributed to Medicare+Choice enrollees; (3) payments to qualified nonhospital providers for their direct GME costs (federally qualified health centers, rural health clinics, MedicarePlus organizations, and other appropriate providers); (4) incentive payments to teaching hospitals that voluntarily agree to reduce the number of medical residents in training; (5) a demonstration project under which direct GME payments are to be made to qualifying consortia that consist of a teaching hospital and one or more specified entities who operate an approved medical residency training program; (6) a study on the variations in the costs of hospital overhead and supervisory physician medical education costs among hospitals; and (7) the requirement that the Medicare Payment Advisory Commission (MedPAC) make recommendations on long-term payment policies regarding teaching hospitals and GME.

Teaching hospitals' per resident costs vary greatly between hospitals. The Balanced Budget Refinement Act (BBRA) of 1999 will reduce some of the variation in Medicare reimbursement for these amounts. Starting in fiscal year 2001, hospitals with per resident amounts below 70 percent of the national average will be increased to 70 percent of the geographically adjusted value. Approximately 265 hospitals will receive increased payments under this provision. Those teaching hospitals with per resident amounts above 140 percent of the national average (adjusted for geographic location) will not receive an inflation update for 2 years (fiscal years 2001 and 2002) and will receive a lower update than other hospitals (CPI minus 2 percent) for 3 years (fiscal years 2002-5). About 130 hospitals with per resident amounts over 140 percent of the locality adjusted will be affected by these provisions. Hospitals that have per resident amounts that fall between 70 and 140 percent of the

national average adjusted for local cost differences will not be affected by these provisions.

Indirect medical education costs

Additional payments are made to hospitals under PPS for the indirect costs attributable to approved medical education programs. These indirect costs may be due to a variety of factors, including the extra demands placed on the hospital staff as a result of the teaching activity or additional tests and procedures that may be ordered by residents. Congressional reports on the PPS authorizing legislation indicate that the IME payments are also to account for factors not necessarily related to medical education which may increase costs in teaching hospitals, such as more severely ill patients, increased use of diagnostic testing, and higher staff-to-patient ratios.

The additional payment to a hospital is based on a formula that has provided an increase of approximately 7.7 percent in the Federal portion of the DRG payment for each 0.1 increase in the hospital's intern and resident-to-bed ratio on a curvilinear basis (i.e., the increase in the payment is less than proportional to the increase in the ratio of interns and residents to bed size). BBA 1997 includes reductions in the IME adjustment from 7.7 to 7.0 percent in fiscal year 1998; to 6.5 percent in fiscal year 1999; to 6.0 percent in fiscal year 2000; and to 5.5 percent in fiscal year 2001 and subsequent years.

BBRA 1999 delayed the reduction in the IME adjustment to 5.5 percent until fiscal year 2002. Teaching hospitals will receive 6.5 percent in fiscal year 2000; 6.25 percent in fiscal year 2001 and 5.5 percent in fiscal year 2002 and in subsequent years.

DISPROPORTIONATE SHARE HOSPITALS

Public Law 99-272 (Consolidated Omnibus Budget Reconciliation Act) provided that additional payments would be made to hospitals that serve a disproportionate share of low-income patients. The adjustment was extended several times until OBRA 1990 (Public Law 101-508) made it a permanent payment adjustment. A hospital's disproportionate patient percentage is defined as the hospital's total number of inpatient days attributable to Federal Supplemental Security Income Medicare beneficiaries divided by the total number of Medicare patient days, plus the number of Medicaid patient days divided by the total patient days.

Table D-5 shows the minimum disproportionate patient percentages required to qualify for the adjustment and the formulas for computing the adjustment effective October 1, 1993. For discharges occurring after September 1994, hospitals with a disproportionate share greater than 20.2 percent would receive a disproportionate share adjustment equal to 5.88 percent plus 0.825 percent of the difference between 20.2 percent and the hospital's disproportionate share patient percentage.

BBA 1997 includes reductions in the current disproportionate share hospital (DSH) payment formula amounts of 1 percent for fiscal year 1998; 2 percent in fiscal year 1999; 3 percent in fiscal year 2000; 4 percent in fiscal year 2001; 5 percent in fiscal year 2002; and 0 percent in fiscal year 2003 and each subsequent fiscal year.

BBA 1997 also requires the Secretary to submit to the House Ways and Means and Senate Finance Committees, no later than 1 year after enactment, a report that contains a new formula for determining additional DSH payments to hospitals. As of April 1, 2000, the report had not been issued.

TABLE D-5.—CRITERIA TO QUALIFY FOR DISPROPORTIONATE SHARE ADJUSTMENT AND FORMULAS FOR COMPUTING ADDITIONAL PAYMENT, EFFECTIVE OCTOBER 1, 1993

Type of hospital	Qualifying disproportionate patient percentage (P)	Formula or fixed percentage adjustment
Urban, 100 or more beds ...	15 percent	$(P-15)(0.6) 0.65 + 2.5$.
Urban, 100 or more beds ...	20.2 percent	$(P-20.2) 0.8 + 5.88$.
Urban, 100 or more beds ...	30 percent of inpatient revenue from State or local indigent care funds.	35 percent.
Urban, under 100 beds	40 percent	5 percent.
Rural, over 500 beds	Not specified in law; regulations set threshold at 15 percent.	Same as urban, 100 or more beds.
Rural, over 100 beds	30 percent	4 percent.
Rural, under 100 beds	45 percent	4 percent.
Rural, sole community hospital.	30 percent	10 percent.
Rural, rural referral center and—		
(a) not a sole community hospital, 100 or more beds.	30 percent	$(P-30)(0.6) + 4.0$.
(b) not a sole community hospital, under 100 beds.	45 percent	$(P-30)(0.6) + 4.0$.
(c) also a sole community hospital.	30 percent	Greater of 10 percent or $(P-30)(0.6) + 4.0$.

Note.—The disproportionate patient percentage (P) is equal to the sum of (a) the number of Medicare inpatient days provided to Supplemental Security Income recipients divided by total Medicare inpatient days, and (b) the number of inpatient days provided to Medicaid beneficiaries divided by total inpatient days.

Source: Prospective Payment Assessment Commission.

BBRA 1999 froze the reduction in the DSH payment formula to 3 percent for fiscal year 2001 and changed the reduction to 4 percent for fiscal year 2002. The Secretary is also required to collect hospital cost data on uncompensated inpatient/outpatient care, including non-Medicare bad debt and charity care as well as Medicaid and indigent care charges.

ESRD BENEFICIARY DISCHARGES

Effective with cost reporting periods beginning on or after October 1, 1984, additional payments are made to hospitals for inpatient dialysis provided to ESRD beneficiaries if total discharges of such beneficiaries from non-ESRD related DRGs account for 10

percent or more of the hospital's total Medicare discharges. A hospital meeting the criteria is paid an additional payment for each ESRD beneficiary discharge based on the estimated weekly cost of dialysis and the average length of stay of its ESRD beneficiaries. In fiscal year 1996, 35 hospitals received approximately \$7 million in ESRD exception payments.

OUTLIERS

Additional amounts are paid to hospitals for atypical cases (known as "outliers") which have either extremely long length of stay (day outliers) or extraordinarily high costs (cost outliers) compared to most discharges classified in the same DRG. The law requires that total outlier payments to all hospitals covered by the system represent no less than 5 percent and no more than 6 percent of the total estimated PPS payments for the fiscal year. Effective with discharges occurring on or after October 1, 1984, a transferring hospital may qualify for an additional payment for extraordinarily high-cost cases meeting the criteria for cost outliers. Outlier payments are financed by an offsetting overall reduction in the base payment amount per discharge. Effective October 1, 1986, Public Law 99-509 established separate urban and rural set-aside factors for financing outlier payments. The separate set-aside factors for rural and urban hospitals for financing outlier payments ended when the other urban/rural payment differential was eliminated in fiscal year 1995, as enacted in OBRA 1990.

Public Law 100-203 increased payments for outlier cases classified in DRGs relating to patients with burns from April 1, 1988, through September 30, 1989. This legislation also prohibited the Secretary from issuing any final regulations before September 1, 1988, which changed the method of payment for outlier cases (other than burn cases).

The Secretary published new outlier rules on September 30, 1988, effective for discharges on or after October 1, 1988. The new rules modified the thresholds used in determining whether a case is an outlier and increased the allowable payment amounts for cost outliers. The effect of the changes increased the proportion of all outlier payments going to cost outliers. Previously, about 85 percent of outlier payments were made for length-of-stay (LOS) outliers and 15 percent for cost outliers. Under the new rules, 60 percent of payments were made for cost outliers and 40 percent for LOS outliers. (Cases that meet both length-of-stay and cost outlier criteria are paid under the policy that produces the higher payment.)

To determine the amount of additional payments for outlier cases, the LOS for each case in a diagnosis-related group (DRG) is first compared against the applicable LOS threshold for the category. If the LOS for a case exceeds the threshold, then the case qualifies as a day outlier. In this instance, the hospital is paid its regular payment rate per discharge (for this DRG), plus a per diem amount (44 percent of the hospital's per diem rate for the DRG) for each Medicare covered day above the LOS threshold.

If the case does not qualify as a day outlier, then it may qualify as a cost outlier. The case will qualify for extra payments on this basis if the hospital's Medicare covered charges for the case, ad-

justed to operating costs (and reduced by its indirect teaching and disproportionate share adjustments, if applicable), exceed its cost outlier threshold for the DRG. In this instance, the hospital is paid its regular payment rate per discharge for the DRG, plus the Federal portion of 75 percent of the difference between its adjusted (and reduced) charges for the case and the cost outlier threshold.

In October 1991, Medicare began a transition from cost-based to prospective payment for hospital capital expenses (see below). In the August 30, 1991, final rule implementing this change, the Secretary established a unified outlier payment system for capital and operating costs. For day outliers, payments for covered days were set equal to a percentage of the combined per diem operating and capital payment rates for the DRG. For cost outliers, payments are made only if the combined operating and capital cost for the case exceed the cost outlier threshold for the DRG. As in the case of operating cost payments, standardized capital payment amounts are reduced to establish a pool for outlier payments.

OBRA 1993 legislated two changes in outlier policy that became effective in fiscal year 1995. First, day outliers were phased out over a period of 4 years. By fiscal year 1999, all outlier payments were based solely on cost. Second, cost-outlier thresholds are based on a fixed amount beyond the payment rate for each case so that hospitals incur the same loss on every case before outlier payments are applied.

BBA 1997 eliminates the use of the IME adjustment and DSH payments as part of costs that trigger outlier payments, effective beginning in fiscal year 1998. The new calculation has the effect of increasing outlier payments to hospitals receiving IME and DSH payments because it increases the hospitals' costs with respect to the outlier threshold.

PAYMENT FOR CAPITAL

Until fiscal year 1992, Medicare paid a share of hospitals' reasonable capital-related costs, based on services used by beneficiaries as a proportion of total services furnished by the hospital. (Payments in recent years have been subject to fixed percentage reductions described below.) Four basic types of costs are allowable for Medicare reimbursement:

1. Interest on mortgages, bonds, or other borrowing used to finance capital investments or current operations. Interest costs are generally offset by any interest income earned by the hospital on investments;
2. Depreciation, figured on a straight line basis, for plant and equipment, but not for land;
3. Rental payments for plant and equipment;
4. Property taxes and insurance premiums related to capital assets.

One other type of capital cost was formerly recognized under Medicare, but has not been reimbursable for hospital services since fiscal year 1989: return on equity for investor-owned hospitals. Return on equity payments provided a return to investors equivalent to what they would have earned if they had used their money for some other purpose.

When the new prospective payment system (PPS) was enacted in 1983, Congress excluded capital costs. However, the Secretary was instructed to report to Congress on methods for including capital in PPS and was authorized (but not required) to implement prospective payment for capital on or after October 1, 1986.

The Secretary's authority to include capital in PPS was postponed twice. The Supplemental Appropriations Act of 1986 (Public Law 99-349) delayed prospective capital payment until October 1, 1987. OBRA 1987 (Public Law 100-203) delayed prospective payment until October 1, 1991. However, the Secretary was required, not merely authorized, to implement a prospective system by that date. The system was required to provide that capital payments be made on a per-discharge basis, with adjustments based on each discharge's classification under the DRGs or some similar system. At the Secretary's discretion, the system could include adjustments to reflect variations in costs of construction or borrowing, exceptions (including exceptions for hospitals with existing obligations), and adjustments to reflect hospital occupancy rates.

While prospective payment for capital was delayed (see below), Congress included in budget reconciliation legislation fixed percentage reductions in amounts otherwise payable by Medicare for capital costs. These cuts began in fiscal year 1987, with a 3.5-percent reduction. Medicare would compute its share of total costs for each hospital and then reduce that computed share by 3.5 percent. The percentage reduction increased to 7 percent for the first quarter of fiscal year 1988, 12 percent for the rest of that fiscal year, and 15 percent for fiscal year 1989 through fiscal year 1991. Delays in completing budget legislation meant that there were brief intervals in 1987 and 1989 when no reduction was taken. The reductions originally applied only to capital costs related to inpatient care. Beginning in fiscal year 1990, capital payments for outpatient hospital services were also reduced. The reductions did not apply to certain types of rural hospitals defined in Medicare law, including SCHs, essential access community hospitals, and rural primary care hospitals.

OBRA 1990 (Public Law 101-508) continued capital payment reductions through fiscal year 1995, with the reduction percentage lowered to 10 percent for fiscal years 1992 through 1995. Because prospective payment began in fiscal year 1992, the reductions were not applied directly to each hospital's computed capital costs. Instead, the Secretary was required to set payments under the new system (or under the new system and PPS combined) in such a way as to achieve an aggregate inpatient hospital capital spending reduction of 10 percent, as compared to what would have been spent under the reasonable cost system.

The administration's rules for prospective payment for capital costs were published in the *Federal Register* on August 30, 1991. The rule provides for a 10-year transition to fully prospective payment beginning October 1, 1991.

Under the rule, the Secretary establishes a standard per case capital payment rate, based on average capital costs per case in fiscal year 1989 and updated for inflation and other factors. Through fiscal year 1995, the base rate was adjusted in order to meet the requirement that capital payment rates be set in such a way as to

achieve an aggregate saving of 10 percent relative to what would have been paid under a full cost system. Beginning with fiscal year 1996, that requirement expired. As a result, the standardized payment rates increased by more than 20 percent. The capital standard Federal payment rate for fiscal year 2000 is \$377.03 (\$174.81 for Puerto Rico). The rates are adjusted using the DRG weights and a geographic factor based on area wage indices. Tables D-14, D-15, and D-16 at the end of part I of this appendix give the current geographic adjustment factors (GAFs) for urban areas, for all rural areas in a State, and the factors for hospitals that have reclassified.

In addition, hospitals in large urban areas receive a 3-percent increase and hospitals in Alaska and Hawaii receive a cost-of-living adjustment. A disproportionate share adjustment is provided for urban hospitals with more than 100 beds. A hospital receives approximately a 2.1 percentage point increase in capital payments for each 10 percent increment in its disproportionate share percentage.

An adjustment is also made for the indirect costs of medical education. This adjustment is based on the ratio of residents to average daily inpatient census. Capital payments increase approximately 2.8 percentage points for each 10 percent increment in the residents to average daily census ratio. Additional capital payments are issued for outlier cases.

During a transition period that ends September 30, 2000, each individual hospital's capital payment rate is a blended rate based partly on its own historic capital costs and partly on the Federal rate. In fiscal year 1996, rates were 50 percent hospital-specific and 50 percent Federal. The hospital-specific portion will drop by 10 percent a year, until fully Federal rates take effect in fiscal year 2001.

OBRA 1993 (Public Law 103-66) reduced the Federal rate for inpatient capital expenses by 7.4 percent to correct for inflation forecast errors.

The transition rules include two provisions to assist hospitals most disadvantaged by the shift to prospective payment: a "hold harmless" payment system and exception payments for certain facilities. Hospitals with base year capital costs above average continue to be paid on a cost basis for the portion of their costs related to "old" capital investments (generally assets put in use or obligated by the end of 1990). The rest of the hospital's capital payments are based on the prospective rates. For example, if 75 percent of a hospital's costs are for depreciation and interest on a pre-1990 building, the hospital is paid Medicare's share of those costs (subject to the current 10-percent reduction). For "new" capital, it receives a portion of the prospective rate based on the hospital's own ratio of new to total capital. In this case, because old capital accounts for 75 percent of costs, the hospital's new capital payment is 25 percent of the prospective rate for each case treated. This hold harmless payment system will continue until the end of the 10-year transition, or until a hospital's old capital costs drop to the point at which it is more advantageous for the hospital to shift to fully prospective payment.

Exception payments are made to hospitals whose capital payments under the new system fall significantly short of their actual

capital costs. Most hospitals are assured of receiving a minimum of 70 percent of costs. Specified urban hospitals with a disproportionate share of low-income patients receive at least 80 percent of costs, and rural SCHs at least 90 percent. Computation of exception payments is cumulative. If a hospital received more than the minimum in 1 year but a shortfall the next, the surplus from the first year would be applied before any additional payment would be made in the second year.

The Balanced Budget Act (BBA) of 1997 requires the Secretary to rebase the capital payment rates for discharges occurring on or after October 1, 1997 by the actual rates in effect in fiscal year 1995, so that aggregate capital payments will equal 90 percent of what payments would have been under reasonable cost payments, with an additional reduction in the capital payment rate of 2.1 percent from October 1, 1997 through September 30, 2002. BBA 1997 eliminates the allowance for return on equity capital. In addition, when a facility undergoes a change of ownership, the BBA 1997 provides for a depreciation adjustment of the historical cost of the asset recognized by Medicare, less depreciation allowed, to the owner of record as of the date of enactment, or to the first owner of record of the asset in the case of an asset not in existence as of the date of enactment.

Table D-6 shows the average capital payments per case received by PPS hospitals in each year since the implementation of PPS for inpatient operating costs in 1984. The decrease in average capital payments per case in 1988 reflects the provision in OBRA 1986 and 1987 that reduced Medicare payments below costs. The decrease in 1994 reflects the provision in OBRA 1993 that corrected for previous errors in setting the base capital payment rates. Capital payments generally have stayed between 8 and 9 percent of total inpatient payments. The proportion of capital costs covered by those payments fell from 100 percent under cost-based reimbursement to a low of 87.4 percent in 1990. The implementation of capital PPS initially resulted in increased payment-to-cost ratios, but those fell as the payment rates were adjusted to reflect more accurate data. The jump in the payment-to-cost ratio in 1995—when Medicare inpatient capital payments exceeded cost for the first time ever—reflects the elimination of the budget neutrality requirement in fiscal year 1996.

The per case capital payment amount varies widely by hospital group, as shown in table D-7. Urban hospitals had an average payment rate of \$727 in 1997, for example, while rural hospitals received only \$436 per case. Major teaching hospitals were paid \$1,017 for each case, while nonteaching hospitals got \$561. However, the share of capital payments as a proportion of total PPS inpatient payments, which include both operating and capital payments, was very similar for different types of hospitals. Despite urban hospitals' much higher average payment, almost twice that paid to rural hospitals, the urban payment equalled 113 percent of their capital costs, while rural hospitals were paid 111.9 percent of their capital costs.

TABLE D-6.—PPS CAPITAL PAYMENTS PER CASE, SHARE OF TOTAL PPS INPATIENT PAYMENTS, AND RATIO OF PAYMENTS TO COSTS, 1984-97

Year	Capital pay- ments per case	In percent	
		Share of total PPS inpatient payments	Payment-to-cost ratio
1984	\$310	8.1	100.0
1985	371	8.6	100.0
1986	409	9.1	99.3
1987	426	9.0	97.5
1988	423	8.5	90.2
1989	463	8.6	87.9
1990	476	8.3	87.4
1991	510	8.4	87.6
1992	586	9.1	97.2
1993	589	8.9	95.2
1994	585	8.5	92.7
1995	628	8.8	101.6
1996	702	9.4	119.0
1997	666	8.8	112.9

Note.—Data on prospective payment system capital costs and payments are for hospital accounting years beginning during each Federal fiscal year. Hospitals in Massachusetts and New York excluded from data in 1984 and 1985; hospitals in New Jersey excluded from data in 1984 through 1988; hospitals in Maryland excluded from data in all years.

Source: Medicare Payment Advisory Commission analysis of Medicare Cost Report data from the Health Care Financing Administration.

TABLE D-7.—PROSPECTIVE PAYMENT SYSTEM CAPITAL PAYMENTS PER CASE, SHARE OF TOTAL PPS INPATIENT PAYMENTS, AND RATIO OF PAYMENTS TO COSTS, BY HOSPITAL GROUP, 1997

Hospital group	Capital pay- ments per case	In percent	
		Capital pay- ments as a per- centage of total PPS inpatient payments	Payment-to-cost ratio
Urban	\$726.51	8.8	113.0
Rural	436.09	8.9	111.9
Large urban	779.82	8.7	114.2
Other urban	659.12	8.9	111.4
Rural referral	522.88	9.0	108.0
Sole community	413.64	8.5	111.7
Other rural	383.29	8.9	116.1
Major teaching	101.67	8.0	117.4
Other teaching	715.56	8.7	113.8
Nonteaching	561.46	9.2	110.6
Disproportionate share large urban	831.71	8.4	113.5
Disproportionate share other urban	677.41	8.6	112.8
Disproportionate share rural	446.47	8.9	112.3

TABLE D-7.—PROSPECTIVE PAYMENT SYSTEM CAPITAL PAYMENTS PER CASE, SHARE OF TOTAL PPS INPATIENT PAYMENTS, AND RATIO OF PAYMENTS TO COSTS, BY HOSPITAL GROUP, 1997—Continued

Hospital group	Capital payments per case	In percent	
		Capital payments as a percentage of total PPS inpatient payments	Payment-to-cost ratio
Nondisproportionate share	602.22	9.2	111.9
Teaching and disproportionate share ..	828.78	8.3	114.4
Teaching only	740.88	8.9	116.4
Disproportionate share only	594.31	9.0	111.0
Nonteaching nondisproportionate share	537.6	9.4	110.3
Voluntary	683.49	8.8	114.4
Proprietary	681.06	9.5	104.4
Urban government	698.11	7.9	112.8
Rural government	390.11	8.6	116.2
All hospitals	666.43	8.8	112.9

Source: Medicare Payment Advisory Commission analysis of Medicare Cost Report data from the Health Care Financing Administration.

PAYMENTS ON A REASONABLE COST BASIS

Costs for certain items are excluded from the PPS and thus are not included in the prospective payment rates. As explained in the sections below, Medicare pays for its share of several costs according to the former reasonable cost-based system.

PHYSICIANS IN TEACHING HOSPITALS

Physician services in hospitals are paid under the physician fee schedule. If a teaching hospital so elects, the direct medical and surgical services of physicians in such hospitals would be paid for on the basis of reasonable costs.

QUALIFIED NONPHYSICIAN ANESTHETISTS IN CERTAIN RURAL HOSPITALS

Anesthesia services furnished by hospital-employed nonphysician anesthetists (certified registered nurse anesthetists and anesthesiologist's assistants) or obtained under arrangement may be paid on a reasonable cost basis, if the rural or nonurban hospital demonstrates to its intermediary that it meets established criteria regarding employment arrangements and volume of services provided. In fiscal year 1999, 639 hospitals received approximately \$33.9 million in Medicare payments for these services.

ORGAN ACQUISITION COSTS

The estimated net expenses associated with Medicare organ acquisition in certified transplantation centers are excluded from the PPS and paid on a reasonable cost basis.

PASSTHROUGH PAYMENTS FOR HEMOPHILIA INPATIENTS

The Omnibus Budget Reconciliation Act (OBRA) of 1989 excluded the cost of administering blood clotting factors for hemophilia inpatients from PPS, for items furnished from June 19, 1990, through December 19, 1991. OBRA 1993 further extended this provision through fiscal year 1994. The price per unit for the blood clotting factors was set at a predetermined rate, in consultation with the Prospective Payment Assessment Commission (ProPAC), and the cost of administering the blood clotting factors was determined by multiplying a predetermined price per unit of blood clotting factor by the number of units provided to the individual. BBA 1997 makes the payment for the costs of administering blood clotting factor permanent effective October 1, 1997.

BAD DEBTS OF MEDICARE BENEFICIARIES

An additional payment is made to hospitals for bad debts attributable to unpaid deductible and copayment amounts related to covered services received by Medicare beneficiaries.

The Secretary is prohibited from making any change in the policy in effect on August 1, 1987, including changes in hospital documentation requirements. OBRA 1989 prohibited the Secretary from requiring hospitals to change their bad debt collection policy if a fiscal intermediary accepted the policy in accordance with the rules in effect as of August 1, 1987, for indigency determination procedures, for recordkeeping, and for determining whether to refer a claim to an external collection agency. For such facilities, the Secretary also may not collect from the hospital on the basis of an expectation of a change in the hospital's collection policy. BBA 1997 reduces bad debt payments by 25 percent in fiscal year 1998; 40 percent in fiscal year 1999; and 45 percent in fiscal year 2000 and each subsequent fiscal year.

SPECIAL TREATMENT OF CERTAIN FACILITIES UNDER PPS

SOLE COMMUNITY HOSPITALS

Sole community hospitals (SCHs) are hospitals that, because of factors such as isolated location, weather conditions, travel conditions, or absence of other hospitals, are the sole source of inpatient services reasonably available in a geographic area, or are located more than 35 road miles from another hospital. In addition, the Secretary is authorized to designate a hospital as an SCH if, by reason of factors such as travel time to the nearest alternative source of appropriate inpatient care, location, weather conditions, travel conditions, or absence of other like hospitals, the Secretary determines that it is the sole source of inpatient hospital services reasonably available to individuals in a geographic area.

OBRA 1989 established new payment provisions that apply to all SCHs for cost reporting periods beginning after April 1, 1990. An SCH may receive the higher of the following rates as the basis of reimbursement: a target amount based on 100 percent hospital-specific prospective rates based on fiscal year 1982 costs updated to the present; a target amount based on hospital-specific prospective rates based on fiscal year 1987 costs updated to the present; or the Federal PPS rate. Current SCHs not meeting the criteria are allowed to continue to qualify for payments as an SCH.

OBRA 1989 made permanent the provision by which an SCH may request additional payments if the hospital experiences a decrease of more than 5 percent in its total inpatient cases due to circumstances beyond its control. An SCH may receive such payments if it meets SCH criteria but is not being paid as an SCH. BBRA 1999 authorizes a SCH that was paid using a target amount based on its 1982 or 1987 hospital specific rates during cost reporting periods beginning during 1999 to rebase its target amount and use 1996 hospital specific rates. The rebased target amount for qualifying hospitals will be fully implemented for discharges during fiscal year 2004 and subsequently. BBRA 1999 also provided a full market basket index (MBI) update for SCH discharges in fiscal year 2001. As of January 1999, 785 hospitals were classified as SCHs.

MEDICARE DEPENDENT HOSPITALS

OBRA 1989 created a new classification of hospitals termed Medicare dependent hospitals (MDH). MDHs are hospitals that are located in a rural area, have 100 beds or less, are not classified as a sole community provider, and for which not less than 60 percent of inpatient days or discharges in the hospital cost reporting period that began during fiscal year 1987 were attributable to Medicare. These hospitals are reimbursed in the same fashion as sole community providers during cost reporting periods beginning on or after April 1, 1990, and ending on or before March 31, 1993. OBRA 1993 (Public Law 103-66) extended additional payments to MDHs through September 30, 1994, on a phase-down basis. BBA 1997 extends the MDH Program through October 1, 2001. BBRA 1999 extended the MDH Program through October 1, 2006. As of January 1999, 356 hospitals were classified as MDHs.

REFERRAL CENTERS

The Secretary is authorized to provide exceptions and adjustments as appropriate for rural referral centers (RRCs). These centers are defined as:

1. Rural hospitals having 275 or more beds;
2. Hospitals having at least 50 percent of their Medicare patients referred from other hospitals or from physicians not on the hospital's staff, at least 60 percent of their Medicare patients residing more than 25 miles from the hospital, and at least 60 percent of the services furnished to Medicare beneficiaries are furnished to those who live 25 miles or more from the hospital; or
3. Rural hospitals meeting the following criteria for hospital cost reporting periods beginning on or after October 1, 1985:

- A case-mix index equal to or greater than the median case mix for all urban hospitals (the national standard), or the median case mix for urban hospitals located in the same census region, excluding hospitals with approved teaching programs. The case-mix index is a measure of the relative costliness of the hospital's mixture of cases among the DRGs compared to the national average mixture of Medicare cases;
- A minimum of 5,000 discharges, the national discharge criterion (3,000 in the case of osteopathic hospitals), or the median number of discharges in urban hospitals for the region in which the hospital is located; and
- At least one of the following three criteria: more than 50 percent of the hospital's medical staff are specialists, at least 60 percent of discharges are for inpatients who reside more than 25 miles from the hospital, or at least 40 percent of inpatients treated at the hospital have been referred either from physicians not on the hospital's staff or from other hospitals.

Referral centers are paid prospective payments based on the applicable urban payment amount rather than the rural payment amount, as adjusted by the hospital's area wage index. The applicable amount is the "other urban" rate (i.e., the rate for urban areas with 1 million or fewer people) for all referral centers except those (if any) located in metropolitan statistical areas (MSAs) greater than 1 million.

OBRA 1993 extended the classification through fiscal year 1994 for those referral centers classified as of September 30, 1992. BBA 1997 provides that hospitals designated as RRCs since fiscal year 1991 are permanently classified as RRCs. BBA 1997 also provides that any hospital ever classified as an RRC cannot be denied a request for geographic reclassification on the basis of any comparison of its average hourly wage with the average hourly wage of hospitals in the area where the RRC is located.

Although referral centers have lost some of the benefit of their classification status because of the equalization of the other urban and rural payment rates in fiscal year 1995, referral centers continue to be entitled to preferential consideration before the Medicare Geographic Classification Review Board (see below). As of January 1999, 231 hospitals were classified as referral centers.

CRITICAL ACCESS HOSPITALS

BBA 1997 provided for the Medicare Rural Hospital Flexibility Program which creates a new category of rural hospitals, critical access hospitals (CAHs) and authorizes a grant program of \$25 million annually for 5 years to establish networks for improving access to health care services in rural communities. Based on earlier demonstration programs of rural primary care hospitals and medical assistance facilities, CAHs provide emergency, outpatient and limited inpatient services in rural areas. To qualify as a CAH, the rural, nonprofit or public hospital must be located more than 35 miles from another hospital or designated by the State as a necessary provider of health care; provide 24-hour emergency services; and operate a limited number of inpatient beds in which hospital stays can be no more than 96 hours except under certain cir-

cumstances. Generally, a rural hospital designated as a CAH receives reasonable, cost based reimbursement for care rendered to Medicare beneficiaries. Before a hospital can be designated as a CAH, the State must submit and have approved a rural health plan implementing the Medicare Rural Hospital Flexibility Program.

