DEPARTMENT OF HEALTH AND HUMAN SERVICES

Health Care Financing Administration

42 CFR Parts 412, 413, and 489

[BPD–878–P]

RIN 0938–AH55

Medicare Program; Changes to the Hospital Inpatient Prospective Payment Systems and Fiscal Year 1998 Rates

AGENCY: Health Care Financing Administration (HCFA), HHS.

ACTION: Proposed rule.

SUMMARY: We are proposing to revise the Medicare hospital inpatient prospective payment systems for operating costs and capital-related costs to implement necessary changes arising from our continuing experience with the systems. In addition, in the addendum to this proposed rule, we are describing proposed changes in the amounts and factors necessary to determine prospective payment rates for Medicare hospital inpatient services for operating costs and capital-related costs. These changes would be applicable to discharges occurring on or after October 1, 1997. We are also setting forth proposed rate-of-increase limits as well as proposing changes for hospitals and hospital units excluded from the prospective payment systems.

DATES: Comments will be considered if received at the appropriate address, as provided below, no later than 5 p.m. on August 1, 1997.

ADDRESSES: Mail written comments (an original and three copies) to the following address:

Health Care Financing Administration, Department of Health and Human Services, Attention: BPD–878–P, P.O. Box 7517, Baltimore, MD 21207–0517.

If you prefer, you may deliver your written comments (an original and three copies) to one of the following addresses:

Room 309–G, Hubert H. Humphrey Building, 200 Independence Avenue, SW., Washington, DC 20201, or

Room C5–09–26, Central Building, 7500 Security Boulevard, Baltimore, MD 21244–1850.

Because of staffing and resource limitations, we cannot accept comments by facsimile (FAX) transmission. In commenting, please refer to file code BPD–878–P. Comments received timely will be available for public inspection as they are received, generally beginning approximately three weeks after publication of a document, in Room 309–G of the Department's offices at 200 Independence Avenue, SW., Washington, DC, on Monday through Friday of each week from 8:30 a.m. to 5 p.m. (phone: (202) 690–7890).

For comments that relate to information collection requirements, mail a copy of comments to:

Office of Information and Regulatory Affairs, Office of Management and Budget, Room 10235, New Executive Office Building, Washington, DC 20503.

Attn: Allison Herron Eydt, HCFA Desk Officer; and Office of Financial and Human Resources,

Management Planning and Analysis Staff, Room C2–26–17, 7500 Security Boulevard, Baltimore, MD 21244–1850.

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FOR FURTHER INFORMATION CONTACT:

Nancy Edwards, (410) 786–4531, Operating Prospective Payment, DRG, and Wage Index Issues.

Frank Emerson, (410) 786–4656, Capital Prospective Payment, Excluded Hospitals, and Graduate Medical Education Issues.

SUPPLEMENTARY INFORMATION:

I. Background

A. Summary

Under section 1886(d) of the Social Security Act (the Act), a system of payment for the operating costs of acute care hospital inpatient stays under Medicare Part A (Hospital Insurance) based on prospectively-set rates was established effective with hospital cost reporting periods beginning on or after October 1, 1983. Under this system, Medicare payment for hospital inpatient operating costs is made at a predetermined, specific rate for each hospital discharge. All discharges are classified according to a list of diagnosis-related groups (DRGs). The regulations governing the hospital inpatient prospective payment system are located in 42 CFR Part 412. On August 30, 1996, we published a final rule (61 FR 46166) to implement changes to the prospective payment system for hospital operating costs beginning with Federal fiscal year (FY) 1997.

As required by section 1886(g) of the Act, effective with cost reporting periods beginning on or after October 1, 1991, we implemented a prospective payment methodology for hospital inpatient capital-related costs. Under the new methodology, a predetermined payment amount per discharge is made for Medicare inpatient capital-related costs.

B. Major Contents of This Proposed Rule

In this proposed rule, we are setting forth proposed changes to the Medicare hospital inpatient prospective payment systems for both operating costs and capital-related costs. This proposed rule would be effective for discharges occurring on or after October 1, 1997. Following is a summary of the major changes that we are proposing to make:

1. Changes to the DRG Classifications and Relative Weights

As required by section 1886(d)(4)(C) of the Act, we must adjust the DRG classifications and relative weights at least annually. Our proposed changes for FY 1998 are set forth in section II. of this preamble.