The Balanced Budget Refinement Act of 1999 (BBRA 1999) modified the CAH Program and provided that: the 96-hour length-of-stay limitation is applied on an average annual basis; for-profit and, under certain circumstances, hospitals that have closed within the past 10 years may be designated as CAHs; and CAHs may elect either a cost-based hospital outpatient service payment plus a fee schedule payment for professional services or an all-inclusive rate.

As of September 1999, 11 States were in the process of drafting rural health plans; 2 States, New Jersey and Rhode Island, are ineligible for program participation because they have no rural areas; and 35 States have HCFA approved rural health plans. Fifty-eight CAHs have been designated. Twelve medical assistance facility hospitals in Montana converted to CAHs on October 1, 1999; and 85 hospitals are in the process of applying for CAH designation.

GEOGRAPHIC RECLASSIFICATION OF HOSPITALS

OBRA 1989 (Public Law 101-239) established the Medicare Geographic Classification Review Board to consider appeals by hospitals for a change in classification from rural to urban, or from one urban area to another urban area. The Board was created to determine whether a hospital should be redesignated to an area with which it has close proximity for purposes of using the other area's standardized amount, wage index, or both. For geographic reclassifications effective for discharges in fiscal year 1994 and subsequent years, a hospital may seek reclassification to only one area. Urban hospitals must be no more than 15 miles from the area to which they seek reassignment, and rural hospitals must be no more than 35 miles from such an area.

A hospital may qualify for the payment rate of another area if it proves that its incurred costs are comparable to those of hospitals in that area. To use an area's wage index, a hospital must demonstrate that: (1) its average hourly wage is equal to at least 84 percent of the average hourly wage of hospitals in the area to which it seeks redesignation; and (2) its average hourly wage weighted for occupational categories is at least 90 percent of the average hourly wage of hospitals in the area to which it seeks redesignation. For geographic reclassifications effective for discharges in fiscal year 1994 and subsequent years, the wage index guidelines were revised to specify, in addition, that a hospital cannot be reclassified unless its average hourly wage is at least 108 percent of the average hourly wage of the area in which it is located.

Effective for fiscal year 1996 and subsequent years, a hospital may not be reclassified for purposes of using another area's standardized amount if the area to which the hospital seeks reclassification does not have a higher standardized amount than that currently received by the hospital. In addition, a hospital that seeks reclassification for the purpose of using another area's wage index may apply for reclassification only to an area that has a higher

pre-reclassified average hourly wage than that of the hospital's original geographic area. BBA 1997 provides that hospitals can request geographic reclassification for the purposes of receiving additional disproportionate share hospital (DSH) payments for the period ending 30 months after enactment. Aside from reclassifications through the Medicare Geographic Classification Review Board, hospitals have also been reclassified by law (OBRA 1987, Public Law 100-203).

Public Law 100-203 provided for the reclassification of rural hospitals as urban if the county in which the hospital was located was adjacent to two or more MSAs and met criteria regarding commuting patterns of its residents to the central counties of the adjacent MSAs. BBRA 1999 provided for an update of the standards used for the geographic reclassification of "rural deemed urban" hospitals.

BBRA 1999 also provided that certain urban hospitals could be reclassified as rural hospitals if the hospital is located in a rural census tract of an MSA (as determined under the most recent Goldsmith Modification); is located in an area designated by State law or regulation as a rural area; the hospital would qualify as a referral center or as an SCH if the hospital were located in a rural area or the hospital meets other criteria as specified by the Secretary. Finally, BBRA 1999 reclassified certain counties to accommodate the circumstances of specific hospitals as well.

HOSPITALS EXCLUDED FROM THE PROSPECTIVE PAYMENT SYSTEM

PPS-EXEMPT HOSPITALS

The following hospitals are by law excluded from the PPS and are paid on the basis of reasonable costs, subject to the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA) rate of increase limits: psychiatric hospitals, rehabilitation hospitals, psychiatric or rehabilitation units which are distinct parts of a hospital, alcohol and drug abuse hospitals and such distinct units of hospitals (for cost reporting periods beginning before October 1, 1987), children's hospitals (with patients averaging under 18 years of age), long-term hospitals (with an average inpatient length of stay greater than 25 days), and cancer hospitals (hospitals extensively involved in treatment for and research on cancer) classified as such before December 31, 1990. In addition, the act provides an exemption for any hospital classified as a cancer hospital before December 31, 1991, that is located in a State that has a PPS waiver under section 1814(b). In addition, there are special cases in which the PPS is not applied, such as emergency services provided to Medicare beneficiaries in hospitals not participating in Medicare.

OBRA 1990 increased the cost limits imposed on hospitals exempt from PPS. Under prior law, hospitals with costs in excess of the cost limits imposed by the TEFRA would be reimbursed for their cost up to the TEFRA limit. Under OBRA 1990, hospitals with costs exceeding the cost limits imposed by TEFRA receive 50 percent of the costs that exceed the limit, up to a maximum of 110 percent of the limit. In addition, the Secretary is directed to de-

velop a new prospective payment methodology for exempt hospitals, or to substantially modify the current target-rate system.

OBRA 1993 provided for an update factor to the cost limits of market basket minus 1.0 percentage point for fiscal years 1994 through 1997. Hospitals with operating costs in fiscal year 1990 that exceeded the target amount by more than 10 percent are exempt from the update reduction, with partial reductions applied to hospitals near the threshold. Hospitals reimbursed under approved State cost control systems are also excluded from the prospective rates.

For PPS-exempt facilities, BBA 1997 sets the fiscal year 1998 update at 0 percent, and for fiscal years 1999–2002, the update factor will vary depending on a hospital's target amount and costs. For hospitals with costs: (1) that equal or exceed their target amounts by 10 percent or more, the update will be equal to the market basket; (2) that exceed their target, but by less than 10 percent, the update factor will be equal to zero or, if greater, the market basket minus 0.25 percentage points for each percentage point by which costs are less than 10 percent over the target; (3) that are either at their target, or below (but not below $\frac{2}{3}$ of the target amount for the hospital), the update factor will be equal to zero or, if greater, the market basket percentage minus 2.5 percentage points; or (4) that do not exceed $\frac{2}{3}$ of their target amount, the update factor will be equal to 0 percent.

In addition, BBA 1997 includes several provisions affecting Medicare payments to PPS-exempt hospitals and units. BBA 1997 reduces the capital payment update amount for PPS-exempt hospitals and units by 15 percent for fiscal years 1998–2002. BBA 1997 establishes a cap on PPS-exempt TEFRA limits, also known as target amounts, for PPS-exempt hospitals or units for cost reporting periods beginning on or after October 1, 1997 and before October 1, 2002. The Secretary is required to estimate the 75th percentile of the target amounts for hospitals for cost reporting periods ending during fiscal year 1996, and then update the amount up to the first cost reporting period beginning on or after October 1, 1997, by a factor equal to the market basket percentage increase. For cost reporting periods beginning during each of fiscal years 1999–2002, the Secretary is required to update the amount by a factor equal to the market basket increase. BBRA 1999 adjusts the labor-related portion of the 75 percent cap to reflect differences between the wage-related costs in the area of the hospital and the national average of such costs within the same class of hospitals beginning for cost reporting periods on or after October 1, 1999.

BBA 1997 provides for changing bonus payments to PPS-exempt facilities to equal the lesser of: (1) 15 percent of the amount by which the target amount exceeds the amount of operating costs, or (2) 2 percent of the target amount. In addition, for cost reporting periods beginning on or after October 1, 1997, BBA 1997 provides for continuous improvement bonus payments for certain eligible hospitals. BBRA 1999 increases the amount of bonus payments that may be made to eligible long-term care and psychiatric providers. Eligible providers may receive up to a 1.5 percent bonus payment for cost reporting periods beginning on or after October 1, 2000, and before September 30, 2001, and up to a 2 percent bonus

payment for cost reporting periods beginning on or after October 1, 2001, and before September 30, 2002.

BBA 1997 establishes different payment and target amount rules for new PPS-exempt hospitals or distinct-part units within hospitals that first received Medicare payments on or after October 1, 1997. BBA 1997 provides PPS-exempt hospitals and distinct units of hospitals that received Medicare payments for services furnished before January 1, 1990, with the option of rebasing the hospital's target amount for the 12-month cost reporting period beginning during fiscal year 1998.

BBA 1997 also requires the Secretary to establish a case-mix adjusted PPS for rehabilitation hospitals and distinct-part units, effective beginning in fiscal year 2001. The Secretary is required to establish: (1) classes of discharges of rehabilitation facilities by patient case-mix groups based on impairment, age, related prior hospitalization, comorbidities, and functional capability of the discharged individual and other appropriate factors; and (2) a method of classifying specific discharges from rehabilitation facilities within these groups. BBRA 1999 requires the Secretary to base the PPS for rehabilitation hospitals and distinct part units on discharges. The Secretary is also required to establish classes of patient discharges of rehabilitation facilities by functional related groups, based on impairment, age, comorbidities, and functional capability of the patient as well as other factors deemed appropriated to improve the explanatory power of functional independence measure-function related groups. BBRA 1999 also clarifies that payments to rehabilitation facilities may be adjusted to account for the early transfer of patients to another site of care. The Secretary is also required to submit a study to Congress not later than 3 years after the implementation of PPS on its impact on utilization and access to rehabilitation services.

BBA 1997 requires the Secretary to collect data to develop, establish, administer and evaluate a case mix adjusted PPS for long term care hospitals. BBRA 1999 requires the Secretary to report to the appropriate congressional committees by October 1, 2001, on a discharge-based PPS for long term care hospitals which would be implemented in a budget-neutral fashion for cost reporting periods beginning on or after October 1, 2002. The Secretary may require long term care hospitals to submit information to develop the payment system. BBRA 1999 also requires the Secretary to report to the appropriate congressional committees by October 1, 2001, on a per diem-based PPS with an adequate patient classification system for psychiatric hospitals (and distinct part units) which would be implemented in a budget-neutral fashion for cost reporting periods beginning on or after October 1, 2002. The Secretary may require psychiatric hospitals and units to submit information to develop the payment system.

STATE SYSTEMS

Section 1886(c) of the Social Security Act (as added by TEFRA) gave the Secretary of the U.S. Department of Health and Human Services (DHHS) discretion to reimburse hospitals in a State according to the State's hospital reimbursement control system rather than according to Medicare's reimbursement methods if the State

requests this change and if DHHS determines that the State system meets certain requirements. Currently, only Maryland has a waiver to operate its own system.

Public Laws 98–21 and 98–369 added several more requirements for State systems. According to final regulations published by DHHS on April 24, 1986 (51 F.R. 15481) implementing these legislative changes, DHHS has the discretion to allow Medicare hospital reimbursement to be made in accordance with a State reimbursement control system if the chief executive officer of the State requests approval of the State system, and provided that the State system:

1. Applies to substantially all non-Federal acute care hospitals in the State;
2. Applies to at least 75 percent of all inpatient revenues or expenses for the State;
3. Provides assurances that payers, hospital employees and patients in the State will be treated equitably under its system;
4. Provides assurances that its system will not result in greater Medicare expenditures over 36-month periods;
5. Does not preclude health maintenance organizations or competitive medical plans from negotiating directly with hospitals concerning payment for inpatient services;
6. Limits hospital charges to Medicare beneficiaries to deductibles, coinsurance, and services for which the beneficiary would not be entitled to have payment made under Medicare part A; and prohibits payment under part B of Medicare for nonphysician services provided to hospital inpatients unless this prohibition is waived.

Public Law 101–239 (OBRA 1989) required the Secretary's test of effectiveness of a State cost containment system to be based on the aggregate rate of increase from October 1, 1984, to the most recent date for which annual data are available. This provision also extended the waiver for the New York rural hospital payment demonstration.

Special provisions apply to States that have existing demonstration projects approved by HCFA under section 402 of the Social Security Amendments of 1967 or section 222(a) of the Social Security Amendment of 1972 for the operation of State reimbursement control systems. DHHS approval of a State's application to continue the operation of a system upon expiration of the demonstration project is mandatory if, and for so long as, the system meets the minimum requirements described in the six items listed above.

Public Law 101–508 revised the Secretary's test of effectiveness of a State cost containment system to be based on the rate of increase in costs per hospital inpatient admission as compared to the rate of increase in such costs with respect to all hospitals between January 1, 1981, and the present. In addition, OBRA 1990 provided that a State no longer qualifying for a prospective payment system (PPS) waiver be provided with a reasonable period, not to exceed 2 years, for transition from the State system to the national payment system, and required restoration of the waiver if the State returned to compliance during the transition period.

ADMINISTRATION

PROSPECTIVE PAYMENT ASSESSMENT COMMISSION/MEDICARE PAYMENT ADVISORY COMMISSION

The Prospective Payment Assessment Commission (ProPAC) was a commission composed of 17 independent experts charged with advising the Congress on PPS and Medicare payment policies. BBA 1997 replaced ProPAC and the Physician Payment Review Commission with a 15-member Medicare Payment Advisory Commission (MedPAC). MedPAC is required to submit annual reports to Congress on March 1 and June 1 concerning the Medicare Program.

ADMINISTRATIVE AND JUDICIAL REVIEW

Administrative and judicial appeals are allowed under procedures and authorities already established under the Medicare Program. However, the law precludes administrative and judicial review of: (1) the “budget neutrality” adjustment (see above), and (2) the diagnosis-related group (DRG) payment amounts, including the establishment of DRGs, the methodology for classifying discharges within DRGs, and the DRG weighting factors.

REVIEW ACTIVITIES

Public Law 97–248, known as TEFRA, replaced the existing Professional Standards Review Organization Program with the Utilization and Quality Control Peer Review Program. The Secretary of DHHS was required to enter into performance-based contracts with physician-sponsored or physician-access organizations known as peer review organizations (PROs). As a condition of receiving payments under the PPS, hospitals are required to enter into an agreement with a PRO under which the PRO reviews the validity of diagnostic and procedural information provided by the hospitals; the completeness, adequacy and quality of care provided; and the appropriateness of admissions patterns, discharges, lengths of stay, transfers, and services furnished in outlier cases.

Since 1982, the statute governing the PRO Program has been amended numerous times, and as of October 1999 the PROs are operating under the sixth “scope of work.”

HISTORICAL TRENDS IN PPS PAYMENTS, COSTS, AND MARGINS

MEDICARE PAYMENTS TO HOSPITALS

In fiscal year 2000, hospitals will be paid an estimated \$93.2 billion for Medicare-covered inpatient hospitalization as shown in table D–8. The largest share of this amount, \$71.5 billion, will be for PPS inpatient operating costs. The Medicare Program will provide more than 90 percent of these payments and the remaining amount will come from beneficiaries for deductibles and coinsurance. PPS hospitals will also receive some \$6.1 billion in capital payments. Another \$13.6 billion will be paid for operating and capital costs related to services provided in PPS-excluded facilities, which include psychiatric and rehabilitation hospitals and distinct-

part units as well as long-term and children's hospitals. Hospitals will also receive \$2.0 billion for the direct costs of training programs, including those for interns and residents and for nursing and allied health personnel.

TABLE D-8.—TOTAL MEDICARE PAYMENTS TO HOSPITALS FOR INPATIENT HOSPITALIZATION BY PAYMENT TYPE, FISCAL YEAR 2000

[In billions of dollars]

Payment category	Amount	Amount
Program	71.8	
Operating	65.7	
Capital	6.1	
Beneficiary copayments	5.8	
Total PPS		\$77.6
Program	12.6	
Operating	11.9	
Capital	0.8	
Beneficiary copayments	1.0	
Total PPS-excluded		13.6
Interns and residents	1.7	
Nursing and allied health	0.3	
Total direct medical education		2.0
Total		93.2

Source: Congressional Budget Office.

TRENDS IN PPS OPERATING PAYMENTS AND COSTS

The increase in PPS operating payments per case has differed from the update factor in every year, as shown in table D-9. In the first 2 years of prospective payment, payments per discharge rose sharply, by 18.5 percent and 10.5 percent, respectively. This is attributable to two factors: overestimation of the base year hospital costs upon which the initial PPS rates were set due to the use of unaudited Medicare Cost Reports, and a large increase in the aggregate case mix index in the early years because of more emphasis on accurate DRG coding and complete documentation of the medical record.

After an increase of 3.2 percent in 1986, payments per case grew at an annual rate of 5.9 percent from 1987 through 1992, as a result of large increases in both the PPS MBI and the aggregate Medicare case-mix index. From 1993 through 1998, the PPS update was lower with zero percent update in 1998. Lower updates coupled with a declining case mix index (table D-13) has resulted in smaller increases in PPS payments per case.

TABLE D-9.—COMPARISON OF INCREASES IN HOSPITAL MARKET BASKET, AVERAGE PPS UPDATES, PPS OPERATING PAYMENTS PER CASE, AND PPS OPERATING COSTS PER CASE, FISCAL YEARS 1984-98

[In percent]

Fiscal year	Forecasted increase in PPS market basket ¹	Annual increase in PPS market basket	PPS update			Increase in PPS operating payments per case ³	Increase in PPS operating costs per case
			ProPAC recommendation ²	HCFA recommendation	Actual update		
1984 ..	4.9	5.1	NA	4.7	4.7	18.5	1.8
1985 ..	4.0	4.0	NA	4.5	4.5	10.5	11.0
1986 ..	4.3	3.0	1.5	0.0	0.5	3.2	9.6
1987 ..	3.7	3.3	1.7	0.5	1.2	5.4	9.1
1988 ..	4.7	4.8	2.3	0.8	1.5	6.0	9.0
1989 ..	5.4	5.5	4.2	2.7	3.3	6.6	9.2
1990 ..	5.5	4.6	4.1	4.0	⁴ 4.7	6.5	8.9
1991 ..	5.2	4.4	4.7	3.7	3.4	5.9	7.0
1992 ..	4.4	3.2	3.0	3.0	3.0	5.2	4.7
1993 ..	4.1	3.1	2.8	2.7	2.7	3.8	1.2
1994 ..	4.3	2.6	3.6	⁵ 2.6	2.0	3.6	-1.1
1995 ..	3.6	3.1	2.6	2.0	2.0	4.0	-1.1
1996 ..	3.5	2.4	1.7	1.5	1.5	4.2	-0.6
1997 ..	2.5	2.0	1.0	1.0	2.0	2.5	0.1
1998 ..	2.9	2.9	0.0	0.0	0.0	1.7	NA

¹ Based on data available when final PPS rule was issued.² Based on ProPAC's annual Report and Recommendations to the Congress and market basket forecast when final PPS rule was issued.³ Increases for 1984-95 based on data from Medicare Cost Reports, which correspond to hospital cost reporting periods, rather than Federal fiscal years. Increases for 1996-98 based on PPS update and estimated case-mix index increase.⁴ Actual updates for fiscal year 1990 adjusted to reflect 1.22 percent across-the-board reduction in DRG weights.⁵ Annual update based on HCFA's recommendation that rates be frozen at 1993 level through January 1, 1994.

NA—Not available.

Source: Medicare Payment Advisory Commission.

Following an increase of only 1.8 percent in the first year of PPS, PPS operating costs per discharge rose by about 11 percent in the second year, and about 9 percent from 1986 through 1990. However, the 7.0-percent growth in operating costs per case in 1991 was the smallest since the first year of PPS, and the rise of 1.2 percent in 1993 was below general inflation. Costs per case actually decreased from 1994 through 1996, with a small increase (0.1 percent) in 1997.

Cost growth experience has not been uniform across hospitals, as shown in table D-10. Through 1990, urban and rural hospitals had about the same rate of increase. In the first year, both groups reacted to prospective payment by holding their cost growth far below the rates prevailing before PPS, while annual cost increases in the following 6 years were much higher for both groups. From 1991 through 1995, however, urban hospitals held their cost growth to 1.9 percent annually, while rural hospital costs rose at a 3.4-

percent rate. That pattern continued throughout 1996 and 1997 with costs per case increasing in rural hospitals at a higher rate than in urban hospitals.

TABLE D-10.—ANNUAL RATE OF CHANGE IN PPS OPERATING COSTS PER CASE BY HOSPITAL GROUP AND PERIOD, 1984-97

[In percent]

Hospital group	Period				
	1984	1985-90	1991-95	1996	1997
Urban	1.6	9.4	1.9	-0.9	0.0
Rural	1.5	9.2	3.4	1.3	1.5
Large urban	0.6	9.2	1.5	-0.9	-0.1
Other urban	3.2	9.8	2.4	-0.6	0.2
Rural referral	1.5	9.7	3.4	0.0	1.0
Sole community	1.3	8.6	3.6	2.3	1.4
Other rural	1.4	9.2	3.3	1.7	1.7
Major teaching	1.3	9.1	1.7	-0.3	-0.4
Other teaching	1.3	9.4	2.2	-0.7	0.1
Nonteaching	1.9	9.5	2.0	-0.7	0.6
Disproportionate share large urban	0.0	9.0	1.4	-1.0	0.1
Disproportionate share other urban	3.2	9.7	2.6	-0.5	0.2
Disproportionate share rural ..	0.3	9.7	3.4	0.5	1.8
Nondisproportionate share	2.4	9.6	2.2	-0.3	0.0
Teaching and disproportionate share	0.7	9.2	2.0	-0.4	0.0
Teaching only	2.6	9.7	2.4	-0.7	-0.7
Disproportionate share only ...	1.8	9.5	1.8	-1.5	0.4
Nonteaching nondisproportionate share	2.0	9.4	2.1	-0.2	0.8
Voluntary	1.8	9.3	2.2	-0.3	0.0
Proprietary	0.7	10.0	0.3	-3.7	0.7
Urban government	2.4	9.6	2.1	-0.6	0.1
Rural government	1.5	9.3	3.9	2.0	1.7
All hospitals	1.8	9.5	2.1	-0.6	0.1

Note.—Data on PPS operating costs and payments are for hospital accounting years beginning during each Federal fiscal year. Changes based on cohorts of hospitals with Medicare Cost Reports in two consecutive years. Hospitals in Massachusetts and New York excluded from data in 1984 and 1985; hospitals in New Jersey excluded from data in 1984 through 1988; hospitals in Maryland excluded from data in all years.

Source: Medicare Payment Advisory Commission analysis of Medicare Cost Report data from the Health Care Financing Administration.

The recent low rate of cost growth among hospitals in large urban areas may reflect the fact that the most rapid changes in the health care system appear to be occurring in the largest cities. From 1991 through 1995, these hospitals' costs per discharge rose at a rate 0.9 percentage points below that for other urban hospitals

and 1.9 percentage points below that for rural hospitals. Large urban hospitals continue to show greater success in controlling increases in cost per case in 1996 and 1997 than those categories of hospitals.

The pattern of cost increases also varies substantially by ownership. In the first year of PPS, when hospitals perceived potential pressure to control costs, proprietary facilities had by far the smallest increase of any group. Once this pressure lessened, costs increased sharply through 1990 for all groups, including the proprietaries. However, from 1991 on, proprietary hospitals reined in their costs to a far greater extent than the other groups. That pattern continued in 1996 but did not hold true in 1997. In 1997, voluntary and urban government hospitals displayed smaller increases in operating costs per case than proprietary hospitals.

PPS INPATIENT MARGINS

The PPS inpatient margin compares combined Medicare operating and capital payments with the corresponding costs. In 1997, the aggregate PPS margin rose for the sixth consecutive year as shown in table D-11. This contrasts with a declining trend through the first 8-9 years of prospective payment, during which the margin fell to a low of -2.4 percent in 1991. The turnaround is attributable to the sharp slowdown in hospital cost growth with the continuation of current trends. The aggregate PPS inpatient margin for 1997 is 17.0 percent, the highest PPS inpatient margin in the 14 years of prospective payment.

INPATIENT MARGINS BY HOSPITAL TYPE

PPS inpatient margins vary by hospital group. The margin for urban hospitals was 14.5 percent in the first year—exceeding that for rural hospitals by 6.8 percentage points. Beginning in fiscal year 1986, the Congress enacted a series of policy changes designed to increase payment for rural hospitals. By 1988, although the difference between the two groups had decreased to 4.5 percentage points, rural hospitals had negative margins while urban ones were still receiving payments that exceeded their costs. The disparity narrowed to 0.5 percentage points by 1992, but has widened as urban hospitals have constrained their costs more than rural hospitals.

TABLE D-11.—PPS INPATIENT (OPERATING PLUS CAPITAL) MARGINS, BY HOSPITAL GROUP, FIRST 14 YEARS OF PPS, 1984-97

[In percent]

Hospital group	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Urban	14.5	13.9	9.8	6.8	3.3	0.8	-1.2	-2.2	-0.9	1.3	5.7	10.7	16.4	18.1
Rural	7.7	7.4	2.2	0.2	-1.2	-2.9	-3.7	-3.7	-1.4	-0.7	0.2	5.1	9.8	9.5
Large urban	15.0	13.9	10.0	6.8	3.1	0.7	-0.7	-1.4	0.4	2.8	7.8	12.7	18.7	20.5
Other urban	13.8	14.0	9.4	6.8	3.7	0.9	-1.9	-3.4	-2.9	-1.0	2.5	7.8	12.8	14.4
Rural referral	9.9	12.9	7.9	6.1	3.9	1.2	0.0	-0.6	2.9	2.6	2.8	6.1	9.9	10.3
Sole community	8.0	6.4	2.1	0.3	-1.2	-2.6	-1.2	-0.8	2.5	3.8	4.4	7.3	11.3	10.1
Other rural	7.0	6.0	0.3	-1.9	-3.2	-4.5	-6.0	-6.0	-4.8	-3.8	-2.5	3.7	8.9	8.3
Major teaching	18.6	19.9	15.2	12.9	10.0	7.9	7.2	7.5	9.3	10.9	16.4	20.5	25.1	28.5
Other teaching	14.9	14.5	10.5	7.2	3.9	1.4	-1.0	-2.2	-1.2	0.8	4.6	9.3	14.5	16.2
Nonteaching	11.2	10.0	5.2	2.5	-0.7	-3.3	-5.2	-6.4	-5.0	-3.0	0.4	6.0	11.6	12.2
Disproportionate share large urban	15.3	14.2	10.8	8.3	5.5	3.5	3.0	2.8	5.0	7.8	13.1	17.6	22.9	24.4
Disproportionate share other urban	13.5	14.2	10.0	7.8	5.0	2.4	0.0	-1.3	-1.0	0.9	4.5	10.0	14.8	16.6
Disproportionate share rural	8.5	8.2	2.8	0.4	-0.5	-2.1	-2.2	-1.8	0.2	0.5	2.2	7.6	12.3	11.7
Nondisproportionate share	12.6	11.9	7.0	3.6	-0.3	-2.9	-5.5	-6.7	-5.5	-4.0	-0.7	4.4	10.4	11.8
Teaching and disproportionate share ..	15.8	15.9	12.4	10.0	7.6	5.3	4.1	3.6	5.0	7.3	11.8	16.2	21.0	23.0
Teaching only	16.1	16.3	11.3	7.0	2.2	-0.1	-3.2	-4.0	-2.9	-1.7	2.2	7.0	13.5	15.6
Disproportionate share only	11.6	10.7	6.1	3.6	0.6	-1.6	-3.0	-3.7	-2.3	-0.1	3.9	10.0	15.6	15.9
Nonteaching nondisproportionate share	10.8	9.5	4.5	1.5	-1.8	-4.6	-6.9	-8.4	-7.2	-5.4	-2.5	2.7	8.2	9.2
Voluntary	14.0	13.7	9.6	6.5	3.1	0.7	-1.3	-2.5	-1.1	0.6	4.3	9.0	14.6	16.4
Proprietary	12.9	11.0	6.3	3.4	0.0	-3.9	-5.7	-4.4	-2.2	1.8	8.6	15.6	21.5	21.2
Urban government	13.5	14.1	9.1	7.6	4.8	3.6	2.7	1.4	2.2	4.9	9.7	14.5	18.8	20.8
Rural government	6.6	5.1	-0.6	-2.3	-2.3	-3.7	-4.0	-4.4	-2.6	-2.0	-2.6	2.5	6.9	6.2
All hospitals	13.4	13.0	8.7	5.9	2.7	0.3	-1.5	-2.4	-1.0	1.0	5.0	10.0	15.5	17.0

Note.—Data on PPS operating and capital costs and payments are for hospital accounting years beginning during each Federal fiscal year. Hospitals in Massachusetts and New York excluded from data in 1984 and 1985; hospitals in New Jersey excluded from data in 1984 through 1988; hospitals in Maryland excluded from data in all years.

Source: Medicare Payment Advisory Commission analysis of Medicare Cost Report data from the Health Care Financing Administration.

Major teaching hospitals consistently have had the highest aggregate inpatient margin of any hospital group. Moreover, the difference in the margins for major teaching and nonteaching hospitals has grown. For major teaching hospitals, the inpatient margin fell from 19.9 percent in the second year of PPS to a low of 7.2 percent in 1990, while the drop for other teaching and nonteaching hospitals was much sharper. By 1997, all three groups had higher margins than in the early years of the decade, with the largest increase seen in the major teaching group. Their margin was 28.5 percent—12.3 percentage points higher than for other teaching hospitals and 16.3 percentage points higher than for the nonteaching group. These differences had been 3.7 percentage points and 7.4 percentage points, respectively, in the first PPS year.

The trend in inpatient margins by ownership category also reflects changes in payment policy and degree of success in controlling costs. In the first year, voluntary, proprietary, and urban government hospitals all had inpatient margins around 13–14 percent, while rural government hospitals lagged behind. In 1990, the inpatient margin for the proprietary group, which had fallen by more than 18 percentage points since the beginning of PPS to –5.7 percent, was the lowest of the four groups. However, as these hospitals held down their cost growth, their margin increased by more than 20 percentage points, to 21.2 percent in 1997.

TOTAL MARGINS

The PPS inpatient margin, however, does not represent the bottom line for the hospital industry. The total margin, which includes expenses and revenues related to Medicare and other inpatient and outpatient care as well as other facility activities, increased steadily from the early 1970s to the early 1980s, peaking in 1984. In subsequent years—as Medicare tightened its control over inpatient payment rate increases—the total margin began to fall (table D–12). In the late 1980s, however, this decline leveled off at 3.5 percent, and by 1991 the total margin had risen to 4.4 percent. It declined slightly in 1992, then started on an upward trend in 1994, standing at 6.3 percent in 1997, the highest level since 1986 and above levels experienced before PPS began.

ADDITIONAL HOSPITAL DATA

Table D–13 provides historical trends in factors affecting PPS rates and average payments per case, based on data and estimates provided by HCFA's Office of the Actuary. Tables D–14 through D–16 contain wage index information for PPS hospitals for fiscal year 2000. Table D–17 contains information on changes in DRG relative weights from fiscal year 1999 through 2000.

TABLE D-12.—TOTAL MARGINS BY HOSPITAL GROUP, 1984-97

[In percent]

Hospital group	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Urban	7.7	6.9	4.5	3.7	3.6	3.5	3.5	4.3	4.2	4.4	4.9	5.7	5.9	6.2
Rural	5.0	4.7	3.0	2.9	3.3	4.2	4.7	5.1	5.3	5.1	5.5	6.6	7.0	6.8
Large urban	7.5	6.6	4.0	3.2	3.0	2.9	2.4	3.6	3.5	3.8	4.2	4.9	5.2	5.4
Other urban	8.1	7.2	5.4	4.6	4.5	4.7	5.2	5.6	5.3	5.2	6.1	6.9	7.2	7.5
Rural referral	7.4	8.4	5.7	5.7	5.1	6.5	6.5	6.5	6.7	6.8	7.1	8.6	8.9	9.4
Sole community	4.8	4.1	2.7	2.3	2.7	3.3	4.3	5.4	5.6	5.6	5.9	6.3	6.1	6.1
Other rural	4.4	3.7	2.2	2.1	3.0	3.7	4.2	4.5	4.6	4.3	4.7	5.9	5.9	4.9
Major teaching	5.2	5.7	2.2	2.1	2.4	1.8	0.9	3.5	3.2	3.3	3.1	4.2	3.5	5.1
Other teaching	8.4	7.3	5.6	4.4	4.3	4.5	4.4	4.7	4.4	4.7	5.3	6.2	6.9	6.6
Nonteaching	7.3	6.4	4.5	3.8	3.6	3.9	4.4	4.8	4.9	4.9	5.9	6.4	7.0	6.7
Disproportionate share large urban	6.6	5.7	3.2	2.4	2.2	2.0	1.3	3.1	3.0	3.5	3.7	4.3	4.3	4.8
Disproportionate share other urban	7.9	7.1	5.4	4.7	4.6	4.7	5.3	5.9	5.8	5.4	6.2	7.0	7.2	7.4
Disproportionate share rural	5.8	5.7	2.5	2.8	3.5	4.4	5.7	7.4	7.7	6.0	6.0	7.8	8.2	7.5
Nondisproportionate share	7.7	7.0	4.9	4.2	4.2	4.4	4.5	4.6	4.4	4.6	5.4	8.2	6.8	6.8
Teaching and disproportionate share	6.7	6.1	3.6	3.0	2.9	3.0	2.4	4.0	3.9	4.0	4.1	4.9	4.7	5.4
Teaching only	9.0	8.5	5.9	4.7	5.0	4.6	4.5	4.7	3.9	4.4	5.1	6.5	7.3	7.3
Disproportionate share only	7.7	6.5	4.6	3.7	3.5	3.4	4.2	5.1	5.2	5.1	6.3	6.8	7.5	6.9
No teaching or disproportionate share	7.0	6.2	4.4	4.0	3.7	4.3	4.5	4.5	4.7	4.7	5.5	6.1	6.6	6.5
Voluntary	7.7	7.0	4.9	3.8	3.8	3.9	3.9	4.3	4.0	4.1	4.8	5.7	5.8	6.5
Proprietary	8.8	7.5	5.6	4.6	3.6	2.9	3.9	5.2	6.6	7.2	9.6	9.3	10.1	6.9
Urban government	4.4	4.4	0.9	2.3	2.2	2.5	1.7	4.4	4.2	4.4	3.4	4.4	3.9	5.2
Rural government	4.6	2.9	2.0	1.5	2.4	3.3	4.0	4.8	5.2	4.5	4.7	5.7	6.1	5.3
All hospitals	7.3	6.6	4.3	3.6	3.5	3.6	3.6	4.4	4.3	4.5	5.0	5.8	6.1	6.3

Note.—Data are percentages. Data on total revenues and expenses are for hospital accounting years beginning during each Federal fiscal year. Hospitals in Massachusetts and New York excluded from data in 1984 and 1985; hospitals in New Jersey excluded from data in 1984-88; hospitals in Maryland excluded from data in all years.

Source: Medicare Payment Advisory Commission analysis of Medicare Cost Report data from the Health Care Financing Administration.

TABLE D-13.—TRENDS IN FACTORS AFFECTING PPS RATES AND AVERAGE PAYMENTS PER CASE, FISCAL YEARS 1983–2001

[Percentage change from previous year]

Rate impact factor	Fiscal year																			
	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	
Market basket index	5.5	4.9	4.1	2.9	3.2	4.7	5.4	5.5	5.2	4.4	4.1	4.3	¹ 3.6	² 3.5	2.5	2.7	2.4	2.9	3.2	
Annual update factor	NA	NA	NA	NA	NA	1.7	3.33	5.71	2.83	2.9	2.75	2.11	1.89	1.64	2	0	0.5	1.09	2.01	
Case-mix index	NA	NA	3.1	2.5	2.1	3.2	2.5	0.85	2.5	1.5	0.8	0.7	1.5	1.4	0.3	-0.6	-0.5	0.5	0.5	
Average payments per discharge	9.7	10.4	14.2	7.0	5.0	1.6	9.5	5.6	2.6	8.8	3.6	2.5	4.4	4.1	2.4	-2.0	0.0	2.0	2.9	
Average payments per beneficiary	10.9	7.6	5.6	0.8	0.8	0.4	6.1	7.7	3	8.4	6	4.9	4.7	3.5	3.3	-3.2	-2.3	2.1	3.4	

¹3.7 for hospitals excluded from the prospective payment system.

²3.4 for hospitals excluded from the prospective payment system.

NA—Not available.

Source: Health Care Financing Administration.

TABLE D-14.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS, FISCAL YEAR 2000

Urban area (constituent counties)	Wage index	GAF
0040 Abilene, TX: Taylor, TX	0.8179	0.8714
00602 Aguadilla, ² PR: Aguada, PR; Aguadilla, PR; Moca, PR	0.4249	0.5565
0080 Akron, OH; Portage, OH; Summit, OH	1.0163	1.0111
0120 Albany, GA: Dougherty, GA; Lee, GA	1.0372	1.0253
0160 Albany-Schenectady-Troy, NY: Albany, NY; Montgomery, NY; Rensselaer, NY; Saratoga, NY; Schenectady, NY; Schoharie, NY	0.8754	0.9129
0200 Albuquerque, NM: Bernalillo, NM; Sandoval, NM; Valencia, NM	0.8499	0.8946
0220 Alexandria, LA: Rapides, LA	0.7910	0.8517
0240 Allentown-Bethlehem-Easton, PA: Carbon, PA; Lehigh, PA; Northampton, PA	0.9550	0.9690
0280 Altoona, PA: Blair, PA	0.9342	0.9545
0320 Amarillo, TX: Potter, TX; Randall, TX	0.8435	0.8900
0380 Anchorage, AK: Anchorage, AK	1.3009	1.1974
0440 Ann Arbor, MI: Lenawee, MI; Livingston, MI; Washtenaw, MI	1.1483	1.0993
0450 Anniston, AL: Calhoun, AL	0.8462	0.8919
0460 Appleton-Oshkosh-Neenah, WI: Calumet, WI; Outagamie, WI; Winnebago, WI	0.8913	0.9242
0470 Arecibo, PR: Arecibo, PR; Camuy, PR; Hatillo, PR	0.4815	0.6062
0480 Asheville, NC: Buncombe, NC; Madison, NC	0.8884	0.9222
0500 Athens, GA: Clarke, GA; Madison, GA; Oconee, GA	0.9800	0.9863
0520 Atlanta, ¹ GA: Barrow, GA; Bartow, GA; Carroll, GA; Cherokee, GA; Clayton, GA; Cobb, GA; Coweta, GA; DeKalb, GA; Douglas, GA; Fayette, GA; Forsyth, GA; Fulton, GA; Gwinnett, GA; Henry, GA; Newton, GA; Paulding, GA; Pickens, GA; Rockdale, GA; Spalding, GA; Walton, GA	1.0050	1.0034
0560 Atlantic-Cape May, NJ: Atlantic, NJ; Cape May, NJ	1.1050	1.0708
0580 Auburn-Opelika, AL: Lee, AL	0.7748	0.8397
0600 Augusta-Aiken, GA-SC: Columbia, GA; McDuffie, GA; Richmond, GA; Aiken, SC; Edgefield, SC	0.9013	0.9313
0640 Austin-San Marcos, ¹ TX: Bastrop, TX; Caldwell, TX; Hays, TX; Travis, TX; Williamson, TX	0.9081	0.9361
0680 Bakersfield, ² CA: Kern, CA	0.9951	0.9966
0720 Baltimore, ¹ MD: Anne Arundel, MD; Baltimore, MD; Baltimore City, MD; Carroll, MD; Harford, MD; Howard, MD; Queen Anne's, MD	0.9891	0.9925
0733 Bangor, ME: Penobscot, ME	0.9609	0.9731
0743 Barnstable-Yarmouth, MA: Barnstable, MA	1.3302	1.2158
0760 Baton Rouge, LA: Ascension, LA; East Baton Rouge, LA; Livingston, LA; West Baton Rouge, LA	0.8707	0.9095
0840 Beaumont-Port Arthur, TX: Hardin, TX; Jefferson, TX; Orange, TX	0.8624	0.9036
0860 Bellingham, WA: Whatcom, WA	1.1394	1.0935
0870 Benton Harbor, ² MI: Berrien, MI	0.8831	0.9184
0875 Bergen-Passaic, ¹ NJ: Bergen, NJ; Passaic, NJ	1.1833	1.1222
0880 Billings, MT: Yellowstone, MT	1.0038	1.0026
0920 Biloxi-Gulfport-Pascagoula, MS: Hancock, MS; Harrison, MS; Jackson, MS	0.7949	0.8545
0960 Binghamton, NY: Broome, NY; Tioga, NY	0.8750	0.9126
1000 Birmingham, AL: Blount, AL; Jefferson, AL; St. Clair, AL; Shelby, AL	0.8994	0.9300
1010 Bismarck, ND: Burleigh, ND; Morton, ND	0.7893	0.8504
1020 Bloomington, IN: Monroe, IN	0.8593	0.9014
1040 Bloomington-Normal, IL: McLean, IL	0.8993	0.9299
1080 Boise City, ID: Ada, ID; Canyon, ID	0.9086	0.9365
1123 Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH (MA Hospitals) ^{1,2} Bristol, MA; Essex, MA; Middlesex, MA; Norfolk, MA; Plymouth, MA; Suffolk, MA; Worcester, MA; Hillsborough, NH; Merrimack, NH; Rockingham, NH; Strafford, NH	1.1369	1.0918
1123 Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH (NH Hospitals) ¹ Bristol, MA; Essex, MA; Middlesex, MA; Norfolk, MA; Plymouth, MA; Suffolk, MA; Worcester, MA; Hillsborough, NH; Merrimack, NH; Rockingham, NH; Strafford, NH	1.1358	1.0911
1125 Boulder-Longmont, CO: Boulder, CO	0.9944	0.9962
1145 Brazoria, TX: Brazoria, TX	0.8516	0.8958
1150 Bremerton, WA: Kitsap, WA	1.1011	1.0682
1240 Brownsville-Harlingen-San Benito, TX: Cameron, TX	0.9212	0.9453
1260 Bryan-College Station, TX: Brazos, TX	0.8501	0.8947
1280 Buffalo-Niagara Falls, NY: ¹ Erie, NY; Niagara, NY	0.9604	0.9727
1303 Burlington, VT: Chittenden, VT; Franklin, VT; Grand Isle, VT	1.0558	1.0379
1310 Caguas, PR: Caguas, PR; Cayey, PR; Cidra, PR; Gurabo, PR; San Lorenzo, PR	0.4561	0.5842

TABLE D-14.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS, FISCAL YEAR 2000—Continued

Urban area (constituent counties)	Wage index	GAF
1320 Canton-Massillon, ² OH: Carroll, OH; Stark, OH	0.8649	0.9054
1350 Casper, WY: Natrona, WY	0.9199	0.9444
1360 Cedar Rapids, IA: Linn, IA	0.9018	0.9317
1400 Champaign-Urbana, IL: Champaign, IL	0.9163	0.9419
1440 Charleston-North Charleston, SC: Berkeley, SC; Charleston, SC; Dorchester, SC	0.8988	0.9295
1480 Charleston, WV: Kanawha, WV; Putnam, WV	0.9095	0.9371
1520 Charlotte-Gastonia-Rock Hill, NC-SC: ¹ Cabarrus, NC; Gaston, NC; Lincoln, NC; Mecklenburg, NC; Rowan, NC; Stanly, NC; Union, NC; York, SC	0.9433	0.9608
1540 Charlottesville, VA: Albemarle, VA; Charlottesville City, VA; Fluvanna, VA; Greene, VA	1.0573	1.0389
1560 Chattanooga, TN-GA: Catoosa, GA; Dade, GA; Walker, GA; Hamilton, TN; Marion, TN	0.9731	0.9815
1580 Cheyenne, WY: ² Laramie, WY	0.8859	0.9204
1600 Chicago, IL: ¹ Cook, IL; DeKalb, IL; DuPage, IL; Grundy, IL; Kane, IL; Kendall, IL; Lake, IL; McHenry, IL; Will, IL	1.0872	1.0589
1620 Chico-Paradise, CA: Butte, CA	1.0390	1.0265
1640 Cincinnati, OH-KY-IN: ¹ Dearborn, IN; Ohio, IN; Boone, KY; Campbell, KY; Gallatin, KY; Grant, KY; Kenton, KY; Pendleton, KY; Brown, OH; Clermont, OH; Hamilton, OH; Warren, OH	0.9434	0.9609
1660 Clarksville-Hopkinsville, TN-KY: Christian, KY; Montgomery, TN	0.8283	0.8790
1680 Cleveland-Lorain-Elyria, OH: ¹ Ashtabula, OH; Cuyahoga, OH; Geauga, OH; Lake, OH; Lorain, OH; Medina, OH	0.9688	0.9785
1720 Colorado Springs, CO: El Paso, CO	0.9218	0.9458
1740 Columbia, MO: Boone, MO	0.8904	0.9236
1760 Columbia, SC: Lexington, SC; Richland, SC	0.9357	0.9555
1800 Columbus, GA-AL: Russell, AL; Chattahoochee, GA; Harris, GA; Muscogee, GA	0.8510	0.8954
1840 Columbus, OH: ¹ Delaware, OH; Fairfield, OH; Franklin, OH; Licking, OH; Madison, OH; Pickaway, OH	0.9907	0.9936
1880 Corpus Christi, TX: Nueces, TX; San Patricio, TX	0.8702	0.9092
1890 Corvallis, OR: Benton, OR	1.1087	1.0732
1900 Cumberland, MD-WV (Maryland Hospitals): Allegany, MD; Mineral, WV	0.8801	0.9163
1920 Dallas, TX: ¹ Collin, TX; Dallas, TX; Denton, TX; Ellis, TX; Henderson, TX; Hunt, TX; Kaufman, TX; Rockwall, TX	0.9589	0.9717
1950 Danville, VA: Danville City, VA; Pittsylvania, VA	0.9061	0.9347
1960 Davenport-Moline-Rock Island, IA-IL: Scott, IA; Henry, IL; Rock Island, IL	0.8706	0.9095
2000 Dayton-Springfield, OH: Clark, OH; Greene, OH; Miami, OH; Montgomery, OH	0.9336	0.9540
2020 Daytona Beach, FL: ² Flagler, FL; Volusia, FL	0.8986	0.9294
2030 Decatur, AL: Lawrence, AL; Morgan, AL	0.8679	0.9075
2040 Decatur, IL: Macon, IL	0.8321	0.8817
2080 Denver, CO: ¹ Adams, CO; Arapahoe, CO; Denver, CO; Douglas, CO; Jefferson, CO ..	1.0197	1.0134
2120 Des Moines, IA: Dallas, IA; Polk, IA; Warren, IA	0.8754	0.9129
2160 Detroit, MI: ¹ Lapeer, MI; Macomb, MI; Monroe, MI; Oakland, MI; St. Clair, MI; Wayne, MI	1.0421	1.0286
2180 Dothan, AL: Dale, AL; Houston, AL	0.7836	0.8462
2190 Dover, DE: Kent, DE	0.9335	0.9540
2200 Dubuque, IA: Dubuque, IA	0.8520	0.8961
2240 Duluth-Superior, MN-WI: St. Louis, MN; Douglas, WI	1.0165	1.0113
2281 Dutchess County, NY: Dutchess, NY	0.9872	0.9912
2290 Eau Claire, WI: Chippewa, WI; Eau Claire, WI	0.8957	0.9273
2320 El Paso, TX: El Paso, TX	0.8947	0.9266
2330 Elkhart-Goshen, IN: Elkhart, IN	0.9379	0.9570
2335 Elmira, NY: ² Chemung, NY	0.8636	0.9045
2340 Enid, OK: Garfield, OK	0.7953	0.8548
2360 Erie, PA: Erie, PA	0.9023	0.9320
2400 Eugene-Springfield, OR: Lane, OR	1.0765	1.0518
2440 Evansville-Henderson, IN-KY (IN Hospitals): ² Posey, IN; Vanderburgh, IN; Warrick, IN; Henderson, KY	0.8396	0.8872
2440 Evansville-Henderson, IN-KY (KY Hospitals): Posey, IN; Vanderburgh, IN; Warrick, IN; Henderson, KY	0.8303	0.8804
2520 Fargo-Moorhead, ND-MN: Clay, MN; Cass, ND	0.8620	0.9033
2560 Fayetteville, NC: Cumberland, NC	0.8494	0.8942

TABLE D-14.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS, FISCAL YEAR 2000—Continued

Urban area (constituent counties)	Wage index	GAF
2580 Fayetteville-Springdale-Rogers, AR: Benton, AR; Washington, AR	0.7773	0.8415
2620 Flagstaff, AZ—UT: Coconino, AZ; Kane, UT	1.0348	1.0237
2640 Flint, MI: Genesee, MI	1.1020	1.0688
2650 Florence, AL: Colbert, AL; Lauderdale, AL	0.7927	0.8529
2655 Florence, SC: Florence, SC	0.8618	0.9032
2670 Fort Collins-Loveland, CO: Larimer, CO	1.0302	1.0206
2680 Ft. Lauderdale, FL: ¹ Broward, FL	1.0172	1.0117
2700 Fort Myers-Cape Coral, FL: ² Lee, FL	0.8986	0.9294
2710 Fort Pierce-Port St. Lucie, FL: Martin, FL; St. Lucie, FL	1.0109	1.0075
2720 Fort Smith, AR—OK: Crawford, AR; Sebastian, AR; Sequoyah, OK	0.7844	0.8468
2750 Fort Walton Beach, FL: ² Okaloosa, FL	0.8986	0.9294
2760 Fort Wayne, IN: Adams, IN; Allen, IN; De Kalb, IN; Huntington, IN; Wells, IN; Whit- ley, IN	0.9096	0.9372
2800 Forth Worth-Arlington, TX: ¹ Hood, TX; Johnson, TX; Parker, TX; Tarrant, TX	0.9835	0.9887
2840 Fresno, CA: Fresno, CA; Madera, CA	1.0262	1.0179
2880 Gadsden, AL: Etowah, AL	0.8754	0.9129
2900 Gainesville, FL: Alachua, FL	1.0102	1.0070
2920 Galveston-Texas City, TX: Galveston, TX	0.9732	0.9816
2960 Gary, IN: Lake, IN; Porter, IN	0.9369	0.9563
2975 Glens Falls, NY: ² Warren, NY; Washington, NY	0.8636	0.9045
2980 Goldsboro, NC: Wayne, NC	0.8333	0.8826
2985 Grand Forks, ND—MN: Polk, MN; Grand Forks, ND	0.9097	0.9372
2995 Grand Junction, CO: Mesa, CO	0.9188	0.9437
3000 Grand Rapids-Muskegon-Holland, MI: ¹ Allegan, MI; Kent, MI; Muskegon, MI; Ot- tawa, MI	1.0135	1.0092
3040 Great Falls, MT: Cascade, MT	1.0459	1.0312
3060 Greeley, CO: Weld, CO	0.9722	0.9809
3080 Green Bay, WI: Brown, WI	0.9215	0.9456
3120 Greensboro-Winston-Salem-High Point, NC: ¹ Alamance, NC; Davidson, NC; Davie, NC; Forsyth, NC; Guilford, NC; Randolph, NC; Stokes, NC; Yadkin, NC	0.9037	0.9330
3150 Greenville, NC: Pitt, NC	0.9500	0.9655
3160 Greenville-Spartanburg-Anderson, SC: Anderson, SC; Cherokee, SC; Greenville, SC; Pickens, SC; Spartanburg, SC	0.9188	0.9437
3180 Hagerstown, MD: Washington, MD	0.8853	0.9200
3200 Hamilton-Middletown, OH: Butler, OH	0.8989	0.9296
3240 Harrisburg-Lebanon-Carlisle, PA: Cumberland, PA; Dauphin, PA; Lebanon, PA; Perry, PA	0.9917	0.9943
3283 Hartford, CT: ^{1,2} Hartford, CT; Litchfield, CT; Middlesex, CT; Tolland, CT	1.2413	1.1595
3285 Hattiesburg, MS: ² Forrest, MS; Lamar, MS	0.7306	0.8066
3290 Hickory-Morganton-Lenoir, NC: Alexander, NC; Burke, NC; Caldwell, NC; Catawba, NC	0.9148	0.9408
3320 Honolulu, HI: Honolulu, HI	1.1479	1.0991
3350 Houma, LA: Lafourche, LA; Terrebonne, LA	0.7837	0.8463
3360 Houston, TX: ¹ Chambers, TX; Fort Bend, TX; Harris, TX; Liberty, TX; Montgomery, TX; Waller, TX	0.9387	0.9576
3400 Huntington-Ashland, WV—KY—OH: Boyd, KY; Carter, KY; Greenup, KY; Lawrence, OH; Cabell, WV; Wayne, WV	0.9757	0.9833
3440 Huntsville, AL: Limestone, AL; Madison, AL	0.8822	0.9178
3480 Indianapolis, IN: ¹ Boone, IN; Hamilton, IN; Hancock, IN; Hendricks, IN; Johnson, IN; Madison, IN; Marion, IN; Morgan, IN; Shelby, IN	0.9792	0.9857
3500 Iowa City, IA: Johnson, IA	0.9607	0.9729
3520 Jackson, MI: Jackson, MI	0.8840	0.9190
3560 Jackson, MS: Hinds, MS; Madison, MS; Rankin, MS	0.8387	0.8865
3580 Jackson, TN: Madison, TN; Chester, TN	0.8600	0.9019
3600 Jacksonville, FL: ^{1,2} Clay, FL; Duval, FL; Nassau, FL; St. Johns, FL	0.8986	0.9294
3605 Jacksonville, NC: ² Onslow, NC	0.8290	0.8795
3610 Jamestown, NY: ² Chautauqua, NY	0.8636	0.9045
3620 Janesville-Beloit, WI: Rock, WI	0.9656	0.9763
3640 Jersey City, NJ: Hudson, NJ	1.1674	1.1118
3660 Johnson City-Kingsport-Bristol, TN—VA: Carter, TN; Hawkins, TN; Sullivan, TN; Unicoi, TN; Washington, TN; Bristol City, VA; Scott, VA Washington, VA	0.8894	0.9229

TABLE D-14.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS, FISCAL YEAR 2000—Continued

Urban area (constituent counties)	Wage index	GAF
3680 Johnstown, PA: ² Cambria, PA; Somerset, PA	0.8524	0.8964
3700 Jonesboro, AR: Craighead, AR	0.7251	0.8024
3710 Joplin, MO: ² Jasper, MO; Newton, MO	0.7723	0.8378
3720 Kalamazoo-Battlecreek, MI: Calhoun, MI; Kalamazoo, MI; Van Buren, MI	0.9981	0.9987
3740 Kankakee, IL: Kankakee, IL	0.8598	0.9017
3760 Kansas City, KS—MO: ¹ Johnson, KS; Leavenworth, KS; Miami, KS; Wyandotte, KS; Cass, MO; Clay, MO; Clinton, MO; Jackson, MO; Lafayette, MO; Platte, MO; Ray, MO	0.9322	0.9531
3800 Kenosha, WI: Kenosha, WI	0.9033	0.9327
3810 Killeen-Temple, TX: Bell, TX; Coryell, TX	0.9932	0.9953
3840 Knoxville, TN: Anderson, TN; Blount, TN; Knox, TN; Loudon, TN; Sevier, TN; Union, TN	0.9199	0.9444
3850 Kokomo, IN: Howard, IN; Tipton, IN	0.8984	0.9293
3870 La Crosse, WI—MN: Houston, MN; La Crosse, WI	0.8933	0.9256
3880 Lafayette, LA: Acadia, LA; Lafayette, LA; St. Landry, LA; St. Martin, LA	0.8397	0.8872
3920 Lafayette, IN: Clinton, IN; Tippecanoe, IN	0.8809	0.9168
3960 Lake Charles, LA: Calcasieu, LA	0.7966	0.8558
3980 Lakeland-Winter Haven, FL: ² Polk, FL	0.8986	0.9294
4000 Lancaster, PA: Lancaster, PA	0.9255	0.9484
4040 Lansing-East Lansing, MI: Clinton, MI; Eaton, MI; Ingham, MI	0.9977	0.9984
4080 Laredo, TX: Webb, TX	0.8323	0.8819
4100 Las Cruces, NM: Dona Ana, NM	0.8590	0.9012
4120 Las Vegas, NV—AZ: ¹ Mohave, AZ; Clark, NV; Nye, NV	1.1258	1.0845
4150 Lawrence, KS: Douglas, KS	0.8222	0.8745
4200 Lawton, OK: Comanche, OK	0.9532	0.9677
4243 Lewiston-Auburn, ME: Androscoggin, ME	0.8899	0.9232
4280 Lexington, KY: Bourbon, KY; Clark, KY; Fayette, KY; Jessamine, KY; Madison, KY; Scott, KY; Woodford, KY	0.8552	0.8984
4320 Lima, OH: Allen, OH; Auglaize, OH	0.9108	0.9380
4360 Lincoln, NE: Lancaster, NE	0.9670	0.9773
4400 Little Rock-North Little Rock, AR: Faulkner, AR; Lonoke, AR; Pulaski, AR; Saline, AR	0.8614	0.9029
4420 Longview-Marshall, TX: Gregg, TX; Harrison, TX; Upshur, TX	0.8738	0.9118
4480 Los Angeles-Long Beach, CA: ¹ Los Angeles, CA	1.2085	1.1385
4520 Louisville, KY—IN: Clark, IN; Floyd, IN; Harrison, IN; Scott, IN; Bullitt, KY; Jefferson, KY; Oldham, KY	0.9381	0.9572
4600 Lubbock, TX: Lubbock, TX	0.8411	0.8883
4640 Lynchburg, VA: Amherst, VA; Bedford, VA; Bedford City, VA; Campbell, VA; Lynchburg City, VA	0.8814	0.9172
4680 Macon, GA: Bibb, GA; Houston, GA; Jones, GA; Peach, GA; Twiggs, GA	0.8530	0.8968
4720 Madison, WI: Dane, WI	0.9729	0.9814
4800 Mansfield, OH: ² Crawford, OH; Richland, OH	0.8649	0.9054
4840 Mayaguez, PR: Anasco, PR; Cabo Rojo, PR; Hormigueros, PR; Mayaguez, PR; Sabana Grande, PR; San German, PR	0.4674	0.5940
4880 McAllen-Edinburg-Mission, TX: Hidalgo, TX	0.8120	0.8671
4890 Medford-Ashland, OR: Jackson, OR	1.0492	1.0334
4900 Melbourne-Titusville-Palm Bay, FL: Brevard, FL	0.9296	0.9512
4920 Memphis, TN—AR—MS: ¹ Crittenden, AR; DeSoto, MS; Fayette, TN; Shelby, TN; Tipton, TN	0.8244	0.8761
4940 Merced, CA: Merced, CA	1.0509	1.0346
5000 Miami, FL: ¹ Dade, FL	1.0233	1.0159
5015 Middlesex-Somerset-Hunterdon, NJ: ¹ Hunterdon, NJ; Middlesex, NJ; Somerset, NJ	1.0876	1.0592
5080 Milwaukee-Waukesha, WI: ¹ Milwaukee, WI; Ozaukee, WI; Washington, WI; Waukesha, WI	0.9845	0.9894
5120 Minneapolis-St. Paul, MN—WI: ¹ Anoka, MN; Carver, MN; Chisago, MN; Dakota, MN; Hennepin, MN; Isanti, MN; Ramsey, MN; Scott, MN; Sherburne, MN; Washington, MN; Wright, MN; Pierce, WI; St. Croix, WI	1.0929	1.0627
5140 Missoula, MT: Missoula, MT	0.9085	0.9364
5160 Mobile, AL: Baldwin, AL; Mobile, AL	0.8267	0.8778
5170 Modesto, CA: Stanislaus, CA	1.0111	1.0076
5190 Monmouth-Ocean, NJ: ¹ Monmouth, NJ; Ocean, NJ	1.1258	1.0845
5200 Monroe, LA: Ouachita, LA	0.8221	0.8745
5240 Montgomery, AL: Autauga, AL; Elmore, AL; Montgomery, AL	0.7724	0.8379

TABLE D-14.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS, FISCAL YEAR 2000—Continued