2. Changes to the Hospital Wage Index

In section III. of this preamble, we discuss proposed revisions to the wage index and the annual update of the wage data. Specific issues addressed in this section include:

- FY 1998 wage index update.
- Revisions to the wage index based on hospital redesignations.
- Revised process for wage data verification.

3. Revision of the Operating Hospital Market Baskets

In section IV. of this preamble, we discuss our proposal to use a revised hospital market basket in developing the FY 1998 update factor for the operating prospective payment rates and the excluded hospital rate-of-increase limits.

4. Other Changes to the Prospective Payment System for Inpatient Operating Costs

In section V. of this preamble, we discuss several provisions of the regulations in 42 CFR Parts 412 and 413 and set forth certain proposed changes concerning the following:

- Elimination of day outlier payments.
- Rural referral centers.
- Indirect medical education.
- Direct graduate medical education programs.

5. Changes to the Prospective Payment System for Capital-Related Costs

In section VI. of this preamble, we discuss several provisions of the regulations in 42 CFR part 412, 413, and 489 and set forth certain proposed changes and clarifications concerning the following:

- Possible adjustments to capital minimum payment levels.
- Special exceptions application process.

6. Changes for Hospitals and Hospital Units Excluded From the Prospective Payment Systems

In section VII. of this preamble, we discuss the criteria for ''hospitals within hospitals'' seeking exclusion from the prospective payment system. We also discuss technical clarifications concerning exclusion of rehabilitation units.

7. Determining Prospective Payment Operating and Capital Rates and Rate-of-Increase Limits

In the addendum to this proposed rule, we set forth proposed changes to the amounts and factors for determining the FY 1998 prospective payment rates for operating costs and capital-related costs. We also are proposing update factors for determining the rate-of-increase limits for cost reporting periods beginning in FY 1998 for hospitals and hospital units excluded from the prospective payment system.

8. Impact Analysis

In Appendix A, we set forth an analysis of the impact that the proposed changes described in this proposed rule would have on affected entities.

9. Capital Acquisition Model

Appendix B contains the technical appendix on the proposed FY 1998 capital cost model.

10. Revised Market Basket Data Sources

Appendix C sets forth the data sources used to determine the market basket relative weights and choice of price proxies.

11. Report to Congress on the Update Factor for Prospective Payment Hospitals and Hospitals Excluded From the Prospective Payment System

Section 1886(e)(3)(B) of the Act requires that the Secretary report to Congress on our initial estimate of an update factor for FY 1998 for both hospitals included in and hospitals excluded from the prospective payment systems. This report is included as Appendix D to this proposed rule.

12. Proposed Recommendation of Update Factor for Hospital Inpatient Operating Costs

As required by sections 1886 (e)(4) and (e)(5) of the Act, Appendix E provides our recommendation of the appropriate percentage change for FY 1998 for the following:

- Large urban area and other area average standardized amounts (and hospital-specific rates applicable to sole community hospitals) for hospital inpatient services paid for under the prospective payment system for operating costs.
- Target rate-of-increase limits to the allowable operating costs of hospital inpatient services furnished by hospitals and hospital units excluded from the prospective payment system.

13. Discussion of Prospective Payment Assessment Commission Recommendations

The Prospective Payment Assessment Commission (ProPAC) is directed by section 1886(e)(2)(A) of the Act to make recommendations on the appropriate percentage change factor to be used in updating the average standardized amounts. In addition, section 1886(e)(2)(B) of the Act directs ProPAC to make recommendations regarding changes in each of the Medicare payment policies under which payments to an institution are prospectively determined. In particular, the recommendations relating to the hospital inpatient prospective payment systems are to include recommendations concerning the number of DRGs used to classify patients, adjustments to the DRGs to reflect severity of illness, and changes in the methods under which hospitals are paid for capital-related costs. Under section 1886(e)(3)(A) of the Act, the recommendations required of ProPAC under sections 1886(e)(2) (A) and (B) of the Act are to be reported to Congress not later than March 1 of each year.

We are printing ProPAC's March 1, 1997 report, which includes its recommendations, as Appendix F of this document. The recommendations, and the actions we are proposing to take with regard to them (when an action is recommended), are discussed in detail in the appropriate sections of this preamble, the addendum, or the appendices to this proposed rule. See section VIII. of this preamble for specific information concerning where individual recommendations are addressed. For a brief summary of the ProPAC recommendations, we refer the reader to the beginning of the ProPAC report as set forth in Appendix F of this proposed rule. For further information relating specifically to the ProPAC report, contact ProPAC at (202) 401–8986.

II. Proposed Changes to DRG Classifications and Relative Weights

A. Background

Under the prospective payment system, we pay for inpatient hospital services on the basis of a rate per discharge that varies by the DRG to which a beneficiary's stay is assigned. The formula used to calculate payment for a specific case takes an individual hospital's payment rate per case and multiplies it by the weight of the DRG to which the case is assigned. Each DRG weight represents the average resources required to care for cases in that particular DRG relative to the average resources used to treat cases in all DRGs.

Congress recognized that it would be necessary to recalculate the DRG relative weights periodically to account for changes in resource consumption. Accordingly, section 1886(d)(4)(C) of the Act requires that the Secretary adjust the DRG classifications and relative weights annually. These adjustments are made to reflect changes in treatment patterns, technology, and any other factors that may change the relative use of hospital resources. The proposed changes to the DRG classification system and the proposed recalibration of the DRG weights for discharges occurring on or after October 1, 1997 are discussed below.

B. DRG Reclassification

1. General

Cases are classified into DRGs for payment under the prospective payment system based on the principal diagnosis, up to eight additional diagnoses, and up to six procedures performed during the stay, as well as age, sex, and discharge status of the patient. The diagnosis and procedure information is reported by the hospital using codes from the International Classification of Diseases, Ninth Edition, Clinical Modification (ICD–9–CM). The Medicare fiscal intermediary enters the information into its claims system and subjects it to a

series of automated screens called the Medicare Code Editor (MCE). These screens are designed to identify cases that require further review before classification into a DRG can be accomplished.

After screening through the MCE and any further development of the claims, cases are classified by the GROUPER software program into the appropriate DRG. The GROUPER program was developed as a means of classifying each case into a DRG on the basis of the diagnosis and procedure codes and demographic information (that is, sex, age, and discharge status). It is used both to classify past cases in order to measure relative hospital resource consumption to establish the DRG weights and to classify current cases for purposes of determining payment. The records for all Medicare hospital inpatient discharges are maintained in the Medicare Provider Analysis and Review (MedPAR) file. The data in this file are used to evaluate possible DRG classification changes and to recalibrate the DRG weights.

Currently, cases are assigned to one of 492 DRGs in 25 major diagnostic categories (MDCs). Most MDCs are based on a particular organ system of the body (for example, MDC 6, Diseases and Disorders of the Digestive System); however, some MDCs are not constructed on this basis since they involve multiple organ systems (for example, MDC 22, Burns).

In general, principal diagnosis determines MDC assignment. However, there are five DRGs to which cases are assigned on the basis of procedure codes rather than first assigning them to an MDC based on the principal diagnosis. These are the DRGs for liver, bone marrow, and lung transplant (DRGs 480, 481, and 495, respectively) and the two DRGs for tracheostomies (DRGs 482 and 483). Cases are assigned to these DRGs before classification to an MDC.

Within most MDCs, cases are then divided into surgical DRGs (based on a surgical hierarchy that orders individual procedures or groups of procedures by resource intensity) and medical DRGs. Medical DRGs generally are differentiated on the basis of diagnosis and age. Some surgical and medical DRGs are further differentiated based on the presence or absence of complications or comorbidities (hereafter CC).

Generally, GROUPER does not consider other procedures; that is, nonsurgical procedures or minor surgical procedures generally not performed in an operating room are not listed as operating room (OR) procedures in the GROUPER decision tables. However, there are a few non-OR procedures that do affect DRG assignment for certain principal diagnoses, such as extracorporeal shock wave lithotripsy for patients with a principal diagnosis of urinary stones.

The changes we are proposing to make to the DRG classification system for FY 1998 and other decisions concerning DRGs are set forth below. Unless otherwise noted, our DRG analysis is based on a 10 percent random sample of the FY 1996 MedPAR file.