Urban area (constituent counties)	Wage index	GAF
5280 Muncie, IN: Delaware, IN	1.0834	1.0564
5330 Myrtle Beach, SC: Horry, SC	0.8529	0.8968
5345 Naples, FL: Collier, FL	0.9839	0.9889
5360 Nashville, TN: ¹ Cheatham, TN; Davidson, TN; Dickson, TN; Robertson, TN; Rutherford, TN; Sumner, TN; Williamson, TN; Wilson, TN	0.9449	0.9619
5380 Nassau-Suffolk, NY: ¹ Nassau, NY; Suffolk, NY	1.4074	1.2637
5483 New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT: ¹ Fairfield, CT; New Haven, CT	1.2417	1.1598
5523 New London-Norwich, CT: New London, CT	1.2428	1.1605
5560 New Orleans, LA: ¹ Jefferson, LA; Orleans, LA; Plaquemines, LA; St. Bernard, LA; St. Charles, LA; St. James, LA; St. John The Baptist, LA; St. Tammany, LA	0.9089	0.9367
5600 New York, NY: ¹ Bronx, NY; Kings, NY; New York, NY; Putnam, NY; Queens, NY; Richmond, NY; Rockland, NY; Westchester, NY	1.4517	1.2908
5640 Newark, NJ: ¹ Essex, NJ; Morris, NJ; Sussex, NJ; Union, NJ; Warren, NJ	1.0772	1.0522
5660 Newburgh, NY—PA: Orange, NY; Pike, PA	1.0908	1.0613
5720 Norfolk-Virginia Beach-Newport News, VA—NC: ¹ Currituck, NC; Chesapeake City, VA; Gloucester, VA; Hampton City, VA; Isle of Wight, VA; James City, VA; Mathews, VA; Newport News City, VA; Norfolk City, VA; Poquoson City, VA; Portsmouth City, VA; Suffolk City, VA; Virginia Beach City VA; Williamsburg City, VA; York, VA	0.8442	0.8905
5775 Oakland, CA: ¹ Alameda, CA; Contra Costa, CA	1.5095	1.3258
5790 Ocala, FL: Marion, FL	0.9615	0.9735
5800 Odessa-Midland, TX: Ector, TX; Midland, TX	0.8873	0.9214
5880 Oklahoma City, OK: ¹ Canadian, OK; Cleveland, OK; Logan, OK; McClain, OK; Oklahoma, OK; Pottawatomie, OK	0.8589	0.9011
5910 Olympia, WA: Thurston, WA	1.0932	1.0629
5920 Omaha, NE—IA: Pottawattamie, IA; Cass, NE; Douglas, NE; Sarpy, NE; Washington, NE	1.0455	1.0309
5945 Orange County, CA: ¹ Orange, CA	1.1592	1.1065
5960 Orlando, FL: ¹ Lake, FL; Orange, FL; Osceola, FL; Seminole, FL	0.9806	0.9867
5990 Owensboro, KY: Daviess, KY	0.8104	0.8659
6015 Panama City, FL: Bay, FL	0.9169	0.9423
6020 Parkersburg-Marietta, WV—OH (WV Hospitals): Washington, OH; Wood, WV	0.8414	0.8885
6020 Parkersburg-Marietta, WV—OH (OH Hospitals): ² Washington, OH; Wood, WV	0.8649	0.9054
6080 Pensacola, FL: ² Escambia, FL; Santa Rosa, FL	0.8986	0.9294
6120 Peoria-Pekin, IL: Peoria, IL; Tazewell, IL; Woodford, IL	0.8399	0.8874
6160 Philadelphia, PA—NJ: ¹ Burlington, NJ; Camden, NJ; Gloucester, NJ; Salem, NJ; Bucks, PA; Chester, PA; Delaware, PA; Montgomery, PA; Philadelphia, PA	1.1186	1.0798
6200 Phoenix-Mesa, AZ: ¹ Maricopa, AZ; Pinal, AZ	0.9464	0.9630
6240 Pine Bluff, AR: Jefferson, AR	0.7697	0.8359
6280 Pittsburgh, PA: ¹ Allegheny, PA; Beaver, PA; Butler, PA; Fayette, PA; Washington, PA; Westmoreland, PA	0.9634	0.9748
6323 Pittsfield, MA: ² Berkshire, MA	1.1369	1.0918
6340 Pocatello, ID: Bannock, ID	0.8973	0.9285
6360 Ponce, PR: Guayanilla, PR; Juana Diaz, PR; Penuelas, PR; Ponce, PR; Villalba, PR; Yauco, PR	0.4971	0.6196
6403 Portland, ME: Cumberland, ME; Sagadahoc, ME; York, ME	0.9487	0.9646
6440 Portland-Vancouver, OR—WA: ¹ Clackamas, OR; Columbia, OR; Multnomah, OR; Washington, OR; Yamhill, OR; Clark, WA	1.0996	1.0672
6483 Providence-Warwick-Pawtucket, RI: ¹ Bristol, RI; Kent, RI; Newport, RI; Providence, RI; Washington, RI	1.0690	1.0468
6520 Provo-Orem, UT: Utah, UT	0.9818	0.9875
6560 Pueblo, CO: Pueblo, CO	0.8853	0.9200
6580 Punta Gorda, FL: Charlotte, FL	0.9508	0.9660
6600 Racine, WI: Racine, WI	0.9216	0.9456
6640 Raleigh-Durham-Chapel Hill, NC: ¹ Chatham, NC; Durham, NC; Franklin, NC; Johnston, NC; Orange, NC; Wake, NC	0.9544	0.9685
6660 Rapid City, SD: Pennington, SD	0.8363	0.8848
6680 Reading, PA: Berks, PA	0.9436	0.9610
6690 Redding, CA: Shasta, CA	1.1263	1.0849
6720 Reno, NV: Washoe, NV	1.0655	1.0444
6740 Richland-Kennewick-Pasco, WA: Benton, WA; Franklin, WA	1.1224	1.0823

TABLE D-14.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS, FISCAL YEAR 2000—Continued

Urban area (constituent counties)	Wage index	GAF
6760 Richmond-Petersburg, VA: Charles City County, VA; Chesterfield, VA; Colonial Heights City, VA; Dinwiddie, VA; Goochland, VA; Hanover, VA; Henrico, VA; Hopewell City, VA; New Kent, VA; Petersburg City, VA; Powhatan, VA; Prince George, VA; Richmond City, VA	0.9545	0.9686
6780 Riverside-San Bernardino, CA: ¹ Riverside, CA; San Bernardino, CA	1.1061	1.0715
6800 Roanoke, VA: Botetourt, VA; Roanoke, VA; Roanoke City, VA; Salem City, VA	0.8142	0.8687
6820 Rochester, MN: Olmsted, MN	1.1429	1.0958
6840 Rochester, NY: ¹ Genesee, NY; Livingston, NY; Monroe, NY; Ontario, NY; Orleans, NY; Wayne, NY	0.9184	0.9434
6880 Rockford, IL: Boone, IL; Ogle, IL; Winnebago, IL	0.8783	0.9150
6895 Rocky Mount, NC: Edgecombe, NC; Nash, NC	0.8735	0.9115
6920 Sacramento, CA: ¹ El Dorado, CA; Placer, CA; Sacramento, CA	1.2284	1.1513
6960 Saginaw-Bay City-Midland, MI: Bay, MI; Midland, MI; Saginaw, MI	0.9294	0.9511
6980 St. Cloud, MN: Benton, MN; Stearns, MN	0.9608	0.9730
7000 St. Joseph, MO: Andrew, MO; Buchanan, MO	0.8943	0.9264
7040 St. Louis, MO—IL: ¹ Clinton, IL; Jersey, IL; Madison, IL; Monroe, IL; St. Clair, IL; Franklin, MO; Jefferson, MO; Lincoln, MO; St. Charles, MO; St. Louis, MO; St. Louis City, MO; Warren, MO	0.9052	0.9341
7080 Salem, OR: Marion, OR; Polk, OR	0.9949	0.9965
7120 Salinas, CA: Monterey, CA	1.4710	1.3025
7160 Salt Lake City-Ogden, UT: ¹ Davis, UT; Salt Lake, UT; Weber, UT	0.9854	0.9900
7200 San Angelo, TX: Tom Green, TX	0.7845	0.8469
7240 San Antonio, TX: ¹ Bexar, TX; Comal, TX; Guadalupe, TX; Wilson, TX	0.8318	0.8815
7320 San Diego, CA: ¹ San Diego, CA	1.1955	1.1301
7360 San Francisco, CA: ¹ Marin, CA; San Francisco, CA; San Mateo, CA	1.3784	1.2458
7400 San Jose, CA: ¹ Santa Clara, CA	1.3492	1.2277
7440 San Juan-Bayamon, PR: ¹ Aguas Buenas, PR; Barceloneta, PR; Bayamon, PR; Canovanas, PR; Carolina, PR; Catano, PR; Ceiba, PR; Comerio, PR; Corozal, PR; Dorado, PR; Fajardo, PR; Florida, PR; Guaynabo, PR; Humacao, PR; Juncos, PR; Los Piedras, PR; Loiza, PR; Luguillo, PR; Manati, PR; Morovis, PR; Naguabo, PR; Naranjito, PR; Rio Grande, PR; San Juan, PR; Toa Alta, PR; Toa Baja, PR; Trujillo Alto, PR; Vega Alta, PR; Vega Baja, PR; Yabucoa, PR	0.4657	0.5925
7460 San Luis Obispo-Atascadero-Paso Robles, CA: San Luis Obispo, CA	1.0470	1.0320
7480 Santa Barbara-Santa Maria-Lompoc, CA: Santa Barbara, CA	1.0819	1.0554
7485 Santa Cruz-Watsonville, CA: Santa Cruz, CA	1.3927	1.2546
7490 Santa Fe, NM: Los Alamos, NM; Santa Fe, NM	1.0437	1.0297
7500 Santa Rosa, CA: Sonoma, CA	1.3000	1.1968
7510 Sarasota-Bradenton, FL: Manatee, FL; Sarasota, FL	0.9905	0.9935
7520 Savannah, GA: Bryan, GA; Chatham, GA; Effingham, GA	0.9953	0.9968
7560 Scranton—Wilkes-Barre—Hazleton, PA: ² Columbia, PA; Lackawanna, PA; Luzerne, PA; Wyoming, PA	0.8524	0.8964
7600 Seattle-Bellevue-Everett, WA: ¹ Island, WA; King, WA; Snohomish, WA	1.1289	1.0866
7610 Sharon, PA: ² Mercer, PA	0.8524	0.8964
7620 Sheboygan, WI: ² Sheboygan, WI	0.8759	0.9133
7640 Sherman-Denison, TX: Grayson, TX	0.9329	0.9535
7680 Shreveport-Bossier City, LA: Bossier, LA; Caddo, LA; Webster, LA	0.9049	0.9339
7720 Sioux City, IA—NE: Woodbury, IA; Dakota, NE	0.8549	0.8982
7760 Sioux Falls, SD: Lincoln, SD; Minnehaha, SD	0.8776	0.9145
7800 South Bend, IN: St. Joseph, IN	0.9793	0.9858
7840 Spokane, WA: Spokane, WA;	1.0799	1.0541
7880 Springfield, IL: Menard, IL; Sangamon, IL	0.8684	0.9079
7920 Springfield, MO: Christian, MO; Greene, MO; Webster, MO	0.7991	0.8576
8003 Springfield, MA: ² Hampden, MA; Hampshire, MA	1.1369	1.0918
8050 State College, PA: Centre, PA	0.9138	0.9401
8080 Steubenville-Weirton, OH—WV (OH Hospitals): Jefferson, OH; Brooke, WV; Hancock, WV	0.8649	0.9054
8080 Steubenville-Weirton, OH—WV (WV Hospitals): Jefferson, OH; Brooke, WV; Hancock, WV	0.8614	0.9029
8120 Stockton-Lodi, CA: San Joaquin, CA	1.0518	1.0352
8140 Sumter, SC: ² Sumter, SC	0.8264	0.8776
8160 Syracuse, NY: Cayuga, NY; Madison, NY; Onondaga, NY; Oswego, NY	0.9441	0.9614

TABLE D-14.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS, FISCAL YEAR 2000—Continued

Urban area (constituent counties)	Wage index	GAF
8200 Tacoma, WA: Pierce, WA	1.1631	1.1090
8240 Tallahassee, FL: ² Gadsden, FL; Leon, FL	0.8986	0.9294
8280 Tampa-St. Petersburg-Clearwater, FL: ¹ Hernando, FL; Hillsborough, FL; Pasco, FL; Pinellas, FL	0.9119	0.9388
8320 Terre Haute, IN: Clay, IN; Vermillion, IN; Vigo, IN	0.8570	0.8997
8360 Texarkana, AR-Texarkana, TX: Miller, AR; Bowie, TX	0.8174	0.8710
8400 Toledo, OH: Fulton, OH; Lucas, OH; Wood, OH	0.9593	0.9719
8440 Topeka, KS: Shawnee, KS	0.9326	0.9533
8480 Trenton, NJ: Mercer, NJ	0.9955	0.9969
8520 Tucson, AZ: Pima, AZ	0.8742	0.9120
8560 Tulsa, OK: Creek, OK; Osage, OK; Rogers, OK; Tulsa, OK; Wagoner, OK	0.8086	0.8646
8600 Tuscaloosa, AL: Tuscaloosa, AL	0.8064	0.8630
8640 Tyler, TX: Smith, TX	0.9369	0.9563
8680 Utica-Rome, NY: ² Herkimer, NY; Oneida, NY	0.8636	0.9045
8720 Vallejo-Fairfield-Napa, CA: Napa, CA; Solano, CA	1.2655	1.1750
8735 Ventura, CA: Ventura, CA	1.0952	1.0643
8750 Victoria, TX: Victoria, TX	0.8378	0.8859
8760 Vineland-Millville-Bridgeton, NJ: Cumberland, NJ	1.0517	1.0351
8780 Visalia-Tulare-Porterville, CA: Tulare, CA	1.0411	1.0280
8800 Waco, TX: McLennan, TX	0.8075	0.8638
8840 Washington, DC—MD—VA—WV: ¹ District of Columbia, DC; Calvert, MD; Charles, MD; Frederick, MD; Montgomery, MD; Prince Georges, MD; Alexandria City, VA; Arlington, VA; Clarke, VA; Culpeper, VA; Fairfax, VA; Fairfax City, VA; Falls Church City, VA; Fauquier, VA; Fredericksburg City, VA; King George, VA; Loudoun, VA; Manassas City, VA; Manassas Park City, VA; Prince William, VA; Spotsylvania, VA; Stafford, VA; Warren, VA; Berkeley, WV; Jefferson, WV	1.1053	1.0710
8920 Waterloo-Cedar Falls, IA: Black Hawk, IA	0.8841	0.9191
8940 Wausau, WI: Marathon, WI	0.9445	0.9617
8960 West Palm Beach-Boca Raton, FL: ¹ Palm Beach, FL	0.9909	0.9938
9000 Wheeling, WV-OH (WV Hospitals): ² Belmont, OH; Marshall, WV; Ohio, WV	0.8068	0.8633
9000 Wheeling, WV-OH (OH Hospitals): ² Belmont, OH; Marshall, WV; Ohio, WV	0.8649	0.9054
9040 Wichita, KS: Butler, KS; Harvey, KS; Sedgwick, KS	0.9421	0.9600
9080 Wichita Falls, TX: Archer, TX; Wichita, TX	0.7652	0.8325
9140 Williamsport, PA: ² Lycoming, PA	0.8524	0.8964
9160 Wilmington-Newark, DE-MD: New Castle, DE; Cecil, MD	1.1274	1.0856
9200 Wilmington, NC: New Hanover, NC; Brunswick, NC	0.9707	0.9798
9260 Yakima, WA: ² Yakima, WA	1.0446	1.0303
9270 Yolo, CA: Yolo, CA	1.0485	1.0330
9280 York, PA: York, PA	0.9309	0.9521
9320 Youngstown-Warren, OH: Columbiana, OH; Mahoning, OH; Trumbull, OH	0.9996	0.9997
9340 Yuba City, CA: Sutter, CA; Yuba, CA	1.0662	1.0449
9360 Yuma, AZ: Yuma, AZ	0.9924	0.9948

¹ Large urban area.

² Hospitals geographically located in the area are assigned the statewide rural wage index for fiscal year 2000.

Source: Federal Register, (1999a).

TABLE D-15.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR RURAL AREAS

Nonurban area	Wage index	GAF
Alabama	0.7390	0.8129
Alaska	1.2057	1.1367
Arizona	0.8544	0.8978
Arkansas	0.7236	0.8013
California	0.9951	0.9966

TABLE D-15.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR RURAL AREAS—Continued

Nonurban area	Wage index	GAF
Colorado	0.8813	0.9171
Connecticut	1.2413	1.1595
Delaware	0.9166	0.9421
Florida	0.8986	0.9294
Georgia	0.8094	0.8652
Hawaii	1.0726	1.0492
Idaho	0.8651	0.9055
Illinois	0.8047	0.8617
Indiana	0.8396	0.8872
Iowa	0.7926	0.8528
Kansas	0.7460	0.8182
Kentucky	0.8043	0.8615
Louisiana	0.7486	0.8201
Maine	0.8639	0.9047
Maryland	0.8631	0.9041
Massachusetts	1.1369	1.0918
Michigan	0.8831	0.9184
Minnesota	0.8669	0.9068
Mississippi	0.7306	0.8066
Missouri	0.7723	0.8378
Montana	0.8398	0.8873
Nebraska	0.8007	0.8588
Nevada	0.9097	0.9372
New Hampshire	0.9905	0.9935
New Jersey	(¹)	(¹)
New Mexico	0.8378	0.8859
New York	0.8636	0.9045
North Carolina	0.8290	0.8795
North Dakota	0.7647	0.8322
Ohio	0.8649	0.9054
Oklahoma	0.7255	0.8027
Oregon	0.9873	0.9913
Pennsylvania	0.8524	0.8964
Puerto Rico	0.4249	0.5565
Rhode Island	(¹)	(¹)
South Carolina	0.8264	0.8776
South Dakota	0.7576	0.8269
Tennessee	0.7650	0.8324
Texas	0.7471	0.8190
Utah	0.8906	0.9237
Vermont	0.9427	0.9604
Virginia	0.7916	0.8521
Washington	1.0446	1.0303
West Virginia	0.8068	0.8633
Wisconsin	0.8759	0.9133
Wyoming	0.8859	0.9204

¹ All counties within the State are classified as urban.

Source: Federal Register (1999a).

TABLE D-16.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED, FISCAL YEAR 2000

Area	Wage index	GAF
Abilene, TX	0.8179	0.8714
Akron, OH	0.9981	0.9987
Albany, GA	0.9544	0.9685
Alexandria, LA	0.7910	0.8517
Amarillo, TX	0.8435	0.8900
Anchorage, AK	1.3009	1.1974
Ann Arbor, MI	1.1343	1.0901
Atlanta, GA	1.0050	1.0034
Austin-San Marcos, TX	0.9081	0.9361
Baltimore, MD	0.9891	0.9925
Baton Rouge, LA	0.8707	0.9095
Beaumont-Port Arthur, TX	0.8624	0.9036
Benton Harbor, MI	0.8831	0.9184
Bergen-Passaic, NJ	1.1833	1.1222
Billings, MT	1.0038	1.0026
Biloxi-Gulfport-Pascagoula, MS	0.7949	0.8545
Binghamton, NY	0.8750	0.9126
Birmingham, AL	0.8994	0.9300
Bismarck, ND	0.7893	0.8504
Boise City, ID	0.9086	0.9365
Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH	1.1358	1.0911
Burlington, VT	1.0122	1.0083
Caguas, PR	0.4561	0.5842
Champaign-Urbana, IL	0.9163	0.9419
Charleston-North Charleston, SC	0.8988	0.9295
Charleston, WV	0.8861	0.9205
Charlotte-Gastonia-Rock Hill, NC-SC	0.9433	0.9608
Chattanooga, TN-GA	0.9453	0.9622
Chicago, IL	1.0872	1.0589
Cincinnati, OH-KY-IN	0.9434	0.9609
Clarksville-Hopkinsville, TN-KY	0.8283	0.8790
Cleveland-Lorain-Elyria, OH	0.9688	0.9785
Columbia, MO	0.8736	0.9116
Columbia, SC	0.9215	0.9456
Columbus, GA-AL	0.8318	0.8815
Columbus, OH	0.9728	0.9813
Corpus Christi, TX	0.8599	0.9018
Dallas, TX	0.9589	0.9717
Danville, VA	0.8706	0.9095
Davenport-Moline-Rock Island, IA-IL	0.8606	0.9023
Dayton-Springfield, OH	0.9231	0.9467
Denver, CO	1.0197	1.0134
Des Moines, IA	0.8754	0.9129
Dothan, AL	0.7836	0.8462
Dover, DE	1.0511	1.0347
Duluth-Superior, MN-WI	1.0165	1.0113
Elkhart-Goshen, IN	0.9379	0.9570
Eugene-Springfield, OR	1.0765	1.0518
Evansville-Henderson, IN-KY	0.8396	0.8872

TABLE D-16.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED, FISCAL YEAR 2000—Continued

Area	Wage index	GAF
Fargo-Moorhead, ND-MN (ND and SD Hospitals)	0.8620	0.9033
Fargo-Moorhead, ND-MN (MN Hospital)	0.8669	0.9068
Fayetteville, NC	0.8494	0.8942
Flagstaff, AZ-UT	0.9860	0.9904
Flint, MI	1.0918	1.0620
Fort Collins-Loveland, CO	1.0197	1.0134
Fort Pierce-Port St. Lucie, FL	1.0109	1.0075
Fort Smith, AR-OK	0.7696	0.8358
Fort Walton Beach, FL	0.8713	0.9100
Fort Worth-Arlington, TX	0.9835	0.9887
Fresno, CA	1.0262	1.0179
Gadsden, AL	0.8754	0.9129
Gainesville, FL	0.9963	0.9975
Goldsboro, NC	0.8333	0.8826
Grand Forks, ND-MN	0.9097	0.9372
Grand Rapids-Muskegon-Holland, MI	1.0017	1.0012
Great Falls, MT	1.0459	1.0312
Greeley, CO	0.9449	0.9619
Green Bay, WI	0.9215	0.9456
Greensboro-Winston-Salem-High Point, NC	0.9037	0.9330
Greenville, NC	0.9237	0.9471
Greenville-Spartanburg-Anderson, SC	0.9188	0.9437
Hagerstown, MD	0.8853	0.9200
Harrisburg-Lebanon-Carlisle, PA	0.9793	0.9858
Hartford, CT	1.1715	1.1145
Hickory-Morganton-Lenoir, NC	0.9148	0.9408
Honolulu, HI	1.1479	1.0991
Houston, TX	0.9387	0.9576
Huntington-Ashland, WV-KY-OH	0.9436	0.9610
Huntsville, AL	0.8608	0.9024
Indianapolis, IN	0.9792	0.9857
Iowa City, IA	0.9460	0.9627
Jackson, MS	0.8268	0.8779
Jackson, TN	0.8447	0.8909
Jacksonville, FL	0.8957	0.9273
Johnson City-Kingsport-Bristol, TN-VA	0.8894	0.9229
Jonesboro, AR	0.7251	0.8024
Joplin, MO	0.7678	0.8345
Kalamazoo-Battlecreek, MI	0.9981	0.9987
Kansas City, KS-MO	0.9322	0.9531
Knoxville, TN	0.9199	0.9444
Kokomo, IN	0.8984	0.9293
Lafayette, LA	0.8397	0.8872
Lansing-East Lansing, MI	0.9834	0.9886
Las Vegas, NV-AZ	1.1258	1.0845
Lexington, KY	0.8552	0.8984
Lima, OH	0.9108	0.9380
Lincoln, NE	0.9451	0.9621
Little Rock-North Little Rock, AR	0.8432	0.8898

TABLE D-16.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED, FISCAL YEAR 2000—Continued

Area	Wage index	GAF
Longview-Marshall, TX	0.8541	0.8976
Los Angeles-Long Beach, CA	1.2085	1.1385
Louisville, KY-IN	0.9381	0.9572
Macon, GA	0.8530	0.8968
Madison, WI	0.9729	0.9814
Mansfield, OH	0.8649	0.9054
Memphis, TN-AR-MS	0.8244	0.8761
Merced, CA	1.0509	1.0346
Milwaukee-Waukesha, WI	0.9845	0.9894
Minneapolis-St. Paul, MN-WI	1.0929	1.0627
Missoula, MT	0.9085	0.9364
Monmouth-Ocean, NJ	1.1258	1.0845
Monroe, LA	0.8062	0.8628
Montgomery, AL	0.7724	0.8379
Myrtle Beach, SC	0.8357	0.8843
Nashville, TN	0.9254	0.9483
New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT	1.2417	1.1598
New London-Norwich, CT	1.2328	1.1541
New Orleans, LA	0.9089	0.9367
New York, NY	1.4399	1.2836
Newark, NJ	1.0772	1.0522
Newburgh, NY-PA	1.0837	1.0566
Norfolk-Virginia Beach-Newport News, VA-NC	0.8442	0.8905
Oakland, CA	1.5095	1.3258
Oklahoma City, OK	0.8589	0.9011
Omaha, NE-IA	1.0455	1.0309
Orange County, CA	1.1592	1.1065
Orlando, FL	0.9806	0.9867
Peoria-Pekin, IL	0.8399	0.8874
Philadelphia, PA-NJ	1.1186	1.0798
Phoenix-Mesa, AZ	0.9464	0.9630
Pittsburgh, PA	0.9496	0.9652
Pocatello, ID	0.8651	0.9055
Portland, ME	0.9487	0.9646
Portland-Vancouver, OR-WA	1.0996	1.0672
Provo-Orem, UT	0.9818	0.9875
Raleigh-Durham-Chapel Hill, NC	0.9544	0.9685
Roanoke, VA	0.8142	0.8687
Rockford, IL	0.8783	0.9150
Sacramento, CA	1.2284	1.1513
Saginaw-Bay City-Midland, MI	0.9294	0.9511
St. Cloud, MN	0.9608	0.9730
St. Louis, MO-IL	0.9052	0.9341
Salt Lake City-Ogden, UT	0.9854	0.9900
San Diego, CA	1.1955	1.1301
Santa Fe, NM	0.9911	0.9939
Santa Rosa, CA	1.3000	1.1968
Seattle-Bellevue-Everett, WA	1.1289	1.0866
Sharon, PA	0.8524	0.8964

TABLE D-16.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED, FISCAL YEAR 2000—Continued

Area	Wage index	GAF
Sherman-Denison, TX	0.8833	0.9185
Sioux City, IA-NE	0.8549	0.8982
South Bend, IN	0.9692	0.9788
Springfield, IL	0.8684	0.9079
Springfield, MO	0.7991	0.8576
Syracuse, NY	0.9441	0.9614
Tallahassee, FL	0.8274	0.8783
Tampa-St. Petersburg-Clearwater, FL	0.9119	0.9388
Texarkana, AR-Texarkana, TX	0.8174	0.8710
Toledo, OH	0.9593	0.9719
Topeka, KS	0.9326	0.9533
Tulsa, OK	0.7931	0.8532
Tuscaloosa, AL	0.8064	0.8630
Tyler, TX	0.9199	0.9444
Vallejo-Fairfield-Napa, CA	1.2167	1.1438
Victoria, TX	0.8378	0.8859
Waco, TX	0.8075	0.8638
Washington, DC-MD-VA-WV	1.1053	1.0710
Waterloo-Cedar Falls, IA	0.8841	0.9191
Wausau, WI	0.9445	0.9617
Wichita, KS	0.9082	0.9362
Rural Colorado	0.8813	0.9171
Rural Florida	0.8986	0.9294
Rural Illinois	0.8047	0.8617
Rural Louisiana	0.7486	0.8201
Rural Michigan	0.8831	0.9184
Rural Minnesota	0.8669	0.9068
Rural Missouri	0.7723	0.8378
Rural Montana	0.8398	0.8873
Rural Oregon	0.9873	0.9913
Rural Tennessee	0.7650	0.8324
Rural Texas	0.7471	0.8190
Rural Virginia (KY Hospital)	0.8043	0.8615
Rural Washington	1.0333	1.0227
Rural Wyoming	0.8859	0.9204

Source: Federal Register (1999a).