2. MDC 1 (Diseases and Disorders of the Nervous System)

a. Stereotactic Radiosurgery. Effective October 1, 1995, procedure code 92.3 (stereotactic radiosurgery) was created and classified as a non-OR procedure. However, because this procedure had previously been coded to procedure codes that are classified as operating room procedures, we assigned procedure code 92.3 to the same surgical DRGs as the predecessor codes. Therefore, in the following DRGs, stereotactic radiosurgery is considered a non-OR procedure that affects DRG assignment: In MDC 1, DRG 1 (Craniotomy Age >17 Except for Trauma), DRG 2 (Craniotomy for Trauma Age >17), and DRG 3 (Craniotomy Age 0–17) and, in MDC 10 (Endocrine, Nutritional and Metabolic Diseases and Disorders), DRG 286 (Adrenal and Pituitary Procedures). In addition, in MDC 17 (Myeloproliferative Diseases and Disorders and Poorly Differentiated Neoplasms), procedure code 92.3 is considered a major OR procedure for purposes of assignment to DRG 400 (Lymphoma and Leukemia with Major OR Procedure) and DRGs 406 and 407 (Myeloproliferative Disorders or Poorly Differentiated Neoplasms with Major OR Procedure).[1] We stated in the June 2, 1995 proposed rule (60 FR 29207) that we would analyze the stereotactic radiosurgery cases as soon as the FY 1996 cases were available to ensure that these DRG assignments were appropriate.

In analyzing the FY 1996 MedPAR file, we find that there were stereotactic radiosurgery cases assigned to DRGs 1, 286, 400, and 407. In DRG 1, the average standardized charges for these cases is approximately $16,400 compared to approximately $27,800 for DRG 1 overall and the lengths of stay are about 3 days and 10 days, respectively. In DRG 286, the average charges for procedure code 92.3 are also much lower than all cases in that DRG, about $11,900 versus $19,400. Again the length of stay is also much lower for stereotactic radiosurgery, just over 1 day compared to almost 7 days for all DRG 286 cases.

Clearly, the cases associated with procedure code 92.3 are much less resource intensive than the other cases in the DRGs to which it is assigned. There are two courses of action that we could take. One, we could continue to consider code 92.3 a non-OR procedure that affects DRG assignment and reassign it to more appropriate surgical DRGs in MDC 1 and 11. On the other hand, we could consider it a non-OR code that does not affect DRG assignment. In the latter situation, cases currently assigned to surgical DRGs because of the performance of stereotactic radiosurgery would be reassigned to medical DRGs in the same MDC.

A review of the average charges for the medical DRGs in MDCs 1 and 11 to which these cases would be assigned reveals that these DRGs are not as resource intensive as the stereotactic radiosurgery cases. Therefore, due to the higher charges associated with these cases, we are proposing to reassign procedure code 92.3 to DRGs 7 and 8 (Peripheral and Cranial Nerve and Other Nervous System Procedures) in MDC 1 and DRGs 292 and 293 (Other Endocrine, Nutrition and Metabolic OR Procedures).

We are also proposing to remove procedure code 92.3 from the list of major OR procedures in MDC 17. Again the average charges of those cases are lower than the other cases assigned to those DRGs. Therefore, these cases would be assigned to DRGs 401 and 402 (Lymphoma and Non-Acute Leukemia with Other OR Procedure) and DRG 408 (Myeloproliferative Disorders or Poorly Differentiated Neoplasms with Other OR Procedure).

b. Sleep Apnea. In our August 30, 1996 final rule (61 FR 46168), we discussed our review of the DRG assignment of cases in which surgery is performed to correct obstructive sleep apnea (diagnosis code 780.57). When coded as the principal diagnosis, sleep apnea is assigned to DRGs 34 and 35 (Other Disorders of the Nervous System) in MDC 1.

The result of our review was to assign several surgical procedures used to correct sleep apnea to DRGs 7 and 8 (Peripheral and Cranial Nerve and Other Nervous System Procedures). These procedures involved repair of the palate

[1] A single title combined with two DRG numbers is used to signify pairs. Generally, the first DRG is for cases with CC and the second DRG is for cases without CC. If a third number is included, it represents cases of patients who are age 0–17. Occasionally, a pair of DRGs is split on age >17 and age 0–17.

or pharynx (procedure codes 27.69, 29.4, and 29.59). Previously, since none of these surgical procedures had been assigned to MDC 1, cases of sleep apnea treated with one of these procedures had been assigned to DRG 468 (Extensive OR Procedure Unrelated to Principal Diagnosis) or DRG 477 (Nonextensive OR Procedure Unrelated to Principal Diagnosis).