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
1	1	Surg	Craniotomy age >17 except for trauma	3.0694	3.0957	0.9
2	1	Surg	Craniotomy for trauma age >17	3.1113	3.1047	-0.2
3	1	Surg ¹	Craniotomy age 0-17	1.9493	1.9619	0.6
4	1	Surg	Spinal procedures	2.3278	2.3205	-0.3
5	1	Surg	Extracranial vascular procedures	1.4851	1.4466	-2.6
6	1	Surg	Carpal tunnel release	0.7712	0.8119	5.3
7	1	Surg	Peripheral and cranial nerve and other nervous system proc with CC.	2.3938	2.4986	4.4
8	1	Surg	Peripheral and cranial nerve and other nervous system proc without CC.	1.2901	1.3426	4.1
9	1	Med	Spinal disorders and injuries	1.2873	1.1917	-7.4
10	1	Med	Nervous system neoplasms with CC	1.2107	1.2036	-0.6
11	1	Med	Nervous system neoplasms without CC	0.8245	0.8283	0.5
12	1	Med	Degenerative nervous system disorders	0.9030	0.8904	-1.4
13	1	Med	Multiple sclerosis and cerebellar ataxia	0.7810	0.7599	-2.7
14	1	Med	Specific cerebrovascular disorders except TIA	1.1955	1.1914	-0.3
15	1	Med	Transient ischemic attack and precerebral occlusions.	0.7314	0.7397	1.1
16	1	Med	Nonspecific cerebrovascular disorders with CC	1.0693	1.0985	2.7
17	1	Med	Nonspecific cerebrovascular disorders without CC	0.6178	0.6399	3.6
18	1	Med	Cranial and peripheral nerve disorders with CC	0.9269	0.9353	0.9
19	1	Med	Cranial and peripheral nerve disorders without CC	0.6455	0.6503	0.7
20	1	Med	Nervous system infection except viral meningitis	2.6102	2.6125	0.1
21	1	Med	Viral meningitis	1.4753	1.5032	1.9
22	1	Med	Hypertensive encephalopathy	0.8985	0.9621	7.1
23	1	Med	Nontraumatic stupor and coma	0.7764	0.7746	-0.2
24	1	Med	Seizure and headache age >17 with CC	0.9577	0.9770	2.0
25	1	Med	Seizure and headache age >17 without CC	0.5893	0.5911	0.3
26	1	Med	Seizure and headache age 0-17	0.7277	0.6337	-12.9
27	1	Med	Traumatic stupor and coma, coma >1 hr	1.3130	1.3581	3.4
28	1	Med	Traumatic stupor and coma, coma <1 hr age >17 with CC.	1.1700	1.2690	8.5
29	1	Med	Traumatic stupor and coma, coma <1 hr age >17 without CC.	0.6377	0.6859	7.6
30	1	Med ¹	Traumatic stupor and coma, coma <1 hr age 0-17.	0.3297	0.3318	0.6
31	1	Med	Concussion age >17 with CC	0.8105	0.8497	4.8
32	1	Med	Concussion age >17 without CC	0.5158	0.5295	2.7
33	1	Med ¹	Concussion age 0-17	0.2072	0.2085	0.6
34	1	Med	Other disorders of nervous system with CC	1.0091	1.0275	1.8
35	1	Med	Other disorders of nervous system without CC	0.5907	0.5937	0.5
36	2	Surg	Retinal procedures	0.6891	0.6834	-0.8
37	2	Surg	Orbital procedures	0.9637	1.0318	7.1
38	2	Surg	Primary iris procedures	0.4841	0.4875	0.7
39	2	Surg	Lens procedures with or without vitrectomy	0.5697	0.5704	0.1
40	2	Surg	Extraocular procedures except orbit age >17	0.7895	0.8170	3.5
41	2	Surg ¹	Extraocular procedures except orbit age 0-17	0.3356	0.3378	0.7
42	2	Surg	Intraocular procedures except retina, iris and lens	0.6030	0.6236	3.4
43	2	Med	Hyphema	0.4371	0.4515	3.3
44	2	Med	Acute major eye infections	0.6090	0.6496	6.7
45	2	Med	Neurological eye disorders	0.6814	0.6941	1.9
46	2	Med	Other disorders of the eye age >17 with CC	0.7521	0.7525	0.1
47	2	Med	Other disorders of the eye age >17 without CC	0.4617	0.4784	3.6
48	2	Med ¹	Other disorders of the eye age 0-17	0.2956	0.2975	0.6
49	3	Surg	Major head and neck procedures	1.7567	1.8557	5.6
50	3	Surg	Sialoadenectomy	0.8283	0.8401	1.4
51	3	Surg	Salivary gland procedures except sialoadenectomy	0.8601	0.8504	-1.1
52	3	Surg	Cleft lip and palate repair	0.8614	0.7696	-10.7

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
53	3	Surg	Sinus and mastoid procedures age >17	1.1432	1.1784	3.1
54	3	Surg ¹	Sinus and mastoid procedures age 0-17	0.4792	0.4823	0.6
55	3	Surg	Miscellaneous ear, nose, mouth and throat procedures.	0.8952	0.8686	-3.0
56	3	Surg	Rhinoplasty	0.9008	0.8893	-1.3
57	3	Surg	T&A proc, except tonsillectomy and/or adenoidectomy only, age >17.	0.8876	1.1589	30.6
58	3	Surg ¹	T&A proc, except tonsillectomy and/or adenoidectomy only, age 0-17.	0.2721	0.2739	0.7
59	3	Surg	Tonsillectomy and/or adenoidectomy only, age >17.	0.6700	0.6720	0.3
60	3	Surg ¹	Tonsillectomy and/or adenoidectomy only, age 0-17.	0.2073	0.2086	0.6
61	3	Surg	Myringotomy with tube insertion age >17	1.1586	1.2597	8.7
62	3	Surg ¹	Myringotomy with tube insertion age 0-17	0.2934	0.2953	0.6
63	3	Surg	Other ear, nose, mouth and throat O.R. procedures.	1.3283	1.3136	-1.1
64	3	Med	Ear, nose, mouth and throat malignancy	1.2177	1.2464	2.4
65	3	Med	Dysequilibrium	0.5162	0.5261	1.9
66	3	Med	Epistaxis	0.5402	0.5548	2.7
67	3	Med	Epiglottitis	0.8230	0.8031	-2.4
68	3	Med	Otitis media and uri age >17 with CC	0.6699	0.6758	0.9
69	3	Med	Otitis media and uri age >17 without CC	0.5053	0.5191	2.7
70	3	Med	Otitis media and uri age 0-17	0.3841	0.3985	3.7
71	3	Med	Laryngotracheitis	0.7630	0.6136	-19.6
72	3	Med	Nasal trauma and deformity	0.6524	0.6462	-1.0
73	3	Med	Other ear, nose, mouth and throat diagnoses age >17.	0.7504	0.7667	2.2
74	3	Med ¹	Other ear, nose, mouth and throat diagnoses age 0-17.	0.3334	0.3356	0.7
75	4	Surg	Major chest procedures	3.1811	3.1107	-2.2
76	4	Surg	Other respiratory system O.R. procedures with CC	2.6876	2.7208	1.2
77	4	Surg	Other respiratory system O.R. procedures without CC.	1.1565	1.2113	4.7
78	4	Med	Pulmonary embolism	1.4047	1.3861	-1.3
79	4	Med	Respiratory infections and inflammations age >17 with CC.	1.6309	1.6439	0.8
80	4	Med	Respiratory infections and inflammations age >17 without CC.	0.9147	0.8980	-1.8
81	4	Med ¹	Respiratory infections and inflammations age 0-17.	1.5098	1.5196	0.6
82	4	Med	Respiratory neoplasms	1.3606	1.3656	0.4
83	4	Med	Major chest trauma with CC	0.9544	0.9796	2.6
84	4	Med	Major chest trauma without CC	0.5068	0.5278	4.1
85	4	Med	Pleural effusion with CC	1.2351	1.2421	0.6
86	4	Med	Pleural effusion without CC	0.6835	0.6724	-1.6
87	4	Med	Pulmonary edema and respiratory failure	1.3650	1.3694	0.3
88	4	Med	Chronic obstructive pulmonary disease	0.9530	0.9406	-1.3
89	4	Med	Simple pneumonia and pleurisy age >17 with CC	1.0838	1.0855	0.2
90	4	Med	Simple pneumonia and pleurisy age >17 without CC.	0.6644	0.6734	1.4
91	4	Med	Simple pneumonia and pleurisy age 0-17	0.7209	0.6334	-12.1
92	4	Med	Interstitial lung disease with CC	1.2042	1.1786	-2.1
93	4	Med	Interstitial lung disease without CC	0.7711	0.7644	-0.9
94	4	Med	Pneumothorax with CC	1.1879	1.1910	0.3
95	4	Med	Pneumothorax without CC	0.6042	0.5944	-1.6
96	4	Med	Bronchitis and asthma age >17 with CC	0.7891	0.7943	0.7
97	4	Med	Bronchitis and asthma age >17 without CC	0.5919	0.5954	0.6

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
98	4	Med	Bronchitis and asthma age 0-17	0.6953	0.6859	-1.4
99	4	Med	Respiratory signs and symptoms with CC	0.6738	0.6817	1.2
100	4	Med	Respiratory signs and symptoms without CC	0.5150	0.5268	2.3
101	4	Med	Other respiratory system diagnoses with CC	0.8292	0.8490	2.4
102	4	Med	Other respiratory system diagnoses without CC	0.5395	0.5349	-0.9
103	5	Surg	Heart transplant	17.7902	19.5100	9.7
104	5	Surg	Cardiac valve and other major cardiothoracic proc with cardiac cath.	7.2824	7.2361	-0.6
105	5	Surg	Cardiac valve and other major cardiothoracic proc without cardiac cath.	5.7099	5.6607	-0.9
106	5	Surg	Coronary bypass with PTCA	7.3690	7.3334	-0.5
107	5	Surg	Coronary bypass with cardiac cath	5.5030	5.4639	-0.7
108	5	Surg	Other cardiothoracic procedures	5.9764	5.7715	-3.4
109	5	Surg	Coronary bypass without PTCA or cardiac cath	4.0718	4.0403	-0.8
110	5	Surg	Major cardiovascular procedures with CC	4.1500	4.1600	0.2
111	5	Surg	Major cardiovascular procedures without CC	2.2199	2.2267	0.3
112	5	Surg	Percutaneous cardiovascular procedures	1.9893	1.9222	-3.4
113	5	Surg	Amputation for circulatory system disorders except upper limb and toe.	2.7389	2.7283	-0.4
114	5	Surg	Upper limb and toe amputation for circulatory system disorders.	1.5077	1.5555	3.2
115	5	Surg	Permanent cardiac pacemaker implant with ami, heart failure or shock, or AICD lead or generator proc.	3.5558	3.4727	-2.3
116	5	Surg	Other permanent cardiac pacemaker implant or PTCA with coronary artery stent implant.	2.4833	2.4651	-0.7
117	5	Surg	Cardiac pacemaker revision except device replacement.	1.2372	1.2931	4.5
118	5	Surg	Cardiac pacemaker device replacement	1.5716	1.5480	-1.5
119	5	Surg	Vein ligation and stripping	1.3076	1.2297	-6.0
120	5	Surg	Other circulatory system O.R. procedures	1.9630	2.0136	2.6
121	5	Med	Circulatory disorders with AMI and major comp, discharged alive.	1.6334	1.6295	-0.2
122	5	Med	Circulatory disorders with AMI without major comp, discharged alive.	1.1286	1.1063	-2.0
123	5	Med	Circulatory disorders with AMI, expired	1.4848	1.5108	1.8
124	5	Med	Circulatory disorders except AMI, with cardiac cath and complex diag.	1.3793	1.4020	1.6
125	5	Med	Circulatory disorders except AMI, with cardiac cath without complex diag.	1.0134	1.0436	3.0
126	5	Med	Acute and subacute endocarditis	2.5837	2.5170	-2.6
127	5	Med	Heart failure and shock	1.0131	1.0144	0.1
128	5	Med	Deep vein thrombophlebitis	0.7641	0.7645	0.1
129	5	Med	Cardiac arrest, unexplained	1.0898	1.0770	-1.2
130	5	Med	Peripheral vascular disorders with CC	0.9427	0.9469	0.4
131	5	Med	Peripheral vascular disorders without CC	0.6067	0.6050	-0.3
132	5	Med	Atherosclerosis with CC	0.6698	0.6713	0.2
133	5	Med	Atherosclerosis without CC	0.5556	0.5675	2.1
134	5	Med	Hypertension	0.5823	0.5846	0.4
135	5	Med	Cardiac congenital and valvular disorders age >17 with CC.	0.8543	0.8704	1.9
136	5	Med	Cardiac congenital and valvular disorders age >17 without CC.	0.5735	0.6004	4.7
137	5	Med ¹	Cardiac congenital and valvular disorders age 0-17.	0.8135	0.8188	0.7
138	5	Med	Cardiac arrhythmia and conduction disorders with CC.	0.7999	0.8154	1.9

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
139	5	Med	Cardiac arrhythmia and conduction disorders without CC.	0.4977	0.5079	2.0
140	5	Med	Angina pectoris	0.5957	0.5829	-2.1
141	5	Med	Syncope and collapse with CC	0.7022	0.7091	1.0
142	5	Med	Syncope and collapse without CC	0.5312	0.5419	2.0
143	5	Med	Chest pain	0.5263	0.5342	1.5
144	5	Med	Other circulatory system diagnoses with CC	1.1122	1.1526	3.6
145	5	Med	Other circulatory system diagnoses without CC	0.6316	0.6497	2.9
146	6	Surg	Rectal resection with CC	2.2175	2.7862	25.6
147	6	Surg	Rectal resection without CC	1.5890	1.6382	3.1
148	6	Surg	Major small and large bowel procedures with CC	3.4231	3.4289	0.2
149	6	Surg	Major small and large bowel procedures without CC.	1.5692	1.5723	0.2
150	6	Surg	Peritoneal adhesiolysis with CC	2.7419	2.8098	2.5
151	6	Surg	Peritoneal adhesiolysis without CC	1.2808	1.3437	4.9
152	6	Surg	Minor small and large bowel procedures with CC	1.9406	1.9606	1.0
153	6	Surg	Minor small and large bowel procedures without CC.	1.1925	1.2170	2.1
154	6	Surg	Stomach, esophageal and duodenal procedures age >17 with CC.	4.1847	4.1335	-1.2
155	6	Surg	Stomach, esophageal and duodenal procedures age >17 without CC.	1.3541	1.3781	1.8
156	6	Surg ¹	Stomach, esophageal and duodenal procedures age 0-17.	0.8378	0.8432	0.6
157	6	Surg	Anal and stomal procedures with CC	1.2082	1.2392	2.6
158	6	Surg	Anal and stomal procedures without CC	0.6416	0.6561	2.3
159	6	Surg	Hernia procedures except inguinal and femoral age >17 with CC.	1.2878	1.3097	1.7
160	6	Surg	Hernia procedures except inguinal and femoral age >17 without CC.	0.7411	0.7801	5.3
161	6	Surg	Inguinal and femoral hernia procedures age >17 with CC.	1.0710	1.0976	2.5
162	6	Surg	Inguinal and femoral hernia procedures age >17 without CC.	0.6108	0.6283	2.9
163	6	Surg ¹	Hernia procedures age 0-17	0.8664	0.8720	0.6
164	6	Surg	Appendectomy with complicated principal diag with CC.	2.3212	2.3463	1.1
165	6	Surg	Appendectomy with complicated principal diag without CC.	1.2269	1.2655	3.1
166	6	Surg	Appendectomy without complicated principal diag with CC.	1.4446	1.4788	2.4
167	6	Surg	Appendectomy without complicated principal diag without CC.	0.8522	0.8995	5.6
168	3	Surg	Mouth procedures with CC	1.1642	1.2039	3.4
169	3	Surg	Mouth procedures without CC	0.7219	0.7492	3.8
170	6	Surg	Other digestive system O.R. procedures with CC ..	2.8030	2.8435	1.4
171	6	Surg	Other digestive system O.R. procedures without CC.	1.1658	1.2556	7.7
172	6	Med	Digestive malignancy with CC	1.3143	1.3144	0.0
173	6	Med	Digestive malignancy without CC	0.7320	0.7123	-2.7
174	6	Med	Gastrointestinal hemorrhage with CC	0.9933	0.9981	0.5
175	6	Med	Gastrointestinal hemorrhage without CC	0.5298	0.5456	3.0
176	6	Med	Complicated peptic ulcer	1.1053	1.0968	-0.8
177	6	Med	Uncomplicated peptic ulcer with CC	0.8614	0.8802	2.2
178	6	Med	Uncomplicated peptic ulcer without CC	0.6317	0.6502	2.9
179	6	Med	Inflammatory bowel disease	1.1054	1.0869	-1.7
180	6	Med	Gastrointestinal obstruction with CC	0.9174	0.9206	0.3
181	6	Med	Gastrointestinal obstruction without CC	0.5259	0.5277	0.3

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
182	6	Med	Esophagitis, gastroent and misc digestive disorders age >17 with CC.	0.7690	0.7821	1.7
183	6	Med	Esophagitis, gastroent and misc digestive disorders age >17 without CC.	0.5577	0.5710	2.4
184	6	Med	Esophagitis, gastroent and misc digestive disorders age 0-17.	0.5457	0.5286	-3.1
185	3	Med	Dental and oral dis except extractions and restorations, age >17.	0.8292	0.8593	3.6
186	3	Med ¹	Dental and oral dis except extractions and restorations, age 0-17.	0.3193	0.3214	0.7
187	3	Med	Dental extractions and restorations	0.7385	0.7790	5.5
188	6	Med	Other digestive system diagnoses age >17 with CC.	1.0758	1.0942	1.7
189	6	Med	Other digestive system diagnoses age >17 without CC.	0.5593	0.5831	4.3
190	6	Med	Other digestive system diagnoses age 0-17	0.7519	1.0011	33.1
191	7	Surg	Pancreas, liver and shunt procedures with CC	4.4345	4.3837	-1.1
192	7	Surg	Pancreas, liver and shunt procedures without CC	1.7253	1.8454	7.0
193	7	Surg	Biliary tract proc except only cholecystectomy with or without C.D.E. with CC.	3.3276	3.4161	2.7
194	7	Surg	Biliary tract proc except only cholecystectomy with or without C.D.E. without CC.	1.6646	1.6401	-1.5
195	7	Surg	Cholecystectomy with C.D.E. with CC	2.7888	2.9359	5.3
196	7	Surg	Cholecystectomy with C.D.E. without CC	1.6357	1.6554	1.2
197	7	Surg	Cholecystectomy except by laparoscope without C.D.E. with CC.	2.3845	2.4183	1.4
198	7	Surg	Cholecystectomy except by laparoscope without C.D.E. without CC.	1.1996	1.2324	2.7
199	7	Surg	Hepatobiliary diagnostic procedure for malignancy	2.3865	2.3317	-2.3
200	7	Surg	Hepatobiliary diagnostic procedure for nonmalignancy.	3.2800	3.0708	-6.4
201	7	Surg	Other hepatobiliary or pancreas O.R. procedures ..	3.6053	3.5838	-0.6
202	7	Med	Cirrhosis and alcoholic hepatitis	1.3158	1.3188	0.2
203	7	Med	Malignancy of hepatobiliary system or pancreas ..	1.3000	1.3046	0.4
204	7	Med	Disorders of pancreas except malignancy	1.2122	1.2161	0.3
205	7	Med	Disorders of liver except malig, cirr, alc hepa with CC.	1.2127	1.1816	-2.6
206	7	Med	Disorders of liver except malig, cirr, alc hepa without CC.	0.6947	0.7163	3.1
207	7	Med	Disorders of the biliary tract with CC	1.0695	1.1013	3.0
208	7	Med	Disorders of the biliary tract without CC	0.6169	0.6455	4.6
209	8	Surg	Major joint and limb reattachment procedures of lower extremity.	2.1803	2.1175	-2.9
210	8	Surg	Hip and femur procedures except major joint age >17 with CC.	1.8128	1.8028	-0.6
211	8	Surg	Hip and femur procedures except major joint age >17 without CC.	1.2505	1.2609	0.8
212	8	Surg ¹	Hip and femur procedures except major joint age 0-17.	0.8413	0.8468	0.7
213	8	Surg	Amputation for musculoskeletal system and connective tissue disorders.	1.6383	1.7130	4.6
214	8	Surg	No longer valid.			
215	8	Surg	No longer valid.			
216	8	Surg	Biopsies of musculoskeletal system and connective tissue.	2.1275	2.1400	0.6
217	8	Surg	Wound debrid and skin graft except hand, for musculoskeletal and connective tissue disorders.	2.7944	2.8006	0.2

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
218	8	Surg	Lower extrem and humer proc except hip, foot, femur age >17 with CC.	1.4641	1.4900	1.8
219	8	Surg	Lower extrem and humer proc except hip, foot, femur age >17 without CC.	0.9924	1.0117	1.9
220	8	Surg ¹	Lower extrem and humer proc except hip, foot, femur age 0-17.	0.5803	0.5841	0.7
221	8	Surg	No longer valid.			
222	8	Surg	No longer valid.			
223	8	Surg	Major shoulder/elbow proc, or other upper extremity proc with CC.	0.9255	0.9378	1.3
224	8	Surg	Shoulder, elbow or forearm proc, except major joint proc, without CC.	0.7871	0.8042	2.2
225	8	Surg	Foot procedures	1.0122	1.0518	3.9
226	8	Surg	Soft tissue procedures with CC	1.4081	1.4383	2.1
227	8	Surg	Soft tissue procedures without CC	0.7922	0.8181	3.3
228	8	Surg	Major thumb or joint proc, or other hand or wrist proc with CC.	1.0038	1.0516	4.8
229	8	Surg	Hand or wrist proc, except major joint proc, without CC.	0.7058	0.7348	4.1
230	8	Surg	Local excision and removal of int fix devices of hip and femur.	1.1072	1.1722	5.9
231	8	Surg	Local excision and removal of int fix devices except hip and femur.	1.2923	1.3623	5.4
232	8	Surg	Arthroscopy	1.0892	1.1567	6.2
233	8	Surg	Other musculoskeletal system and connective tissue O.R. proc with CC.	2.0628	2.0424	-1.0
234	8	Surg	Other musculoskeletal system and connective tissue O.R. proc without CC.	1.1731	1.2450	6.1
235	8	Med	Fractures of femur	0.7524	0.7479	-0.6
236	8	Med	Fractures of hip and pelvis	0.7243	0.7157	-1.2
237	8	Med	Sprains, strains, and dislocations of hip, pelvis and thigh.	0.5384	0.5451	1.2
238	8	Med	Osteomyelitis	1.3409	1.2831	-4.3
239	8	Med	Pathological fractures and musculoskeletal and connective tissue malignancy.	0.9653	0.9660	0.1
240	8	Med	Connective tissue disorders with CC	1.2252	1.2328	0.6
241	8	Med	Connective tissue disorders without CC	0.5903	0.6089	3.2
242	8	Med	Septic arthritis	1.0371	1.0168	-2.0
243	8	Med	Medical back problems	0.7142	0.7164	0.3
244	8	Med	Bone diseases and specific arthropathies with CC	0.7048	0.7024	-0.3
245	8	Med	Bone diseases and specific arthropathies without CC.	0.4939	0.4801	-2.8
246	8	Med	Nonspecific arthropathies	0.5647	0.5545	-1.8
247	8	Med	Signs and symptoms of musculoskeletal system and connective tissue.	0.5534	0.5563	0.5
248	8	Med	Tendonitis, myositis and bursitis	0.7445	0.7554	1.5
249	8	Med	Aftercare, musculoskeletal system and connective tissue.	0.6520	0.6504	-0.2
250	8	Med	FX, sprn, strn and disl of forearm, hand, foot age >17 with CC.	0.6752	0.6700	-0.8
251	8	Med	FX, sprn, strn and disl of forearm, hand, foot age >17 without CC.	0.4621	0.4608	-0.3
252	8	Med ¹	FX, sprn, strn and disl of forearm, hand, foot age 0-17.	0.2521	0.2537	0.6
253	8	Med	FX, sprn, strn and disl of uparm, lowleg ex foot age >17 with CC.	0.7181	0.7261	1.1
254	8	Med	FX, sprn, strn and disl of uparm, lowleg ex foot age >17 without CC.	0.4309	0.4339	0.7

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
255	8	Med ¹	FX, sprn, strn and disl of uparm, lowleg ex foot age 0-17.	0.2935	0.2954	0.6
256	8	Med	Other musculoskeletal system and connective tissue diagnoses.	0.7583	0.7687	1.4
257	9	Surg	Total mastectomy for malignancy with CC	0.9198	0.9134	-0.7
258	9	Surg	Total mastectomy for malignancy without CC	0.7228	0.7227	0.0
259	9	Surg	Subtotal mastectomy for malignancy with CC	0.8837	0.8673	-1.9
260	9	Surg	Subtotal mastectomy for malignancy without CC	0.6241	0.6444	3.3
261	9	Surg	Breast proc for nonmalignancy except biopsy and local excision.	0.9131	0.9188	0.6
262	9	Surg	Breast biopsy and local excision for nonmalignancy.	0.8729	0.8392	-3.9
263	9	Surg	Skin graft and/or debrid for skin ulcer or cellulitis with CC.	2.0064	2.0609	2.7
264	9	Surg	Skin graft and/or debrid for skin ulcer or cellulitis without CC.	1.1090	1.1216	1.1
265	9	Surg	Skin graft and/or debrid except for skin ulcer or cellulitis with CC.	1.4796	1.5650	5.8
266	9	Surg	Skin graft and/or debrid except for skin ulcer or cellulitis without CC.	0.8262	0.8495	2.8
267	9	Surg	Perianal and pilonidal procedures	0.9293	0.9815	5.6
268	9	Surg	Skin, subcutaneous tissue and breast plastic procedures.	1.0669	1.1979	12.3
269	9	Surg	Other skin, subcut tissue and breast proc with CC.	1.5798	1.6147	2.2
270	9	Surg	Other skin, subcut tissue and breast proc without CC.	0.7206	0.7447	3.3
271	9	Med	Skin ulcers	1.0007	0.9905	-1.0
272	9	Med	Major skin disorders with CC	1.0421	1.0003	-4.0
273	9	Med	Major skin disorders without CC	0.6260	0.6275	0.2
274	9	Med	Malignant breast disorders with CC	1.1119	1.1335	1.9
275	9	Med	Malignant breast disorders without CC	0.5305	0.6322	19.2
276	9	Med	Nonmalignant breast disorders	0.6407	0.6529	1.9
277	9	Med	Cellulitis age >17 with CC	0.8342	0.8312	-0.4
278	9	Med	Cellulitis age >17 without CC	0.5548	0.5621	1.3
279	9	Med	Cellulitis age 0-17	0.6657	0.6641	-0.2
280	9	Med	Trauma to the skin, subcut tissue and breast age >17 with CC.	0.6628	0.6736	1.6
281	9	Med	Trauma to the skin, subcut tissue and breast age >17 without CC.	0.4535	0.4596	1.3
282	9	Med ¹	Trauma to the skin, subcut tissue and breast age 0-17.	0.2552	0.2569	0.7
283	9	Med	Minor skin disorders with CC	0.6938	0.7129	2.8
284	9	Med	Minor skin disorders without CC	0.4399	0.4373	-0.6
285	10	Surg	Amputation of lower limb for endocrine, nutrit, and metabolic disorders.	2.0425	2.0217	-1.0
286	10	Surg	Adrenal and pituitary procedures	2.2199	2.2287	0.4
287	10	Surg	Skin grafts and wound debrid for endocrine, nutrit and metabolic disorders.	1.8591	1.8045	-2.9
288	10	Surg	O.R. procedures for obesity	2.0227	2.0665	2.2
289	10	Surg	Parathyroid procedures	1.0117	0.9756	-3.6
290	10	Surg	Thyroid procedures	0.9166	0.9174	0.1
291	10	Surg	Thyroglossal procedures	0.5772	0.6732	16.6
292	10	Surg	Other endocrine, nutrit and metabolic O.R. proc with CC.	2.5980	2.4719	-4.9
293	10	Surg	Other endocrine, nutrit and metabolic O.R. proc without CC.	1.2794	1.1942	-6.7
294	10	Med	Diabetes age >35	0.7478	0.7518	0.5

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
295	10	Med	Diabetes age 0–35	0.7242	0.7464	3.1
296	10	Med	Nutritional and misc metabolic disorders age >17 with CC.	0.8497	0.8556	0.7
297	10	Med	Nutritional and misc metabolic disorders age >17 without CC.	0.5202	0.5204	0.0
298	10	Med	Nutritional and misc metabolic disorders age 0–17.	0.5262	0.4954	–5.9
299	10	Med	Inborn errors of metabolism	0.8800	0.9475	7.7
300	10	Med	Endocrine disorders with CC	1.0801	1.0779	–0.2
301	10	Med	Endocrine disorders without CC	0.6020	0.5889	–2.2
302	11	Surg	Kidney transplant	3.6406	3.5669	–2.0
303	11	Surg	Kidney, ureter and major bladder procedures for neoplasm.	2.6597	2.5401	–4.5
304	11	Surg	Kidney, ureter and major bladder proc for nonneoplasm with CC.	2.3361	2.3458	0.4
305	11	Surg	Kidney, ureter and major bladder proc for nonneoplasm without CC.	1.1341	1.1857	4.5
306	11	Surg	Prostatectomy with CC	1.2401	1.2448	0.4
307	11	Surg	Prostatectomy without CC	0.6410	0.6588	2.8
308	11	Surg	Minor bladder procedures with CC	1.5166	1.5907	4.9
309	11	Surg	Minor bladder procedures without CC	0.9076	0.9442	4.0
310	11	Surg	Transurethral procedures with CC	1.0629	1.0869	2.3
311	11	Surg	Transurethral procedures without CC	0.6073	0.6126	0.9
312	11	Surg	Urethral procedures, age >17 with CC	0.9877	1.0270	4.0
313	11	Surg	Urethral procedures, age >17 without CC	0.6286	0.6640	5.6
314	11	Surg ¹	Urethral procedures, age 0–17	0.4918	0.4950	0.7
315	11	Surg	Other kidney and urinary tract O.R. procedures	2.0703	2.0660	–0.2
316	11	Med	Renal failure	1.3315	1.3380	0.5
317	11	Med	Admit for renal dialysis	0.6140	0.6965	13.4
318	11	Med	Kidney and urinary tract neoplasms with CC	1.0921	1.1413	4.5
319	11	Med	Kidney and urinary tract neoplasms without CC ...	0.6150	0.6187	0.6
320	11	Med	Kidney and urinary tract infections age >17 with CC.	0.8665	0.8647	–0.2
321	11	Med	Kidney and urinary tract infections age >17 without CC.	0.5808	0.5785	–0.4
322	11	Med	Kidney and urinary tract infections age 0–17	0.5406	0.5606	3.7
323	11	Med	Urinary stones with CC, and/or ESW lithotripsy	0.7658	0.7816	2.1
324	11	Med	Urinary stones without CC	0.4346	0.4475	3.0
325	11	Med	Kidney and urinary tract signs and symptoms age >17 with CC.	0.6236	0.6287	0.8
326	11	Med	Kidney and urinary tract signs and symptoms age >17 without CC.	0.4200	0.4203	0.1
327	11	Med ¹	Kidney and urinary tract signs and symptoms age 0–17.	0.3518	0.3541	0.7
328	11	Med	Urethral stricture age >17 with CC	0.7176	0.7024	–2.1
329	11	Med	Urethral stricture age >17 without CC	0.4918	0.5172	5.2
330	11	Med ¹	Urethral stricture age 0–17	0.3168	0.3189	0.7
331	11	Med	Other kidney and urinary tract diagnoses age >17 with CC.	0.9952	1.0157	2.1
332	11	Med	Other kidney and urinary tract diagnoses age >17 without CC.	0.6235	0.6104	–2.1
333	11	Med	Other kidney and urinary tract diagnoses age 0–17.	0.7757	0.7642	–1.5
334	12	Surg	Major male pelvic procedures with CC	1.5975	1.5864	–0.7
335	12	Surg	Major male pelvic procedures without CC	1.2056	1.1911	–1.2
336	12	Surg	Transurethral prostatectomy with CC	0.8856	0.8965	1.2
337	12	Surg	Transurethral prostatectomy without CC	0.6176	0.6229	0.9
338	12	Surg	Testes procedures, for malignancy	1.0867	1.1552	6.3

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
339	12	Surg	Testes procedures, nonmalignancy age >17	0.9822	1.0600	7.9
340	12	Surg ¹	Testes procedures, nonmalignancy age 0-17	0.2816	0.2834	0.6
341	12	Surg	Penis procedures	1.1194	1.1141	-0.5
342	12	Surg	Circumcision age >17	0.8555	0.8601	0.5
343	12	Surg ¹	Circumcision age 0-17	0.1530	0.1540	0.7
344	12	Surg	Other male reproductive system O.R. procedures for malignancy.	1.0414	1.1025	5.9
345	12	Surg	Other male reproductive system O.R. proc except for malignancy.	0.8646	0.8816	2.0
346	12	Med	Malignancy, male reproductive system, with CC ...	0.9494	0.9645	1.6
347	12	Med	Malignancy, male reproductive system, without CC.	0.5620	0.5828	3.7
348	12	Med	Benign prostatic hypertrophy with CC	0.6892	0.6983	1.3
349	12	Med	Benign prostatic hypertrophy without CC	0.4090	0.4345	6.2
350	12	Med	Inflammation of the male reproductive system	0.6918	0.6957	0.6
351	12	Med ¹	Sterilization, male	0.2348	0.2363	0.6
352	12	Med	Other male reproductive system diagnoses	0.6251	0.6769	8.3
353	13	Surg	Pelvic evisceration, radical hysterectomy and radical vulvectomy.	1.9235	1.9721	2.5
354	13	Surg	Uterine, adnexa proc for nonovarian/adnexal malig with CC.	1.4953	1.5134	1.2
355	13	Surg	Uterine, adnexa proc for nonovarian/adnexal malig without CC.	0.9322	0.9477	1.7
356	13	Surg	Female reproductive system reconstructive procedures.	0.7863	0.7916	0.7
357	13	Surg	Uterine and adnexa proc for ovarian or adnexal malignancy.	2.4429	2.3699	-3.0
358	13	Surg	Uterine and adnexa proc for nonmalignancy with CC.	1.2111	1.2357	2.0
359	13	Surg	Uterine and adnexa proc for nonmalignancy without CC.	0.8663	0.8699	0.4
360	13	Surg	Vagina, cervix and vulva procedures	0.8902	0.8823	-0.9
361	13	Surg	Laparoscopy and incisional tubal interruption	1.2051	1.1894	-1.3
362	13	Surg ¹	Endoscopic tubal interruption	0.3001	0.3020	0.6
363	13	Surg	D&C, conization and radio-implant, for malignancy.	0.7498	0.7807	4.1
364	13	Surg	D&C, conization except for malignancy	0.7280	0.7601	4.4
365	13	Surg	Other female reproductive system O.R. procedures	1.7421	1.8299	5.0
366	13	Med	Malignancy, female reproductive system with CC	1.1912	1.2474	4.7
367	13	Med	Malignancy, female reproductive system without CC.	0.5640	0.5509	-2.3
368	13	Med	Infections, female reproductive system	1.0544	1.0499	-0.4
369	13	Med	Menstrual and other female reproductive system disorders.	0.5257	0.5526	5.1
370	14	Surg	Cesarean section with CC	1.0501	1.0974	4.5
371	14	Surg	Cesarean section without CC	0.7161	0.7212	0.7
372	14	Med	Vaginal delivery with complicating diagnoses	0.5716	0.5920	3.6
373	14	Med	Vaginal delivery without complicating diagnoses ..	0.4000	0.4020	0.5
374	14	Surg	Vaginal delivery with sterilization and/or D&C	0.7120	0.7081	-0.5
375	14	Surg ¹	Vaginal delivery with O.R. proc except sterilization and/or D&C.	0.6812	0.6856	0.6
376	14	Med	Postpartum and postabortion diagnoses without O.R. procedure.	0.4877	0.5342	9.5
377	14	Surg	Postpartum and postabortion diagnoses with O.R. procedure.	1.4263	1.3506	-5.3
378	14	Med	Ectopic pregnancy	0.8441	0.9394	11.3
379	14	Med	Threatened abortion	0.4390	0.4424	0.8
380	14	Med	Abortion without D&C	0.4168	0.3404	-18.3

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
381	14	Surg	Abortion with D&C, aspiration curettage or hysterotomy.	0.5540	0.6002	8.3
382	14	Med	False labor	0.1965	0.2045	4.1
383	14	Med	Other antepartum diagnoses with medical complications.	0.4718	0.5334	13.1
384	14	Med	Other antepartum diagnoses without medical complications.	0.3578	0.3437	-3.9
385	15	(1)	Neonates, died or transferred to another acute care facility.	1.3671	1.3760	0.7
386	15	(1)	Extreme immaturity or respiratory distress syndrome, neonate.	4.5084	4.5376	0.6
387	15	(1)	Prematurity with major problems	3.0791	3.0991	0.6
388	15	(1)	Prematurity without major problems	1.8578	1.8699	0.7
389	15	(1)	Full term neonate with major problems	1.8279	1.8398	0.7
390	15	(1)	Neonate with other significant problems	1.5908	1.6011	0.6
391	15	(1)	Normal newborn	0.1516	0.1526	0.7
392	16	Surg	Splenectomy age >17	3.2927	3.1411	-4.6
393	16	Surg ¹	Splenectomy age 0-17	1.3392	1.3479	0.6
394	16	Surg	Other O.R. procedures of the blood and blood forming organs.	1.6195	1.6806	3.8
395	16	Med	Red blood cell disorders age >17	0.8196	0.8168	-0.3
396	16	Med	Red blood cell disorders age 0-17	2.1978	1.0917	-50.3
397	16	Med	Coagulation disorders	1.2536	1.2154	-3.0
398	16	Med	Reticuloendothelial and immunity disorders with CC.	1.2463	1.2507	0.4
399	16	Med	Reticuloendothelial and immunity disorders without CC.	0.6908	0.7085	2.6
400	17	Surg	Lymphoma and leukemia with major O.R. procedure.	2.6546	2.6610	0.2
401	17	Surg	Lymphoma and nonacute leukemia with other O.R. proc with CC.	2.5749	2.6191	1.7
402	17	Surg	Lymphoma and nonacute leukemia with other O.R. proc without CC.	1.0114	1.0641	5.2
403	17	Med	Lymphoma and nonacute leukemia with CC	1.6843	1.7181	2.0
404	17	Med	Lymphoma and nonacute leukemia without CC	0.8302	0.8549	3.0
405	17	(1)	Acute leukemia without major O.R. procedure age 0-17.	1.8987	1.9110	0.6
406	17	Surg	Myeloprolif disorders or poorly diff neopl with major O.R. proc with CC.	2.5688	2.7833	8.4
407	17	Surg	Myeloprolif disorders or poorly diff neopl with major O.R. proc without CC.	1.1788	1.2463	5.7
408	17	Surg	Myeloprolif disorders or poorly diff neopl with other O.R. proc.	1.8204	1.9990	9.8
409	17	Med	Radiotherapy	1.0117	1.0631	5.1
410	17	Med	Chemotherapy without acute leukemia as secondary diagnosis.	0.8402	0.9015	7.3
411	17	Med	History of malignancy without endoscopy	0.3897	0.4335	11.2
412	17	Med	History of malignancy with endoscopy	0.5042	0.4070	-19.3
413	17	Med	Other myeloprolif dis or poorly diff neopl diag with CC.	1.3473	1.3925	3.4
414	17	Med	Other myeloprolif dis or poorly diff neopl diag without CC.	0.7146	0.7824	9.5
415	18	Surg	O.R. procedure for infectious and parasitic diseases.	3.5747	3.5541	-0.6
416	18	Med	Septicemia age >17	1.4883	1.4988	0.7
417	18	Med	Septicemia age 0-17	1.3276	0.8695	-34.5
418	18	Med	Postoperative and post-traumatic infections	0.9894	0.9931	0.4
419	18	Med	Fever of unknown origin age >17 with CC	0.8764	0.8885	1.4

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
420	18	Med	Fever of unknown origin age >17 without CC	0.6331	0.6136	-3.1
421	18	Med	Viral illness age >17	0.6748	0.6663	-1.3
422	18	Med	Viral illness and fever of unknown origin age 0-17.	0.5668	0.4792	-15.5
423	18	Med	Other infectious and parasitic diseases diagnoses	1.6028	1.6019	-0.1
424	19	Surg	O.R. procedure with principal diagnoses of mental illness.	2.3483	2.3706	0.9
425	19	Med	Acute adjustment reaction and psychological dysfunction.	0.6782	0.6805	0.3
426	19	Med	Depressive neuroses	0.5525	0.5363	-2.9
427	19	Med	Neuroses except depressive	0.5588	0.5714	2.3
428	19	Med	Disorders of personality and impulse control	0.7114	0.6982	-1.9
429	19	Med	Organic disturbances and mental retardation	0.8710	0.8448	-3.0
430	19	Med	Psychoses	0.8079	0.7881	-2.5
431	19	Med	Childhood mental disorders	0.7468	0.7532	0.9
432	19	Med	Other mental disorder diagnoses	0.7085	0.7083	0.0
433	20	NA	Alcohol/drug abuse or dependence, left AMA	0.3025	0.2961	-2.1
434	20	NA	Alcohol/drug abuse or dependence, detox or other symptoms, treatment with CC.	0.7007	0.7296	4.1
435	20	NA	Alcohol/drug abuse or dependence, detox or other symptoms, treatment without CC.	0.4151	0.4275	3.0
436	20	NA	Alcohol/drug dependence with rehabilitation therapy.	0.8145	0.7850	-3.6
437	20	NA	Alcohol/drug dependence, combined rehabilitation and detox therapy.	0.7023	0.6864	-2.3
438	NA	NA	No longer valid.			
439	21	Surg	Skin grafts for injuries	1.5800	1.6571	4.9
440	21	Surg	Wound debridements for injuries	1.7993	1.9354	7.6
441	21	Surg	Hand procedures for injuries	1.0106	0.9179	-9.2
442	21	Surg	Other O.R. procedures for injuries with CC	2.2652	2.2454	-0.9
443	21	Surg	Other O.R. procedures for injuries without CC	0.9292	0.9614	3.5
444	21	Med	Traumatic injury age >17 with CC	0.7115	0.7087	-0.4
445	21	Med	Traumatic injury age >17 without CC	0.4812	0.4800	-0.2
446	21	Med ¹	Traumatic injury age 0-17	0.2943	0.2962	0.6
447	21	Med	Allergic reactions age >17	0.4938	0.5220	5.7
448	21	Med ¹	Allergic reactions age 0-17	0.0968	0.0974	0.6
449	21	Med	Poisoning and toxic effects of drugs age >17 with CC.	0.7850	0.8149	3.8
450	21	Med	Poisoning and toxic effects of drugs age >17 without CC.	0.4321	0.4352	0.7
451	21	Med ¹	Poisoning and toxic effects of drugs age 0-17	0.2614	0.2631	0.7
452	21	Med	Complications of treatment with CC	0.9799	0.9920	1.2
453	21	Med	Complications of treatment without CC	0.4859	0.5060	4.1
454	21	Med	Other injury, poisoning and toxic effect diag with CC.	0.8448	0.8152	-3.5
455	21	Med	Other injury, poisoning and toxic effect diag without CC.	0.4675	0.4663	-0.3
456	NA	NA	No longer valid.			
457	NA	NA	No longer valid.			
458	NA	NA	No longer valid.			
459	NA	NA	No longer valid.			
460	NA	NA	No longer valid.			
461	23	Surg	O.R. proc with diagnoses of other contact with health services.	1.0684	1.1309	5.8
462	23	Med	Rehabilitation	1.4071	1.3599	-3.4
463	23	Med	Signs and symptoms with CC	0.6738	0.6811	1.1
464	23	Med	Signs and symptoms without CC	0.4996	0.4942	-1.1

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
465	23	Med	Aftercare with history of malignancy as secondary diagnosis.	0.5247	0.6720	28.1
466	23	Med	Aftercare without history of malignancy as secondary diagnosis.	0.6121	0.7129	16.5
467	23	Med	Other factors influencing health status	0.4941	0.4986	0.9
468	NA	NA	Extensive O.R. procedure unrelated to principal diagnosis.	3.6582	3.6400	-0.5
469	NA	(2)	Principal diagnosis invalid as discharge diagnosis	0.0000	0.0000	0.0
470	NA	(2)	Ungroupable	0.0000	0.0000	0.0
471	8	Surg	Bilateral or multiple major joint proc of lower extremity.	3.3246	3.2205	-3.1
472	NA	NA	No longer valid	0.0000	0.0000	0.0
473	17	NA	Acute leukemia without major O.R. procedure age >17.	3.4741	3.7200	7.1
474	NA	NA	No longer valid	0.0000	0.0000	0.0
475	4	Med	Respiratory system diagnosis with ventilator support.	3.7429	3.7065	-1.0
476	NA	Surg	Prostatic O.R. procedure unrelated to principal diagnosis.	2.2182	2.2633	2.0
477	NA	Surg	Nonextensive O.R. procedure unrelated to principal diagnosis.	1.7545	1.7696	0.9
478	5	Surg	Other vascular procedures with CC	2.3355	2.3515	0.7
479	5	Surg	Other vascular procedures without CC	1.4230	1.4618	2.7
480	NA	Surg	Liver transplant	10.6455	10.7834	1.3
481	NA	Surg	Bone marrow transplant	10.2138	8.7285	-14.5
482	NA	Surg	Tracheostomy for face, mouth and neck diagnoses	3.6031	3.6454	1.2
483	NA	Surg	Tracheostomy except for face, mouth and neck diagnoses.	16.3395	16.1211	-1.3
484	24	Surg	Craniotomy for multiple significant trauma	5.3380	5.5421	3.8
485	24	Surg	Limb reattachment, hip and femur proc for multiple significant trauma.	3.0788	3.0757	-0.1
486	24	Surg	Other O.R. procedures for multiple significant trauma.	4.9966	4.8962	-2.0
487	24	Med	Other multiple significant trauma	1.9183	1.9536	1.8
488	25	Surg	HIV with extensive O.R. procedure	4.5766	4.7891	4.6
489	25	Med	HIV with major related condition	1.7690	1.7913	1.3
490	25	Med	HIV with or without other related condition	0.9705	0.9651	-0.6
491	8	Surg	Major joint and limb reattachment procedures of upper extremity.	1.6655	1.6673	0.1
492	17	Med	Chemotherapy with acute leukemia as secondary diagnosis.	4.5427	4.4470	-2.1
493	7	Surg	Laparoscopic cholecystectomy without C.D.E. with CC.	1.7914	1.8290	2.1
494	7	Surg	Laparoscopic cholecystectomy without C.D.E. without CC.	0.9973	1.0246	2.7
495	NA	Surg	Lung transplant	8.9500	8.8332	-1.3
496	8	Surg	Combined anterior/posterior spinal fusion	5.4275	5.6871	4.8
497	8	Surg	Spinal fusion with CC	2.7594	2.8441	3.1
498	8	Surg	Spinal fusion without CC	1.6863	1.7952	6.5
499	8	Surg	Back and neck procedures except spinal fusion with CC.	1.4677	1.4487	-1.3
500	8	Surg	Back and neck procedures except spinal fusion without CC.	0.9714	0.9836	1.3
501	8	Surg	Knee procedures with pdx of infection with CC	2.5544	2.5305	-0.9
502	8	Surg	Knee procedures with pdx of infection without CC	1.5539	1.5559	0.1
503	8	Surg	Knee procedures without pdx of infection	1.2297	1.2029	-2.2
504	22	Surg	Extensive third degree burns with skin graft	14.1153	13.2930	-5.8
505	22	NA	Extensive third degree burns without skin graft ...	1.7875	2.2593	26.4

TABLE D-17.—LIST OF DIAGNOSIS-RELATED GROUPS (DRGS), RELATIVE WEIGHTS, AND PERCENT CHANGE, FISCAL YEARS 1999 AND 2000—Continued

DRG number	MDC	Type	Title	Fiscal year 1999 relative weights	Fiscal year 2000 relative weights	Percent change
506	22	NA	Full thickness burn with skin graft or inhalation injury with CC or sig trauma.	4.2478	4.2007	-1.1
507	22	NA	Full thickness burn with skin graft or inhalation injury without CC or sig trauma.	1.7078	1.8942	10.9
508	22	NA	Full thickness burn without skin graft or inhalation injury with CC or sig trauma.	1.4178	1.5971	12.6
509	22	NA	Full thickness burn without skin graft or inhalation injury without CC or sig trauma.	0.7824	0.8554	9.3
510	22	NA	Nonextensive burns with CC or significant trauma	1.1630	1.3335	14.7
511	22	NA	Nonextensive burns without CC or significant trauma.	0.6042	0.8312	37.6

¹ Medicare data have been supplemented by data from 19 States for low-volume diagnosis-related groups (DRGs).

² DRGs 469 and 470 contain cases that could not be assigned to valid DRGs.

NA—Not available.

Note.—Relative weights are based on Medicare patient data and may not be appropriate for other patients. Abbreviations are as follows:

AICD = automatic implantable cardioverter defibrillator	debrid = debridement	hr = hour	proc = procedures
alc hepa = alcoholic hepatitis	detox = detoxification	humer = humerus	PTCA = percutaneous transluminal coronary angioplasty
AMA = against medical advice	diag = diagnosis	int = internal	sig = significant
AMI = acute myocardial infarction	diff = differentiated	lowleg = lower leg	sprn = sprain
cath = catheterization	dis = diseases	malig = malignancy	strn = strain
CC = complication or comorbidity	disl = dislocation	MDC = major diagnostic category	subcut = subcutaneous
C.D.E. = common duct exploration	ESW = extracorporeal shock wave	med = medical	surg = surgical
cirr = cirrhosis	ex = except	myeloprolif = myeloproliferative	T&A = tonsillectomy and/or adenoidectomy
D&C = dilation & curettage	extrem = extremity	misc = miscellaneous	TIA = transient ischemic attack
	fix = fixation	neopl = neoplasm	uparm = upper arm
	FX = fracture	nutrit = nutritional	uri = upper respiratory infection
	gastroent = gastroenteritis	O.R. = operating room	
	HIV = human immunodeficiency virus	pdx = principal diagnosis	

Source: Health Care Financing Administration.

PART II: 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. This fee schedule payment system replaced 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. The second was that the use of the reasonable charge payment method had led, in many cases, to payments which were not directly related to the resources used. The Balanced Budget Act of 1997 (BBA 1997) made several modifications to the fee schedule payment system. The Balanced Budget Refinement Act (BBRA) of 1999 made technical modifications to the BBA 1997 provisions.

Medicare payments for physicians' services are made under a fee schedule which is based on a resource-based relative value scale. Annual updates to the payment amounts are based, in part, on a comparison of actual physician spending in a base period compared to an expenditure goal. The expenditure goal in place prior to fiscal year 1998 was known as the Medicare volume performance standard (MVPS). Beginning in fiscal year 1998 the MVPS was replaced by the sustainable growth rate (SGR). Use of an expenditure goal was intended to moderate the rate of growth in physician expenditures. The law also places limits on amounts that physicians can bill in excess of Medicare's approved payment amount.

MEDICARE FEE SCHEDULE

The Secretary of the U.S. Department of Health and Human Services (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, the first factor used to calculate the fee schedule, 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; and
- The malpractice expense component reflects costs of obtaining malpractice insurance.

The proportion that each component represents of the total RVU varies by service.

The work RVUs incorporated in the initial fee schedule were based on resource costs. They were developed after extensive input from the physician community. Refinements in existing values and establishment of values for new services have been included in the annual fee schedule update. In addition, HCFA is required to conduct a review of all values at least every 5 years. The results of the first review were incorporated in the values used in 1997.

The practice expense and malpractice expense RVUs included in the initial fee schedule were based on historical charges. An analysis by the Physician Payment Review Commission suggested that practice expense RVUs for a service were most likely to be overvalued when they exceeded the work RVUs by a substantial amount. OBRA 1993 provided for reductions in 1994, 1995, and 1996 in cases where the number of practice expense RVUs was substantially more than the number of work RVUs for the service. The Social Security Act Amendments of 1994 required the Secretary to develop a methodology for a resource-based system to be implemented in 1998.

BBA 1997 provided for a phase-in of the resource-based methodology for practice expenses. In 1998, there was a reallocation of no more than \$390 million in practice expense RVUs from services whose number of practice expense RVUs exceed 110 percent of the number of work RVUs. Not included were services provided 75 percent of the time in an office setting or services which were slated to receive an increase under HCFA's proposed regulations issued June 18, 1997. The amount reduced was added to the practice expense RVUs of physician office procedure codes. A new practice expense methodology is being phased in over the 1999-2002 period. In 1999, 25 percent of the practice payment was based on the new methodology. This percentage increased to 50 percent in 2000. It will increase to 75 percent in 2001 and 100 percent in 2002. The Secretary was also required to develop new resource-based methodology for practice expenses. In developing the units, the Secretary was required, to the maximum extent practicable, to utilize generally accepted accounting principles. The Secretary was also required to use actual data on equipment and other key factors. BBRA 1999 requires the Secretary to establish by regulation a process for determining practice expense relative values. Under this process, the Secretary will accept for use, and will use to the maximum extent practicable, data collected or developed outside DHHS.

BBA 1997 also directed HCFA to develop and implement a resource-based methodology for malpractice expenses. It was implemented beginning January 2000.

GEOGRAPHIC ADJUSTMENT FACTOR

The second factor used in calculation of the fee schedule is the GAF for the fee schedule area. There are currently 99 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 D-37 at the end of this chapter shows the GAF values for each of the 99 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, which is the third fee schedule 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 initially required the establishment of a single conversion factor. Beginning in 1993, two conversion factors applied—one for surgical services and one for nonsurgical services. Beginning in 1994, there were three conversion factors—one for surgical, one for primary care, and one for nonsurgical services. BBA 1997 established a single conversion factor beginning in 1998. The 2000 conversion factor is \$36.6137. Thus, payment for a service with an adjusted relative value of 2.0 is \$73.23. Anesthesiologists are paid under a separate fee schedule which uses base and time units. A separate conversion factor (\$17.77 in 2000) applies.

PAYMENT FORMULA

The payment for each service is calculated as follows:

$$\begin{aligned} \text{Payment} = & \text{CF} \times [(\text{RVU}_{\text{work}} \times \text{GPCI}_{\text{work}}) \\ & + (\text{RVU}_{\text{practice expense}} \times \text{GPCI}_{\text{practice expense}}) \\ & + (\text{RVU}_{\text{malpractice}} \times \text{GPCI}_{\text{malpractice}})] \end{aligned}$$

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; and

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

SUSTAINABLE GROWTH RATE AND CONVERSION FACTOR UPDATES

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 phy-

sician payments have succeeded. Initially, this growth was measured by the MVPS. Beginning in fiscal year 1998, the MVPS was replaced by the sustainable growth rate (SGR). The SGR for a year is based on estimates of four factors: (1) changes in spending due to fee increases; (2) fee-for-service enrollment; (3) gross domestic product growth per capita; and (4) laws and regulations.

Beginning in 1999, the annual percentage update to the conversion factor equals the Medicare economic index (MEI) subject to an adjustment ("update adjustment factor") to match spending for physicians services under the SGR system. This adjustment sets the conversion factor at a level so that projected spending for a year will meet allowed spending by the end of the year. Allowed spending for a year is calculated using the SGR. However, in no case can the conversion factor update be more than 3 percentage points above the MEI nor more than 7 percentage points below the MEI.

Currently the update adjustment factor is calculated as follows. The adjustment is determined by estimating the difference between: (1) cumulative allowed spending for April 1, 1997 through March 31 of the year involved; and (2) the cumulative sum of actual spending for April 1, 1997 through March 31 of the previous year. This amount is divided by actual expenditures for the 12-month period ending March 31 of the preceding year, increased by the SGR for the fiscal year which begins during such 12-month period. For the 12-month period ending March 31, 1997, allowed expenditures are defined as actual expenditures for the period. For subsequent 12-month periods, allowed expenditures equal the previous year's amount, increased by the SGR for the fiscal year beginning during such 12-month period.

BBRA 1999 specifies that the calculation of the update adjustment factor is to be made on a calendar year basis, beginning in 2001. The formula for determining the update is modified to add a new component to measure variances from the allowed growth rate in the past year. Further, the impact of year-to-year changes is mitigated by the addition of dampening multipliers. Specifically, beginning for 2001, the update adjustment factor is the sum of a prior year adjustment component and a cumulative adjustment component. The prior year adjustment component is determined by: (1) computing the difference between allowed expenditures for the prior year and actual expenditures for that year; (2) dividing that amount by allowed expenditures for the year; and (3) multiplying the quotient by 0.75. The cumulative adjustment component is determined by: (1) computing the difference between allowed expenditures over the period April 1, 1996 through the end of the prior year and the amount of actual expenditures for such period; (2) dividing that amount by actual expenditures for the prior year increased by the SGR for the year for which the adjustment factor is to be determined; and (3) multiplying the quotient by 0.33. In addition, a transitional adjustment to the update is provided over the 2001–5 period to provide for budget neutrality.

By March 1 of each year (beginning in 2000), the Secretary is required to make available to the Medicare Payment Advisory Commission (MedPAC) and the public an estimate of the SGR and the conversion factor that will apply in the following year and the data

used in making such estimate. MedPAC is required to include a review of the estimate in its June report. The Secretary is required to publish the conversion factor by November 1 (beginning in 2000) for the following year. The Secretary is required to publish, by November 1, 2000, the SGR for 2000 and 2001. Beginning in 2001, the Secretary is required to publish the SGR for the following year and each of the 2 preceding years.

Calculation of the SGR is to be made on a calendar year basis. The 2001 update to the conversion factor is to be based on the fiscal year 2000 SGR as well as the 2000 and 2001 SGRs (using the best data available to the Secretary as of September 1, 2000). The 2002 update to the conversion factor will use the fiscal year 2000 SGR as well as the 2000, 2001, and 2002 SGRs (using the best data available to the Secretary as of September 1, 2001). For 2003 and succeeding years, the SGR for that year and the 2 preceding years would be determined on the basis of the best data available to the Secretary as of September 1 of the preceding year.

The revisions made by BBRA 1999 apply to calculations made to determine the conversion factor for years beginning with 2001. The changes do not apply to or affect any update (or any update adjustment factor) for any year before 2001.

Table D-18 shows the conversion factors that have applied since implementation of the fee schedule in 1992. In 1992, there was one conversion factor. In 1993, there were two conversion factors—one for surgical services and one for nonsurgical services. In 1994-97, there were three conversion factors—one for surgical services, one for primary care services, and one for nonsurgical (nonprimary care) services. BBA 1997 provided for the use of a single conversion factor beginning in 1998.

The SGR system was used for the calculation of the conversion factor update beginning in 1999. This 1999 conversion factor amount was lower than the dollar figure for 1998. However, HCFA explained that this number actually reflected an overall increase because of adjustments made in other parts of the fee schedule calculation. The increase in the MEI for 1999 was 2.3 percent and the adjustment to assure that projected spending would match the SGR was 0.0 percent; this translated into a 1999 update of 2.3 percent. However, the law requires that any changes in the RVUs be budget neutral; HCFA implemented this budget neutrality adjustment through the conversion factor. This and other factors yielded a 1999 adjustment of -7.45944 percent. Thus, the 1999 conversion factor was a 5.3 percent reduction from the 1998 factor.

The 2000 conversion factor is \$36.6137. The increase in the MEI for 2000 is 2.4 percent and the adjustment to assure that projected spending would match the SGR was 3.0 percent. Other adjustments including a budget neutrality adjustment translated into a 2000 update of 5.5 percent.

TABLE D-18.—CONVERSION FACTORS: CALENDAR YEARS 1992-2000

Calendar year	Conversion factor
1992:	
All services	\$31.00
1993:	
Surgical	31.96
Nonsurgical	31.25
1994:	
Surgical	35.16
Primary care	33.72
Other nonsurgical	32.90
1995:	
Surgical	39.45
Primary care	36.38
Other nonsurgical	34.62
1996:	
Surgical	40.80
Primary care	35.42
Other nonsurgical	34.63
1997:	
Surgical	40.96
Primary care	35.77
Other nonsurgical	33.85
1998:	
All services	36.69
1999:	
All services	34.73
2000:	
All services	36.61

Source: Federal Register, 1999b.

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

A physician is able to choose whether 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" by voluntarily entering 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"; these are persons with incomes below poverty for whom Medicaid is required to pay Medicare premiums and cost-sharing charges.

Balance billing limits

Nonparticipating physicians may charge beneficiaries more than the fee schedule amount on nonassigned claims; these balance billing charges are subject to certain limits. The limit is 115 percent of the fee schedule amount for nonparticipating physicians. The nonparticipating physicians fee schedule payment level is 95 percent of the participating physicians level. Thus, the balance billing limit is only 9.25 percent higher than the level recognized for participating physicians (95 percent \times 115 percent).

Private contracting

Private contracting is the term used to describe situations where a physician and a patient agree not to submit a claim for a service which would otherwise be covered and paid for by Medicare. Under private contracting, physicians can bill patients at their discretion without being subject to upper limits specified by Medicare. HCFA had interpreted Medicare law to preclude such private contracts. BBA 1997 included language permitting a limited opportunity for private contracting, effective January 1, 1998. However, if and when a physician decides to enter a private contract with a Medicare patient, that physician must agree to forgo any reimbursement by Medicare (including services provided by Medicare+Choice organizations) for all Medicare beneficiaries for 2 years. The patient is not subject to the 2-year limit; the patient would continue to be able to see other physicians who were not private contracting physicians and have Medicare pay for the services.

Private contracts apply only to covered services. A private contract is unnecessary and private contracting rules do not apply for noncovered services. Examples of noncovered services include cosmetic surgery and routine physical exams.

A physician or practitioner may furnish a service that Medicare may cover under some circumstances but which the physician or practitioner anticipates would not be considered "reasonable and necessary" in the particular case (for example, multiple nursing home visits). If the beneficiary receives an "advance beneficiary notice" that the service may not be covered, a private contract is not

necessary to bill the patient if the claim is subsequently denied by Medicare. There are no limits on what may be charged for the non-covered service.

INITIAL IMPACT OF THE BALANCED BUDGET ACT ON MEDICARE
PAYMENTS TO PHYSICIANS

Several important changes to Medicare's payments to physicians occurred almost immediately after enactment of BBA 1997. A single conversion factor for the physician fee schedule, replacing separate conversion factors for surgical services, primary care, and other nonsurgical services, was implemented on January 1, 1998. On that same date, adjustments in practice expense RVUs for some services were implemented. Both of these policy changes were required by the BBA. Simultaneous with these changes, the Health Care Financing Administration (HCFA) increased the physician work RVUs for many surgical services to make them consistent with previous changes in the RVUs for evaluation and management services. These changes were made on a budget-neutral basis.

MedPAC analyzed the effects of these payment policy changes on payment rates for selected, high volume services. The analysis showed that the net effects of the policy changes were generally greatest for surgical services, with payment rates for some of those services decreasing by 13 percent or more (table D-19). Payment rates for office visits and other nonsurgical services generally increased by 7 percent or more, however.

The shift to a single conversion factor affected payment rates for all services in 1998. In 1997, three separate conversion factors were used: \$40.96 for surgical services, \$35.77 for primary care, and \$33.85 for other nonsurgical services. HCFA calculated the single conversion factor, required by the BBA, to be \$36.69.

In 1998, changes in payment rates for different types of services varied depending on the conversion factor used in 1997 (table D-19). The conversion factor for primary care services, such as office visits, increased by 2.6 percent (table D-18). The conversion factor for other nonsurgical services, such as consultations, grew by 8.4 percent. The decrease in the conversion factor for surgical services was 10.4 percent.

The second policy change affecting payments in 1998 was the adjustment of practice expense RVUs called for by the BBA. The law limited practice expense values to 110 percent of each service's work value. Two groups of services were excluded from this limit: (1) those provided in an office setting at least 75 percent of the time; and (2) those slated to receive an increase in practice expense values under a HCFA proposed rule released on June 18, 1997.

To implement the 110 percent limit in a budget-neutral manner, the savings generated were reallocated to increase the practice expense values of office visits. This reallocation was intended to be a "downpayment" toward changes in office visit values expected as resource-based practice expense values are phased in through 2002. The BBA specified that up to \$390 million could be reallocated to office visits in 1998.

These adjustments led to decreases in practice expense RVUs for both surgical services and nonsurgical services other than primary care (table D-19). The surgical service affected the most by the

practice expense adjustments was cataract lens replacement. The effect of the adjustments on that service was a decrease of 5.8 percent. Upper gastrointestinal endoscopy was affected the most by the practice expense adjustments—a decrease of 6.5 percent. The increase for office visits was 4.3 percent.

TABLE D-19.—CHANGES IN PHYSICIAN PAYMENT RATES FOR SELECTED SERVICES, 1997-98

[In percent]

Type of service	Policy change			Total change	Percentage of 1996 physician services outlays
	Single conversion factor	Practice expense adjustments	Work increases		
Primary care:					
Office and other out-patient visit	2.6	4.3	0.0	6.9	16.8
Emergency department visits	2.6	0.0	0.0	2.6	2.7
Surgical:					
Cataract lens replacement	-10.4	-5.8	1.3	-14.9	4.8
Joint prosthesis	-10.4	-2.9	3.2	-10.1	1.5
Coronary artery bypass graft	-10.4	-3.8	2.7	-11.5	1.6
Transurethral prostate surgery	-10.4	-0.1	3.2	-7.3	0.3
Arthroscopy	-10.4	-5.0	1.7	-13.7	0.3
Open prostate surgery ...	-10.4	0.0	3.4	-7.0	0.1
Other nonsurgical:					
Consultations	8.4	0.0	0.0	8.4	5.7
Routine diagnostic radiology	8.4	0.0	0.0	8.4	3.2
Electrocardiograms	8.4	-0.9	0.0	7.5	2.1
Echocardiograms	8.4	-2.4	0.0	6.0	1.9
CAT scans	8.4	0.0	0.0	8.4	1.7
Colorectal endoscopy	8.1	-3.9	0.0	4.2	1.6
Magnetic resonance imaging	8.4	0.0	0.0	8.4	1.3
Upper gastrointestinal endoscopy	8.3	-6.5	0.0	1.8	1.2
Angioplasty	8.4	-4.7	0.0	3.7	0.6

Note.—Within MedPAC's type of service classification scheme, some "other nonsurgical services" show an increase of slightly less than 8.4 percent. The difference is due to inclusion of surgical services in some categories that are otherwise made up mainly of other nonsurgical services.

Source: Medicare Payment Advisory Commission analysis of 1996 Medicare claims, 100 percent of beneficiaries; 1997 and 1998 physician fee schedule relative value units.

The third policy change for 1998 was increases in work RVUs for global surgical services. This change addressed an issue that arose in the 5-year review of work RVUs. Global surgical services include a surgical service as well as pre- and postoperative evaluation and

management (EM) services. EM work values increased as a result of the 5-year review, but the EM component of global surgical services did not. The increases in work RVUs for 1998 corrected that inconsistency. Among those surgical services responsible for the largest shares of Medicare physician payments, increases due to the change in work RVUs ranged from 1.3 to 3.4 percent (table D-19).

The total change in payment rates for 1998 reflected the combined effects of the single conversion factor, the adjustments in practice expense RVUs for some services, and the increase in work RVUs for global surgical services. By type of service, total changes ranged from an increase of 8.4 percent for some nonsurgical services, other than primary care, to a decrease of 14.9 percent for cataract lens replacements. In general, surgical services saw decreases in payment rates primarily because of the move to a single conversion factor. Payment rates for other services increased.

In addition to the payment policy changes implemented in 1998, the BBA required a phase in of new resource-based practice expense RVUs, starting in 1999. These new RVUs replace values based on historical charges. From 1999 through 2001, payments will be a blend of resource-based and charge-based RVUs. The resource-based values will be fully implemented in 2002. The BBA also required implementation of resource-based professional liability insurance, or malpractice expense, RVUs in 2000.

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 assignment rate. (Initially, this calculation omitted hospital-based physicians and group-practice prepayment plans which were considered assigned by definition. This distinction is no longer made). The assignment rate declined until the mid-1970s when the rate leveled off at about 50 percent (table D-20). Since 1985, the rate has increased significantly, rising to 97.5 percent in 1999. This increase reflects both the impact of the participating physician program as well as the requirement that laboratory services must be paid on an assigned basis.

The statistics included in table D-20 are programwide data. Assignment rates vary geographically. For example, the assignment rate (taken as a percent of dollars) for physician services in fiscal year 1999 ranged from a low of 86.9 percent in Idaho to a high of 99.9 percent in Massachusetts, Ohio, and Rhode Island. The national average assignment rate for physicians services in 1949 was 99.0 percent (table D-21).

TABLE D-20.—ASSIGNMENT RATES, 1969-99

[In percent]

Fiscal year	Claims	Covered 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
1994	92.1	96.0
1995	94.2	97.1
1996	95.6	97.9
1997	96.5	98.3
1998	97.2	98.6
1999	97.5	98.8

NA—Not available.

Source: Health Care Financing Administration, Office of Financial Management.

TABLE D-21.—PHYSICIAN ASSIGNMENT RATES AS PERCENT OF ALLOWED CHARGES BY STATE, SELECTED YEARS 1985–99¹

[In percent]

Census division/State	Fiscal year						
	1985	1990	1995	1996	1997	1998	1999
National	65.5	83.0	96.8	97.8	98.4	98.7	99.0
New England:							
Maine	81.5	92.4	99.1	99.4	99.5	99.6	99.7
New Hampshire	56.5	69.9	96.9	97.9	98.6	98.9	99.2
Vermont	64.3	94.7	99.1	99.3	99.4	99.5	99.5
Massachusetts ²	93.7	99.5	99.8	99.8	99.9	99.9	99.9
Rhode Island	94.0	98.7	99.9	99.9	99.9	99.9	99.9
Connecticut	57.6	84.7	97.6	98.1	98.5	98.7	98.8
Middle Atlantic:							
New York	70.3	81.9	95.6	97.0	97.7	98.1	98.3
New Jersey	62.3	73.0	92.6	94.9	96.2	97.0	97.6
Pennsylvania	88.1	95.7	99.6	99.7	99.7	99.8	99.8
East North Central:							
Ohio	50.8	82.6	99.7	99.8	99.8	99.8	99.9
Indiana	49.6	77.2	96.5	97.6	98.4	98.9	99.1
Illinois	51.7	75.9	98.6	96.9	97.6	98.1	98.5
Michigan	88.2	94.5	99.0	99.2	99.4	99.5	99.6
Wisconsin	51.7	68.2	94.2	96.3	97.2	98.7	99.4
West North Central:							
Minnesota	30.6	47.6	86.2	91.7	93.5	95.3	95.8
Iowa	46.9	69.8	99.2	96.3	98.0	98.6	98.8
Missouri ³	50.1	74.9	96.7	97.7	98.3	98.7	99.1
North Dakota	30.5	55.0	92.9	96.7	98.5	99.0	99.4
South Dakota	18.7	39.2	67.0	73.5	80.0	84.4	90.6
Nebraska	47.3	64.9	89.6	91.6	93.9	95.7	96.3
Kansas ⁴	72.7	88.8	97.1	98.5	99.4	99.5	99.6
South Atlantic:							
Delaware	81.8	90.5	97.8	98.6	98.7	98.9	99.2
Maryland ⁵	81.6	91.4	98.1	98.6	98.9	99.1	99.2
District of Columbia ⁶	78.1	87.5	96.6	97.3	97.9	98.2	98.5
Virginia ⁷	66.4	87.3	98.4	98.9	99.2	99.4	99.5
West Virginia	66.7	93.2	99.1	99.4	99.5	99.6	99.6
North Carolina	60.3	80.8	96.7	97.6	98.2	98.5	98.9
South Carolina	64.9	87.1	97.0	98.0	98.8	99.1	99.3
Georgia	63.9	83.5	97.4	98.3	98.7	99.0	99.2
Florida	62.2	84.1	98.4	98.8	99.0	99.3	99.4
East South Central:							
Kentucky	50.3	84.8	97.9	98.6	99.0	99.2	99.4
Tennessee	55.6	84.0	98.3	98.8	99.2	99.4	99.5
Alabama	74.6	92.3	98.9	99.2	99.4	99.6	99.6
Mississippi	63.5	88.1	97.8	98.5	98.8	99.1	99.4
West South Central:							
Arkansas	72.6	92.0	98.7	99.0	99.2	99.4	99.5
Louisiana	51.0	88.0	98.1	98.8	99.1	99.2	99.4
Oklahoma	39.0	68.2	94.2	96.7	97.7	98.1	98.6
Texas	63.0	79.9	96.6	97.7	98.3	98.7	99.0

TABLE D-21.—PHYSICIAN ASSIGNMENT RATES AS PERCENT OF ALLOWED CHARGES BY STATE, SELECTED YEARS 1985-99¹—Continued

[In percent]

Census division/State	Fiscal year						
	1985	1990	1995	1996	1997	1998	1999
Mountain:							
Montana	42.6	53.0	86.3	95.2	96.2	97.1	97.8
Idaho	25.2	36.1	71.7	77.9	82.8	85.6	86.9
Wyoming	33.8	43.9	81.8	86.0	88.7	90.7	92.9
Colorado	56.0	70.4	93.5	95.5	96.7	97.3	97.8
New Mexico	58.3	76.1	95.2	96.0	97.1	98.2	98.5
Arizona	52.8	76.2	92.8	93.4	94.1	94.4	95.0
Utah	63.1	80.4	96.6	98.0	98.5	99.0	99.3
Nevada	81.6	96.0	99.4	99.5	99.6	99.7	99.8
Pacific:							
Washington	45.5	54.8	93.4	95.7	97.1	98.1	98.6
Oregon	38.7	59.9	92.3	94.7	96.7	97.4	97.6
California	71.3	84.4	97.3	98.0	98.9	98.8	99.0
Alaska	54.4	79.6	96.2	97.0	97.6	98.2	98.5
Hawaii	61.2	82.9	98.7	99.0	99.2	99.4	99.4

¹Rates reflect covered charges for physician claims processed during the period.²Massachusetts 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."³Starting with fiscal year 1993, includes data for all counties in Missouri plus two counties on the State border located in Kansas.⁴Starting with fiscal year 1993, includes data for all counties in Kansas excluding two counties on the State border.⁵Starting with fiscal year 1993, includes data for all counties in Maryland excluding two counties on the State border.⁶Starting with fiscal year 1993, includes data for the District of Columbia plus two counties in Maryland located on the State border plus a few counties and cities located in Virginia, near the State border.⁷Starting with 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, Office of Financial Management.

PARTICIPATING PHYSICIAN PROGRAM DATA

Physician participation rates have increased significantly since the inception of the program (tables D-22 and D-23). For the calendar year 1999 participation period, the physician participation rate (including limited licensed practitioners) had risen to 84.6 percent accounting for 95.9 percent of allowed charges for physician services during the period. Table D-23 shows the participation rates by specialty. Table D-24 shows the percentage of participating physicians and limited licensed practitioners as a percentage of total physicians and limited licensed practitioners for each State.

TABLE D-22.—MEDICARE PHYSICIAN PARTICIPATION RATES: PERCENT OF PHYSICIANS AND LIMITED LICENSED PRACTITIONERS WITH AGREEMENTS AND THEIR SHARE OF ALLOWED CHARGES, 1984-99

Participation period	Percent of physicians signing agreements	Participating physicians' covered charges as a percent of total ¹
October 1984-September 1985	30.4	36.0
October 1985-April 1986	28.4	36.3
April 1986-December 1986 ²	28.3	38.7
January 1987-March 1988	30.6	48.1
April 1988-December 1988	37.3	57.9
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
January 1994-December 1994	64.8	89.4
January 1995-December 1995	72.3	92.6
January 1996-December 1996	77.5	94.3
January 1997-December 1997	80.2	95.1
January 1998-December 1998	82.8	95.7
January 1999-December 1999	84.6	95.9

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

²The 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, Office of Financial Management.

Table D-25 shows the allowed charges of participating physicians as a percent of total allowed charges, by State, for several participation periods. Overall, this percentage increased substantially, rising from 36 percent in the October 1984-September 1985 period to 95.9 percent in the calendar 1999 participation period.

As the participation rate has increased, total allowed charges billed by nonparticipating physicians have declined. In addition, the number of unassigned claims submitted by nonparticipating physicians has declined (table D-26). Total covered charges represented by unassigned claims declined from 34.5 to 1.0 percent over the 1984-99 period. The proportion of charges billed by participation and assignment status varies by State; these data are shown in table D-27.

TABLE D-23.—PARTICIPATION RATES AS PERCENTAGE OF PHYSICIANS BY SPECIALTY, FOR SELECTED PARTICIPATION PERIODS, 1985–99

Specialty	Oct. 1985– Apr. 1986	Jan. 1991– Dec. 1991	Jan. 1992– Dec. 1992	Jan. 1993– Dec. 1993	Jan. 1994– Dec. 1994	Jan. 1995– Dec. 1995	Jan. 1996– Dec. 1996	Jan. 1997– Dec. 1997	Jan. 1998– Dec. 1998	Jan. 1999– Dec. 1999
Physicians (M.D.s and D.O.s):										
General practice	27.3	44.0	48.0	55.1	59.1	59.9	66.3	69.2	71.1	73.7
General surgery	33.9	60.5	66.3	73.8	77.6	80.2	85.8	87.8	89.3	90.4
Otology, laryngology, rhinology	24.6	49.6	57.0	66.2	72.2	77.1	82.6	85.8	87.7	88.7
Anesthesiology	21.1	36.5	49.3	64.6	71.5	73.9	81.0	83.5	85.9	88.9
Cardiovascular disease	35.6	65.4	72.0	78.7	82.5	81.9	88.3	90.2	91.5	92.9
Dermatology	34.0	57.0	61.6	69.8	75.8	79.3	83.6	85.4	87.2	88.0
Family practice	25.5	50.8	57.7	66.1	71.3	74.5	81.4	84.0	85.9	86.9
Internal medicine	32.5	52.6	57.8	66.2	71.0	73.8	79.8	82.2	84.8	86.8
Neurology	34.8	56.1	63.8	71.8	76.4	78.9	84.1	85.8	87.1	88.4
Obstetrics-gynecology	29.1	52.6	58.0	65.7	69.9	72.5	77.3	79.5	81.3	82.9
Ophthalmology	27.3	60.0	66.1	73.2	78.3	81.2	86.2	87.9	89.8	90.9
Orthopedic surgery	29.0	58.4	65.5	74.9	79.2	82.6	86.8	88.7	90.4	90.6
Pathology	39.6	59.2	65.8	73.3	76.8	78.9	83.1	85.0	86.6	89.8
Psychiatry	30.0	44.1	48.8	53.5	57.8	58.7	64.6	67.6	70.4	73.9
Radiology	41.3	62.0	68.2	74.7	78.6	82.8	84.9	87.0	88.3	91.6
Urology	27.8	53.6	61.7	71.8	78.6	83.0	87.3	89.3	90.6	91.5
Nephrology	50.8	71.7	76.3	82.4	84.3	87.0	90.0	90.6	91.3	93.0
Clinic or other group practice—not group practice prepayment plan ...	33.8	73.9	77.0	75.5	80.5	79.4	84.5	87.8	90.1	88.2
Limited licensed practitioners:										
Chiropractor	25.4	28.6	31.4	35.6	39.8	42.6	47.3	51.0	54.3	61.1
Podiatry-surgical chiropody	38.2	59.6	64.2	70.9	75.3	79.2	83.3	86.0	87.9	88.4
Optometrist	44.0	56.9	59.0	62.7	65.6	66.9	70.3	72.2	74.7	76.0

Source: Health Care Financing Administration.

DISTRIBUTION OF PHYSICIAN SERVICES

Tables D-28 to D-36 show the distribution of physician services for calendar year 1998. These tables provide data from the seventh year of the implementation of the Medicare fee schedule. The 1998 data are a summary of all claims filed with the Medicare carriers. The totals shown will differ from total supplementary medical insurance (part B) outlay figures for 1998 shown in the budget for several reasons. First, 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. Second, the amounts shown are for services rendered during calendar year 1998; budget figures are for payments made during the fiscal year regardless of when the services were rendered. Third, 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. Finally, the amounts shown underestimate what they are supposed to represent by a small amount because some claims for services rendered in 1998 had not been processed by carriers at the time the 1998 files were submitted to HCFA, and because some claims recorded had to be eliminated due to recording errors.

Table D-28 illustrates that in 1998, 77.6 percent of allowed amounts under the fee schedule were for physicians' services, and another 1.3 percent were for the services of limited licensed practitioners—psychologists, podiatrists, optometrists, audiologists, chiropractors, dentists, and physical therapists. About 3.7 percent went to independent laboratories in 1998, while 17.3 percent went to suppliers of medical equipment, prosthetics, and ambulance services.

Table D-29 shows the distribution of spending for physicians' services by specialty. (It excludes limited licensed practitioners, labs, and suppliers.) In 1998, generalists accounted for 25.1 percent of spending, nonsurgical specialists for 28.8 percent, and surgical specialists for 26.1 percent. Radiologists, anesthesiologists, and pathologists together accounted for 10.5 percent of allowed amounts. Other physician specialties accounted for the remaining 9.5 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 (13.4 percent of allowed amounts), cardiologists (9.0 percent), ophthalmologists (7.3 percent), radiologists (6.5 percent), and family practitioners (6.1 percent).

The share of services provided on an inpatient basis varies by specialty. About 30.4 percent of the services of generalists were inpatient in 1998. The inpatient share for nonsurgical specialists was 35.7 percent and 32.9 percent for surgical specialists.

TABLE D-24.—PHYSICIAN AND LIMITED LICENSED PRACTITIONER PARTICIPATION RATES AS PERCENTAGE OF PHYSICIANS AND LIMITED LICENSED PRACTITIONERS, BY STATE, FOR SELECTED PARTICIPATION PERIODS, 1985–99

State	Oct. 1985–Apr. 1986	Jan. 1991–Dec. 1991	Jan. 1992–Dec. 1992	Jan. 1993–Dec. 1993	Jan. 1994–Oct. 1994	Jan. 1995–Dec. 1995	Jan. 1996–Dec. 1996	Jan. 1997–Dec. 1997	Jan. 1998–Dec. 1998	Jan. 1999–Dec. 1999
Alabama	58.2	82.7	83.4	85.1	87.2	90.5	91.8	93.5	74.0	94.5
Alaska	10.4	53.8	55.1	60.4	66.3	77.1	73.5	79.0	79.6	81.4
Arizona	15.4	61.3	64.5	76.2	82.6	87.1	85.2	86.6	89.2	89.7
Arkansas	45.2	59.9	57.8	62.1	64.4	74.8	77.2	78.9	80.4	83.1
California	30.0	60.8	62.6	65.9	69.0	74.5	80.5	80.9	81.9	81.0
Colorado	28.1	35.3	48.0	55.7	58.5	65.2	79.5	81.4	83.1	89.6
Connecticut	22.2	29.3	40.8	48.1	55.4	57.8	61.8	86.4	87.8	88.7
Delaware	23.9	43.9	51.9	57.4	60.0	68.0	72.2	68.6	83.1	84.1
District of Columbia	30.5	39.8	45.9	50.6	52.8	63.0	65.3	68.6	79.5	81.0
Florida	25.7	36.5	41.5	55.6	62.2	68.0	70.9	73.9	76.2	77.6
Georgia	33.1	53.6	57.2	74.9	82.7	86.3	87.2	88.6	88.6	83.3
Hawaii	20.6	57.3	64.1	75.9	80.4	82.8	83.6	84.0	84.6	85.6
Idaho	11.0	19.5	22.9	37.1	49.7	54.7	60.1	67.6	72.2	75.6
Illinois	23.1	46.9	50.8	57.6	61.8	73.3	75.6	83.3	85.4	84.2
Indiana	18.2	45.1	49.3	55.8	61.3	72.8	75.7	76.8	77.9	79.0
Iowa	29.7	51.9	58.8	61.8	63.2	81.1	83.6	88.5	90.0	91.1
Kansas	45.4	62.6	70.3	73.2	78.7	84.4	91.1	91.8	93.3	94.7
Kentucky	24.3	59.5	64.0	73.6	69.1	83.4	85.8	88.7	89.7	92.3
Louisiana	18.8	42.9	44.6	44.0	46.7	57.4	61.0	64.6	67.6	73.5
Maine	35.4	50.3	51.6	52.0	53.6	68.9	72.2	79.9	92.4	93.8
Maryland	30.4	45.3	58.7	72.5	77.3	88.1	89.9	89.6	90.6	91.7
Massachusetts	48.1	50.8	50.0	50.2	48.9	64.7	74.9	77.2	93.7	94.0
Michigan	44.0	53.7	51.7	58.1	62.1	75.3	80.2	82.6	88.2	87.7
Minnesota	18.5	29.3	34.4	44.4	51.3	58.6	70.6	77.3	77.9	78.1
Mississippi	19.1	42.7	47.9	53.6	53.8	59.4	77.3	79.3	81.4	82.6

Missouri	35.2	49.0	51.8	67.5	81.8	87.6	86.8	88.1	89.3	89.2
Montana	24.3	24.8	23.7	54.7	58.7	70.1	77.4	78.7	82.7	84.7
Nebraska	20.0	56.5	61.1	70.6	75.9	82.5	86.3	87.2	89.7	92.4
Nevada	21.7	72.9	75.4	84.9	87.9	91.2	90.8	92.2	92.6	93.3
New Hampshire	26.9	32.7	38.5	43.0	48.0	60.4	77.0	79.7	91.9	92.2
New Jersey	18.0	29.6	36.5	42.6	45.9	54.9	60.6	62.8	66.0	80.1
New Mexico	17.7	49.7	53.6	66.8	74.2	78.1	80.7	81.7	87.8	89.3
New York	20.8	34.6	36.9	40.7	46.2	59.2	64.2	70.0	72.8	75.3
North Carolina	39.1	58.1	68.2	72.8	76.5	77.6	81.0	84.6	86.0	88.3
North Dakota	10.9	43.9	45.8	55.0	77.4	81.8	92.2	93.2	93.5	94.3
Ohio	21.7	52.5	57.3	76.6	83.3	90.5	91.8	92.7	73.2	93.2
Oklahoma	13.8	39.0	44.4	53.9	64.9	72.3	76.1	84.0	88.4	89.9
Oregon	18.5	46.7	51.7	59.2	66.5	79.7	82.1	87.6	89.3	89.8
Pennsylvania	50.8	45.9	53.0	59.7	61.1	67.3	69.3	72.0	73.6	83.5
Rhode Island	46.7	67.8	70.3	80.9	82.2	80.9	66.8	68.4	70.1	71.7
South Carolina	17.9	57.9	63.0	67.3	70.2	76.1	82.7	85.5	87.1	90.0
South Dakota	8.0	20.6	23.7	31.6	41.2	51.7	71.4	79.3	83.5	85.7
Tennessee	21.1	63.7	67.6	70.5	76.9	80.6	83.1	87.5	88.7	99.9
Texas	19.7	38.9	52.9	61.3	68.6	76.9	80.3	82.1	84.2	83.3
Utah	29.3	65.6	69.5	80.3	82.0	85.9	86.8	90.2	92.1	94.1
Vermont	41.5	45.4	54.2	56.5	58.8	68.8	76.1	78.6	91.1	91.8
Virginia	29.6	48.1	49.7	52.2	52.9	55.6	84.3	85.7	86.8	87.2
Washington	23.6	46.1	53.1	64.7	73.9	76.2	86.4	89.9	91.2	91.7
West Virginia	22.9	66.3	68.4	75.9	81.9	87.2	89.3	90.8	90.1	92.1
Wisconsin	31.0	46.8	55.5	66.8	73.7	81.2	83.9	85.2	89.0	89.4
Wyoming	18.3	39.1	50.2	53.3	63.0	66.4	81.2	83.3	84.9	86.4
National	28.4	47.6	52.2	59.8	64.8	72.3	77.5	80.2	82.8	84.6

Source: Health Care Financing Administration, Office of Financial Management.

TABLE D-25.—ALLOWED CHARGES OF PARTICIPATING PHYSICIANS AS A PERCENT OF TOTAL ALLOWED CHARGES BY STATE, FOR SELECTED PARTICIPATION PERIODS, 1984-99 ¹

[In percent]

Census division/State	Oct. 1984- Sept. 1985	Jan. 1989-Mar. 1990	Apr. 1990-Dec. 1990	Jan. 1995-Dec. 1995	Jan. 1996-Dec. 1996	Jan. 1997-Dec. 1997	Jan. 1998-Dec. 1998	Jan. 1999-Dec. 1999
National	36.0	62.0	67.2	92.6	94.3	95.1	95.7	95.9
New England:								
Maine	50.9	79.4	80.5	96.2	97.4	98.2	98.3	98.4
New Hampshire	40.1	42.8	46.2	93.2	94.8	96.7	97.4	98.2
Vermont	37.3	81.4	85.9	96.9	97.9	98.4	98.9	98.9
Massachusetts	70.7	95.4	95.0	97.4	97.9	98.6	98.8	98.6
Rhode Island	68.7	88.8	95.2	99.4	99.5	99.5	99.6	99.6
Connecticut	30.7	65.9	67.9	94.1	95.1	96.2	96.2	95.9
Middle Atlantic:								
New York	31.5	51.7	58.0	87.5	89.9	91.7	92.6	93.3
New Jersey	21.5	42.3	49.6	84.6	89.8	90.7	92.0	92.9
Pennsylvania	71.4	81.6	87.9	98.7	99.0	98.8	98.8	98.8
East North Central:								
Ohio	41.5	61.9	70.9	97.8	97.8	97.1	96.5	96.7
Indiana	18.9	60.6	65.2	94.0	95.5	96.4	97.3	97.2
Illinois	29.4	58.1	61.8	90.7	93.0	94.8	95.5	95.6
Michigan	55.4	85.6	86.0	97.6	97.9	98.2	98.1	97.8
Wisconsin	31.3	42.7	48.9	91.1	93.4	94.4	97.5	98.4
West North Central:								
Minnesota	9.9	20.2	25.4	80.5	81.9	83.5	83.5	83.6
Iowa	28.5	54.2	57.8	90.4	95.0	97.1	97.8	98.1
Missouri ²	26.7	41.8	40.1	93.4	94.5	95.4	95.8	95.9
North Dakota	6.9	32.3	45.5	89.3	96.3	97.4	98.4	98.8
South Dakota	3.2	19.5	21.2	59.2	66.4	75.1	81.2	88.2

Nebraska	30.5	51.7	54.8	86.2	88.8	91.6	93.7	94.3
Kansas ³	48.0	82.5	82.3	95.3	98.0	98.4	98.9	98.9
South Atlantic:								
Delaware	57.0	70.8	76.6	95.3	96.7	97.0	97.2	97.3
Maryland ⁴	57.8	80.4	83.3	92.9	94.3	95.5	96.0	96.5
District of Columbia ⁵	60.3	73.9	76.8	93.8	94.9	95.7	96.0	96.1
Virginia ⁶	31.0	69.5	71.2	96.3	97.4	97.8	98.0	98.0
West Virginia	34.5	77.5	80.6	96.3	96.0	96.2	94.9	94.9
North Carolina	34.4	55.2	63.9	92.7	94.7	95.5	95.7	96.1
South Carolina	29.9	68.5	67.6	62.7	95.5	96.8	97.1	97.6
Georgia	29.3	50.7	65.9	94.8	95.8	95.9	96.3	96.6
Florida	30.0	61.6	68.8	94.7	95.8	96.5	97.3	97.7
East South Central:								
Kentucky	22.3	64.3	72.6	94.6	95.5	95.7	96.1	96.7
Tennessee	25.1	57.4	68.5	95.6	96.6	97.3	97.7	97.5
Alabama	42.5	81.3	84.9	97.0	97.7	98.1	98.4	98.5
Mississippi	14.3	65.3	68.3	92.8	94.3	94.9	95.3	96.4
West South Central:								
Arkansas	47.9	81.0	84.5	96.4	97.4	97.6	97.6	98.0
Louisiana	16.2	71.0	76.7	92.2	93.6	94.5	95.3	95.7
Oklahoma	16.6	39.1	50.0	91.4	93.8	95.2	96.1	96.9
Texas	26.2	52.5	56.9	90.6	92.5	92.8	93.2	93.1
Mountain:								
Montana	25.6	29.9	29.7	83.1	91.8	93.6	94.5	95.8
Idaho	8.6	13.2	17.5	61.6	69.7	76.4	79.0	79.2
Wyoming	15.7	19.7	25.8	75.6	81.0	84.7	87.2	89.7
Colorado	23.5	47.7	50.5	86.1	90.3	92.7	93.8	94.9
New Mexico	34.1	39.5	51.1	89.6	90.8	93.4	96.1	96.6
Arizona	32.7	49.8	60.2	90.6	91.5	92.7	92.9	92.2
Utah	43.8	68.9	65.1	94.7	96.2	96.9	97.7	98.4
Nevada	41.5	69.9	82.1	98.4	98.8	98.9	98.7	98.9

TABLE D-25.—ALLOWED CHARGES OF PARTICIPATING PHYSICIANS AS A PERCENT OF TOTAL ALLOWED CHARGES BY STATE, FOR SELECTED PARTICIPATION PERIODS, 1984-99¹—Continued

[In percent]

Census division/State	Oct. 1984- Sept. 1985	Jan. 1989-Mar. 1990	Apr. 1990-Dec. 1990	Jan. 1995-Dec. 1995	Jan. 1996-Dec. 1996	Jan. 1997-Dec. 1997	Jan. 1998-Dec. 1998	Jan. 1999-Dec. 1999
Pacific:								
Washington	17.5	26.9	31.8	90.5	92.9	95.1	96.5	96.8
Oregon	17.3	34.8	43.3	87.5	91.7	94.3	95.3	95.5
California	42.2	67.2	71.2	91.7	93.3	95.5	94.4	94.5
Alaska	17.2	50.0	49.3	85.4	89.8	91.1	91.5	93.7
Hawaii	39.7	58.6	70.1	97.2	97.3	97.5	96.8	97.2

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

²Starting with fiscal year 1993, includes data for all counties in Missouri plus two counties on the State border located in Kansas.

³Starting with fiscal year 1993, includes data for all counties in Kansas excluding two counties on the State border.

⁴Starting with fiscal year 1993, includes data for all counties in Maryland excluding two counties on the State border.

⁵Starting with fiscal year 1993, includes data for the District of Columbia plus two counties in Maryland located on the State border plus several counties and cities located in Virginia near the State border.

⁶Starting with fiscal year 1993, includes data for all counties in Virginia excluding several counties and cities near the State border.

Source: Health Care Financing Administration, Office of Financial Management.

TABLE D-26.—DISTRIBUTION OF ALLOWED CHARGES FOR SERVICES BILLED BY PARTICIPATION STATUS OF PHYSICIAN AND ASSIGNMENT STATUS OF CLAIM, 1984-99¹

[In percent]

Time period	Participants	Nonparticipants	
		Assigned	Unassigned
Oct. 1984–Sept. 1985	36.0	29.5	34.5
Oct. 1985–Mar. 1986	36.3	29.4	34.3
Apr. 1986–Dec. 1986 ²	38.7	28.0	32.9
Jan. 1987–Mar. 1988 ³	48.1	25.2	26.7
Apr. 1988–Dec. 1988	57.9	21.0	21.1
Jan. 1989–Mar. 1990	62.0	19.0	18.5
Apr. 1990–Dec. 1990	67.2	16.7	16.1
Jan. 1991–Dec. 1991	72.3	14.6	13.1
Jan. 1992–Dec. 1992	78.8	11.6	9.7
Jan. 1993–Dec. 1993	85.5	8.5	6.0
Jan. 1994–Dec. 1994	89.4	6.6	4.0
Jan. 1995–Dec. 1995	92.6	4.6	2.8
Jan. 1996–Dec. 1996	94.3	3.7	2.0
Jan. 1997–Dec. 1997	95.1	3.3	1.5
Jan. 1998–Dec. 1998	95.7	3.1	1.2
Jan. 1999–Dec. 1999	95.9	3.0	1.0

¹ Rates reflect covered charges for physician claims processed during the period.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, Office of Financial Management.

TABLE D-27.—DISTRIBUTION OF ALLOWED CHARGES FOR SERVICES BILLED BY STATE, PARTICIPATION STATUS OF PHYSICIAN, AND ASSIGNMENT STATUS OF CLAIM, JANUARY-DECEMBER 1999¹

[In percent]

Census division/State	Participating physician	Nonparticipating physician	
		Assigned	Unassigned
National	95.9	3.0	1.0
New England:			
Maine	98.4	1.3	0.3
New Hampshire	98.2	1.0	0.8
Vermont	98.9	0.6	0.5
Massachusetts	98.6	1.3	0.1
Rhode Island	99.6	0.3	0.1
Connecticut	95.9	2.9	1.2
Middle Atlantic:			
New York	93.3	5.1	1.6
New Jersey	92.9	4.8	2.3
Pennsylvania	98.8	1.0	0.2
East North Central:			
Ohio	96.7	3.1	0.1

TABLE D-27.—DISTRIBUTION OF ALLOWED CHARGES FOR SERVICES BILLED BY STATE, PARTICIPATION STATUS OF PHYSICIAN, AND ASSIGNMENT STATUS OF CLAIM, JANUARY–DECEMBER 1999¹—Continued

[In percent]

Census division/State	Participating physician	Nonparticipating physician	
		Assigned	Unassigned
Indiana	97.2	2.0	0.8
Illinois	95.6	3.1	1.4
Michigan	97.8	1.8	0.4
Wisconsin	98.4	1.0	0.6
West North Central:			
Minnesota	83.6	12.0	4.4
Iowa	98.1	0.9	1.0
Missouri ²	95.9	3.2	1.0
North Dakota	98.8	0.6	0.6
South Dakota	88.2	3.7	8.1
Nebraska	94.3	2.1	3.6
Kansas ³	98.9	0.6	0.4
South Atlantic:			
Delaware	97.3	1.9	0.8
Maryland ⁴	96.5	2.8	0.8
District of Columbia ⁵	96.1	2.4	1.5
Virginia ⁶	98.0	1.6	0.4
West Virginia	94.9	4.7	0.4
North Carolina	96.1	2.8	1.1
South Carolina	97.6	1.7	0.7
Georgia	96.6	2.6	0.8
Florida	97.7	1.7	0.6
East South Central:			
Kentucky	96.7	2.7	0.6
Tennessee	97.5	2.0	0.5
Alabama	98.5	1.1	0.4
Mississippi	96.4	3.0	0.6
West South Central:			
Arkansas	98.0	1.5	0.5
Louisiana	95.7	3.7	0.6
Oklahoma	96.9	1.8	1.3
Texas	93.5	5.9	1.0
Mountain:			
Montana	95.8	2.2	2.1
Wyoming	79.2	8.0	12.8
Idaho	89.7	3.6	6.7
Colorado	95.9	1.8	2.3
New Mexico	96.6	1.9	1.5
Arizona	92.2	2.2	5.6
Utah	98.4	1.0	0.6
Nevada	98.9	0.8	0.2
Pacific:			
Washington	96.8	1.8	1.3
Oregon	95.5	2.2	2.3
California	94.5	4.5	1.0

TABLE D-27.—DISTRIBUTION OF ALLOWED CHARGES FOR SERVICES BILLED BY STATE, PARTICIPATION STATUS OF PHYSICIAN, AND ASSIGNMENT STATUS OF CLAIM, JANUARY–DECEMBER 1999¹—Continued

[In percent]

Census division/State	Participating physician	Nonparticipating physician	
		Assigned	Unassigned
Alaska	93.7	5.0	1.4
Hawaii	97.2	2.1	0.6

¹ Rates reflect charges for physician claims processed during the period.² Includes data for all counties in Missouri plus two counties on the State border located in Kansas.³ Includes data for all counties in Kansas excluding two counties on the State border.⁴ Includes data for all counties in Maryland excluding two counties on the State border.⁵ Includes data for the District of Columbia plus two counties in Maryland located on the State border plus several counties and cities located in Virginia, near the State border.⁶ Includes data for all counties in Virginia excluding several counties and cities near the State border.

Source: Health Care Financing Administration, Office of Financial Management.

TABLE D-28.—ALLOWED AMOUNTS FOR CLAIMS BY TYPE OF PROVIDER, 1998

Type of provider	Allowed amounts (millions)	Percent of total
Physicians	\$44,929.6	77.6
Limited licensed practitioners ¹	772.3	1.3
Laboratories	2,154.2	3.7
Medical suppliers ²	10,044.7	17.3
All providers ³	57,903.7	100.0

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 pre-paid medical plans since these are not reimbursed under the customary, prevailing, and reasonable system.

Source: Health Care Financing Administration, Center for Health Plans and Providers.

TABLE D-29.—ALLOWED AMOUNTS FOR PHYSICIANS' SERVICES BY SPECIALTY, 1998

Specialty	Allowed charges (millions)	Percent of total	Percent inpatient
Generalists:			
General practice	\$931	2.07	17.86
Family practice	2,811	6.1	22.7
Internal medicine	6,166	13.4	35.3
Pediatrics	48	0.1	20.2
Clinics	1,578	3.4	33.1
All generalists	11,533	25.1	30.4
Nonsurgical specialists:			
Allergy/immunology	113	0.2	2.7
Cardiology	4,151	9.0	44.8

TABLE D-29.—ALLOWED AMOUNTS FOR PHYSICIANS' SERVICES BY SPECIALTY, 1998—
Continued

Specialty	Allowed charges (millions)	Percent of total	Percent inpatient
Dermatology	988	2.2	0.7
Gastroenterology	1,267	2.8	40.1
Neurology	767	1.7	41.1
Physical medicine	419	0.9	45.1
Psychiatry	803	1.7	36.4
Pulmonary disease	991	2.2	65.5
Nuclear medicine	64	0.1	16.4
Geriatrics	74	0.2	28.6
Nephrology	869	1.9	43.0
Infectious disease	238	0.5	74.7
Endocrinology	196	0.4	30.7
Rheumatology	285	0.6	10.1
Peripheral vascular disease	19	0.0	51.9
Hematology/oncology	1,444	3.1	11.1
Medical oncology	529	1.2	9.9
All nonsurgical specialists	13,218	28.8	35.7
Surgical specialists:			
General surgery	1,893	4.1	56.7
Otology, laryngology, rhinology	521	1.1	10.4
Neurosurgery	346	0.8	77.8
Obstetrics-gynecology	365	0.8	29.7
Ophthalmology	3,344	7.3	1.1
Orthopedic surgery	2,059	4.5	50.1
Plastic surgery	193	0.4	27.5
Proctology	78	0.2	34.5
Thoracic surgery	544	1.2	88.2
Urology	1,954	4.3	15.9
Hand surgery	28	0.1	13.4
Vascular surgery	305	0.7	65.5
Cardiac surgery	278	0.6	95.2
Surgical oncology	25	0.1	49.4
Other	36	0.1	33.8
All surgical specialists	11,968	26.1	32.9
Other:			
Anesthesiology	1,301	2.8	59.4
Manipulative therapy	22	0.0	17.4
Pathology	552	1.2	33.8
Radiology	2,982	6.5	24.0
Critical care (intensivists)	68	0.1	77.3
Radiation oncology	629	1.4	3.8
Intervention medicine	147	0.3	40.9
Other physician specialties	3,497	7.6	7.5
All other	9,198	20.0	22.6
Total—all physicians	45,917	100.0	31.0

Source: Health Care Financing Administration.

Table D-30 shows the distribution of spending for physicians' services by type of service. About 43.5 percent of spending was for medical care (nonsurgical) in 1998. About 27.8 percent of spending was for surgical procedures in total, adding together the amounts for surgeons, assistant surgeons, and anesthesiologists. About 8.3 percent was for diagnostic laboratory tests, which would include not only blood chemistry analysis and urinalysis, but also tests such as electrocardiograms. About 8.5 percent of spending was for radiology, and 5.6 percent was for consultations.

TABLE D-30.—ALLOWED AMOUNTS FOR PHYSICIANS' SERVICES BY TYPE OF SERVICE, 1998

Type of service	Allowed charges (millions)	Percent of total	Percent inpatient
Pneumococcal, flu, and hepatitis B vaccine	\$97	0.2	0.0
Medical care	19,994	43.5	28.2
Surgery	11,187	24.4	43.5
Consultation	2,557	5.6	54.0
Diagnostic radiology	3,888	8.5	17.7
Diagnostic laboratory	3,792	8.3	16.5
Therapeutic radiology	816	1.8	4.5
Anesthesia	1,377	3.0	61.0
Assistant at surgery	177	0.4	91.6
Other	2,032	4.4	0.2
All services	45,917	100.0	31.0

Source: Health Care Financing Administration, Center for Health Plans and Providers.

Table D-31 lists the top 20 individual services, ranked by total allowed amounts on claims submitted by selected physicians for 1998. 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 37.6 percent of all spending for all physicians' services in 1998. Cataract extraction with implantation of an intraocular lens was the highest ranked surgical procedure, accounting by itself for 2.6 percent of total allowed amounts for physicians' services. Most of the services in the top 20 were evaluation and management services (that is, visits and consultations).

Table D-32 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 D-31, 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 8.5 percent of allowed amounts for physicians' services (from table D-14), but radiological services do not appear in table D-16.

TABLE D-31.—TOP 20 SERVICES BILLED BY PHYSICIANS UNDER MEDICARE, 1998

Rank order	Service code	Description	Allowed charges ¹ (millions)	Percent of total
1	99213	Office/outpatient visit, EST	\$3,356	7.4
2	99214	Office/outpatient visit, EST	2,030	4.5
3	99232	Subsequent hospital care	1,880	4.1
4	66984	Remove cataract, insert lens	1,194	2.6
5	99233	Subsequent hospital care	933	2.1
6	99231	Subsequent hospital care	854	1.9
7	99212	Office/outpatient visit, EST	804	1.8
8	99223	Initial hospital care	656	1.5
9	99215	Office/outpatient visit, EST	582	1.3
10	88305	Tissue exam by pathologist	532	1.2
11	99254	Initial inpatient consultation	525	1.2
12	93307	Echo exam of heart	487	1.1
13	99244	Office consultation	419	0.9
14	99285	Emergency department visit	417	0.9
15	99284	Emergency department visit	401	0.9
16	99255	Initial inpatient consultation	396	0.9
17	90921	ESRD-related services, month	389	0.9
18	99238	Hospital discharge day	375	0.8
19	99312	Nursing fac care, subsequent	372	0.8
20	92014	Eye exam and treatment	368	0.8
Total			16,849	37.6

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

Note.—EST = established patient.

Source: Health Care Financing Administration, Center for Health Plans and Providers.

The 20 service groups shown in table D-32 accounted for 42.8 percent of all allowed amounts for all physicians' services in 1998. The single most costly group was office visits (accounting for 16.7 percent of total allowed amounts for physicians' services), followed by hospital visits (11.1 percent). Cataract surgery of all types accounted for 2.6 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.

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.

TABLE D-32.—ALLOWED AMOUNTS FOR SELECTED GROUPS OF PHYSICIANS' SERVICES, 1998

Rank	Service group	Allowed charges (millions) ¹	Percent of total
1	Office visits (99201–99215)	\$7,712	16.7
2	Hospital visits (99221–99238)	5,145	11.1
3	Cataract surgery (66830–66985)	1,209	2.6
4	Emergency room visits (99281–99285)	1,148	2.5
5	Skilled nursing facility visits (99301–99313)	933	2.0
6	Electrocardiograms (93000–93018, 93015–26)	736	1.6
7	Colonoscopy (45378–45385, 44388–44393, 45355)	563	1.2
8	Coronary artery bypass (33510–33516)	475	1.0
9	Cardiac catheterization (93501–93553)	425	1.0
10	Knee arthroplasty, arthroscopy (27446, 27447, 29881)	358	0.8
11	Hip arthroplasty, arthroscopy (27130–27132)	174	0.4
12	Thromboendarterectomy (35301–35381)	141	0.3
13	Hemodialysis/continuous ambulatory peritoneal dialysis (90935–90947)	141	0.3
14	Pacemaker implant/removal (33200–33214, 33233–33237)	102	0.2
15	Home visits (99341–99353)	100	0.2
16	Transurethral surgery (52602)	94	0.2
17	Pacemaker tests (93731–93736)	86	0.2
18	Vein bypass (35501–35587)	69	0.2
19	Electroencephalograms (95816–95827, 95950, 95955)	43	0.1
20	Prostatectomy (55801–55845)	41	0.1
	Total	19,744	42.8

¹ Amounts for surgical procedures do not include fees for anesthesiologists.

Source: Health Care Financing Administration, Center for Health Plans and Providers.

As shown in table D-33, the most significant shift in site of surgical care between 1980 and 1998 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 26.2 percent in 1998. The proportions of surgery taking place in a physician's office and in other nonhospital settings also grew. In 1998 the proportion of all surgical care provided in inpatient settings had dropped to 43.5 percent.

TABLE D-33.—CHARGES SUBMITTED TO MEDICARE FOR ALL PHYSICIAN SURGICAL SERVICES BY PLACE OF SERVICE, SELECTED YEARS 1980-98

Year and place of service	Surgical charges ¹		
	Amount in millions	Percent of surgical charges	As percent of total settings charges
1980:			
Office	\$445	11.6	12.2
Outpatient hospital ¹	129	3.3	29.5
Inpatient hospital	3,231	84.4	44.1
Other ²	23	0.6	3.7
Total	3,828	100.0	31.8
1990:			
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
Total	11,048	100.0	33.3
1995:			
Office	2,656	20.7	14.3
Outpatient hospital ¹	3,273	25.5	47.3
Inpatient hospital	5,817	45.3	38.8
Ambulatory surgical center	887	6.9	91.0
Other ²	195	1.5	8.9
Total	12,828	100.0	29.3
1997:			
Office	2,603	21.7	12.9
Outpatient hospital ¹	3,064	25.6	45.2
Inpatient hospital	5,263	44.0	36.8
Ambulatory surgical center	839	7.0	88.7
Other ²	200	1.7	7.6
Total	11,969	100.0	26.7
1998:			
Office	2,427	21.7	11.3
Outpatient hospital ¹	2,935	26.2	42.6
Inpatient hospital	4,861	43.5	34.1
Ambulatory surgical center	781	7.0	87.4
Other ²	183	1.6	7.3
Total	11,187	100.0	24.4

¹ May include some services rendered in an ambulatory surgical center. Medicare began covering services in ambulatory surgical centers in 1982.

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

Source: Health Care Financing Administration, Center for Health Plans and Providers.

Table D-34 shows the percent of total surgical charges by specialty in 1980 and 1998. 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 40.3 percent of total surgical care in 1998. The shares among these specialties changed. Ophthalmologists accounted for only 13.6 percent in 1980, by 1995 their share had increased to 20.4 percent due primarily to the substantial growth in cataract surgery during the 1980s. The percentage declined to 16.8 by 1998. For gastroenterologists, surgical care represented much larger proportions of their total Medicare practice in 1998 than in 1980. On the other hand, surgical charges for urologists represented much smaller proportions of their total Medicare practice in 1998 than in 1980.

TABLE D-34.—SUBMITTED SURGICAL CHARGES AS A SHARE OF TOTAL SURGICAL CHARGES AND AS A PERCENT OF TOTAL PRACTICE CHARGES BY MEDICAL SPECIALTY, 1980 AND 1998

Specialty	Percent distribution of surgical charges		Surgical charges as a percent of total practice charges	
	1980	1998	1980	1998
General surgery	22.1	11.6	71.6	68.6
Otology, laryngology, rhinology	1.9	1.8	49.7	38.7
Cardiology	2.7	7.1	22.4	19.2
Dermatology	2.4	5.9	60.9	66.3
Family practice	NA	1.0	NA	3.9
Gastroenterology	1.7	6.4	45.9	56.9
Internal medicine	4.2	2.6	6.9	4.8
Neurosurgery	2.9	2.3	70.2	73.9
Obstetrics-gynecology	NA	1.3	NA	39.2
Ophthalmology	13.6	16.8	62.1	56.3
Orthopedic surgery	13.0	11.9	73.6	64.7
Plastic surgery	1.3	1.4	88.1	80.3
Thoracic surgery	8.0	4.0	82.2	81.8
Urology	10.7	5.2	75.6	29.6
Podiatry	3.0	5.6	53.5	66.4
Clinic or other group	4.7	2.5	25.8	18.1
All other physician specialties	8.4	12.6	NA	8.4
All physicians	100.0	100.0	26.7	24.4

NA—Not available.

Source: Health Care Financing Administration, Center for Health Plans and Providers.

As shown in table D-35, 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 1998, nine specialties provided a majority of their surgical care in outpatient settings: ophthalmology, podiatry, gastroenterology, dermatology, ENT

TABLE D-35.—SUBMITTED SURGICAL CHARGES UNDER MEDICARE BY MEDICAL SPECIALTY AND PLACE OF SERVICE, 1980 AND 1998

[In percent]

Medical specialty	1980				1998				
	Office	Inpatient hos- pital	Outpatient hospital	Other ¹	Office	Inpatient hos- pital	Outpatient hospital	ASC	Other
General surgery	4.4	92.6	2.9	0.1	5.1	64.5	28.4	1.7	0.3
Otology, laryngology, rhinology	12.6	83.7	3.7	(²)	40.2	19.4	35.2	4.6	0.6
Cardiology	1.7	97.9	0.4	(²)	2.5	78.1	18.2	0.1	1.0
Dermatology	94.6	4.0	0.9	0.6	97.0	0.1	2.1	0.6	0.2
Family practice	NA	NA	NA	NA	75.1	6.9	16.3	0.7	1.0
Gastroenterology	12.0	75.6	12.3	0.1	5.9	31.3	50.2	12.4	0.2
Internal medicine	17.5	76.6	5.7	0.2	24.8	38.3	32.5	3.5	0.9
Neurosurgery	1.1	98.5	0.5	(²)	1.0	92.5	6.3	0.1	0.1
Obstetrics-gynecology	NA	NA	NA	NA	17.6	66.1	14.8	1.2	0.2
Ophthalmology	7.9	87.1	5.0	0.1	21.7	1.6	47.9	28.5	0.2
Orthopedic surgery	6.3	90.2	3.4	0.1	9.7	70.9	17.1	2.1	0.2
Plastic surgery	13.0	67.2	19.7	0.1	23.6	29.4	38.1	8.6	0.3
Thoracic surgery	0.8	98.7	0.5	(²)	0.5	95.7	3.6	0.1	0.1
Urology	8.0	90.6	1.4	0.1	30.4	40.9	25.9	2.6	0.2
Podiatry	71.3	13.5	0.9	14.3	68.8	1.4	5.0	1.7	23.1
Clinic or other group	10.1	85.3	4.5	0.1	11.6	55.6	27.7	4.2	0.9
All other physician specialties	NA	NA	NA	NA	12.7	59.4	25.6	1.9	0.4
All physicians	21.7	44.4	25.6	1.7	21.7	43.5	26.2	7.0	1.6

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

² Less than 0.05.

NA—Not available.

Source: Health Care Financing Administration, Center for Health Plans and Providers.

(otology, laryngology, and rhinology), internal medicine, plastic surgery, family practice, and urology. Podiatrists and dermatologists continued primarily to work in their offices; internists split their noninpatient work between office and outpatient settings, while many of the other specialties provided their surgical services in outpatient hospital and ambulatory surgical facilities. Most surgical specialties, such as general, orthopedic, cardiology, neurology, and thoracic surgeons, remained closely tied to inpatient hospital settings.

In 1998, ophthalmologists provided most (30.8 percent) of the surgery done in outpatient hospital settings (table D-36). The predominance of ophthalmologists in this setting is due to cataract surgery. Dermatologists accounted for the largest proportion of office surgical charges at 26.2 percent. However, ophthalmologists and podiatrists also represented significant percentages of office surgical charges, 16.8 and 17.9 percent respectively. In inpatient settings, the traditional surgical specialties—general surgery, orthopedic surgery, cardiovascular surgery, thoracic surgery, and urology accounted for 63.1 percent of all surgical charges.

Table D-37 shows the GPCIs, by Medicare carrier and locality, for 1999 and 2000.

TABLE D-36.—DISTRIBUTION OF ALLOWED SURGICAL CHARGES BY SELECTED SPECIALTIES AND SELECTED PLACE OF SERVICE, 1998

[In percent]

Specialty	Office	Inpatient hospital	Outpatient hospital
General surgery	2.7	17.2	12.6
Otology, laryngology, rhinology	3.3	0.8	2.4
Cardiology	0.8	12.8	4.9
Dermatology	26.2	0.0	0.5
Family practice	3.3	0.2	0.6
Gastroenterology	1.8	4.6	12.3
Internal medicine	3.0	2.3	3.3
Neurosurgery	0.1	4.9	0.5
Obstetrics-gynecology	1.0	1.9	0.7
Ophthalmology	16.8	0.6	30.8
Orthopedic surgery	5.3	19.4	7.7
Plastic surgery	1.5	0.9	2.0
Thoracic surgery	0.1	8.8	0.5
Urology	7.2	4.9	5.1
Podiatry	17.9	0.2	1.1
Clinic or other group	1.4	3.3	2.7
Other physician specialties	7.3	17.2	12.3
Total	100.0	100.0	100.0

Source: Health Care Financing Administration, Center for Health Plans and Providers.

TABLE D-37.—GEOGRAPHIC PRACTICE COST INDICES BY MEDICARE STATE AND LOCALITY, 1999–2000

Locality name	Cost indices		
	Work	Practice expense	Malpractice
Alabama	0.978	0.872	0.876
Alaska	1.063	1.173	1.533
Arizona	0.995	0.971	1.189
Arkansas	0.953	0.855	0.403
Anaheim/Santa Ana, CA	1.036	1.191	0.846
Los Angeles, CA	1.055	1.199	0.846
Marin/Napa/Solano, CA	1.014	1.161	0.667
Oakland/Berkeley, CA	1.040	1.196	0.667
San Francisco, CA	1.067	1.299	0.667
San Mateo, CA	1.047	1.274	0.667
Santa Clara, CA	1.062	1.262	0.667
Ventura	1.027	1.131	0.717
Rest of California ¹	1.008	1.043	0.698
Rest of California ¹	1.008	1.043	0.698
Colorado	0.987	0.970	0.795
Connecticut	1.049	1.172	1.052
Delaware	1.019	1.028	0.860
DC & MD/VA suburbs	1.050	1.161	1.032
Ft. Lauderdale, FL	0.996	1.026	1.783
Miami, FL	1.015	1.077	2.350
Rest of Florida	0.975	0.948	1.327
Atlanta, GA	1.006	1.034	0.951
Rest of Georgia	0.970	0.900	0.951
Hawaii/Guam	0.998	1.183	0.954
Idaho	0.960	0.892	0.566
Chicago, IL	1.027	1.088	1.693
East St. Louis, IL	0.988	0.931	1.487
Suburban Chicago, IL	1.006	1.067	1.365
Rest of Illinois	0.963	0.886	0.990
Indiana	0.981	0.917	0.408
Iowa	0.958	0.882	0.648
Kansas ¹	0.963	0.898	0.890
Kansas ¹	0.963	0.898	0.890
Kentucky	0.970	0.874	0.807
New Orleans, LA	0.998	0.950	1.153
Rest of Louisiana	0.969	0.881	1.031
Southern Maine	0.979	1.030	0.708
Rest of Maine	0.961	0.924	0.708
Baltimore/Surr Ctys, MD	1.019	1.039	1.098
Rest of Maryland	0.985	0.986	0.866
Metropolitan Boston	1.039	1.196	0.713
Rest of Massachusetts	1.010	1.093	0.713
Detroit, MI	1.042	1.022	3.069
Rest of Michigan	0.996	0.939	1.828
Minnesota	0.989	0.967	0.507
Mississippi	0.957	0.846	0.721
Metropolitan Kansas City, MO	0.988	0.949	1.196
Metropolitan St. Louis, MO	0.994	0.943	1.198

TABLE D-37.—GEOGRAPHIC PRACTICE COST INDICES BY MEDICARE STATE AND LOCALITY, 1999–2000—Continued

Locality name	Cost indices		
	Work	Practice expense	Malpractice
Rest of Missouri ¹	0.945	0.828	1.165
Rest of Missouri ¹	0.945	0.828	1.165
Montana	0.951	0.877	0.732
Nebraska	0.949	0.873	0.443
Nevada	1.005	1.032	0.997
New Hampshire	0.988	1.033	1.013
Northern New Jersey	1.057	1.191	0.795
Rest of New Jersey	1.028	1.094	0.795
New Mexico	0.973	0.910	0.716
Manhattan, NY	1.093	1.353	1.654
NYC Suburbs/LI, NY	1.067	1.233	1.932
Poughkeepsie/N NYC suburbs, NY	1.010	1.084	1.326
Queens, NY	1.057	1.234	1.839
Rest of New York	0.999	0.959	0.793
North Carolina	0.970	0.924	0.497
North Dakota	0.950	0.877	0.656
Ohio	0.990	0.939	1.074
Oklahoma	0.969	0.882	0.451
Portland, OR	0.996	1.021	0.587
Rest of Oregon	0.961	0.938	0.587
Metropolitan Philadelphia, PA	1.024	1.089	1.207
Rest of Pennsylvania	0.989	0.931	0.637
Puerto Rico	0.882	0.729	0.359
Rhode Island	1.018	1.069	1.189
South Carolina	0.975	0.905	0.280
South Dakota	0.935	0.873	0.435
Tennessee	0.975	0.899	0.552
Austin, TX	0.986	1.000	0.849
Beaumont, TX	0.992	0.899	1.386
Brazoria, TX	0.992	0.977	1.386
Dallas, TX	1.010	1.016	0.930
Fort Worth, TX	0.987	0.971	0.930
Galveston, TX	0.988	0.970	1.386
Houston, TX	1.020	1.007	1.418
Rest of Texas	0.966	0.888	0.871
Utah	0.977	0.909	0.594
Vermont	0.973	0.984	0.548
Virgin Islands	0.965	1.034	1.032
Virginia	0.985	0.941	0.557
Seattle (King Co), WA	1.005	1.080	0.742
Rest of Washington	0.982	0.976	0.742
West Virginia	0.963	0.853	1.106
Wisconsin	0.981	0.933	0.841
Wyoming	0.967	0.895	0.705

¹ Payment locality is serviced by two carriers.

Source: Federal Register (1999b).

REFERENCES

- Federal Register*. (1991, August 30). Prospective Payment System for Inpatient Hospital Capital-Related Costs, 56(169), 43358–524.
- Federal Register*. (1999a, July 30). Medicare program; Changes to the hospital inpatient prospective payment systems and fiscal year 2000 rates, 64(146), 41440–641.
- Federal Register*. (1999b, November 2). Medicare Program; Revisions to Payment Policies Under the Physician Fee Schedule for Calendar Year 2000; Final rule. 64(211). 59379–590.
- Federal Register*. (2000, January 12). Medicare program; Changes to the hospital inpatient prospective payment systems and fiscal year 2000 rates, corrections 65(8), 1817–23.
- Medicare Payment Advisory Commission (1998, March) *Report to the Congress: Medicare Payment Policy. Volume II Analytic Papers*. Washington, DC: Author.
- Medicare Payment Advisory Commission (1999, March) *Report to the Congress: Medicare Payment Policy*. Washington, DC: Author.
- Office of Rural Health Policy. (1999, September). *The Medicare Rural Hospital Flexibility Program: Rapid Progress Towards Full Implementation*. Chapel Hill, NC.
- Prospective Payment Assessment Commission. (1997, March). *Report and recommendations to the Secretary*. Washington, DC: Author.
- Prospective Payment Assessment Commission. (1997, June). *Medicare prospective payment and the American health care system*. Washington, DC: Author.