An associated procedure that is also used to treat sleep apnea is correction of cleft palate (procedure code 27.62). Currently, correction of cleft palate is assigned only to DRG 52 (Cleft Lip and Palate Repair) in MDC 3 (Diseases and Disorders of the Ear, Nose, Mouth, and Throat). Thus, when this procedure is performed for sleep apnea cases, the cases would be assigned to DRG 477. We are proposing to add this surgical procedure to MDC 1. Like the palate and pharynx repair procedures that were addressed last year, these cases are not clinically similar to the other surgical DRGs in MDC 1; thus, we are proposing to include them in DRGs 7 and 8.

c. Geniculate Herpes Zoster. Geniculate herpes zoster (diagnosis code 053.11) is an acute viral disease characterized by inflammation of spinal ganglia and by a vesicular eruption along the area of distribution of a sensory nerve. In the August 30, 1996 final rule (61 FR 27447), we moved diagnosis codes 053.10 and 053.19 (Herpes zoster with unspecified nervous system complication and Other herpes zoster, respectively) from DRG 20 (Nervous System Infection Except Viral Meningitis) to DRGs 18 and 19 (Cranial and Peripheral Nerve Disorders). We considered moving diagnosis code 053.11 at that time, however, the higher average charges associated with geniculate herpes zoster and slightly higher length of stay led us to decide instead to leave 053.11 in DRG 20 and to reassess this decision in upcoming years.

We conducted an analysis of the cases assigned to DRG 20 using the FY 1996 MedPAR file. The average standardized charges for these cases is approximately $8,430, which is significantly lower than the average charges for the DRG, approximately $21,180. The average length of stay for the geniculate herpes zoster cases, approximately 6 days, is also less than the average length of stay for the DRG, approximately 10 days. Based on these data, we are proposing to reassign diagnosis code 053.11 to DRGs 18 and 19, which have average charges of approximately $8,460 and $5,460, respectively. The average length of stay for DRGs 18 and 19 are approximately 6 days and 4 days, respectively.

3. MDC 5 (Diseases and Disorders of the Circulatory System)

a. Heart Assist Devices. In November 1995, we amended our general noncoverage decision concerning artificial hearts and related devices. Section 65–15 of the Medicare Coverage Issues manual was revised to allow coverage of the HeartMate Implantable Pneumatic Left Ventricular Assist System (HeartMate IP LVAS) in accordance with its Food and Drug Administration-approved use as a temporary mechanical circulation support in nonreversible left ventricular failure as a bridge to cardiac transplant. In order to receive Medicare coverage, all of the following conditions must be met:

- The patient is listed as an approved heart transplant candidate by a Medicare-approved heart transplant center.
- The implantation of the system is done in a Medicare-approved heart transplant center. Written permission from the listing center is needed if the patient has the implantation done at another Medicare-approved center.
- The patient is on inotropes.
- The patient is on an intra-aortic balloon pump (if possible).
- The patient has left atrial pressure or pulmonary capillary wedge pressure ≥ 20mm Hg with either—

—Systolic blood pressure ≤80 mm Hg; or
—Cardiac index of ≤2.0 1/min/m^2.

A procedure code for implant of an implantable, pulsatile heart assist system (37.66), which includes the HeartMate IP LVAS, was created effective October 1, 1995. At that time, the procedure code was assigned to DRGs 110 and 111 (Major Cardiovascular Procedures). Because we now have a full year of cases coded with this procedure (FY 1996 MedPAR file), we have analyzed them to determine if this DRG assignment remains appropriate.

In the full (100 percent) FY 1996 MedPAR file, there are 51 cases of implant of an internal heart assist system (procedure code 37.66) in MDC 5. Of these 51 cases, 18 were assigned to DRG 110 and none to DRG 111. The other 33 cases were assigned to DRG 103 (Heart Transplant), DRG 104 (Cardiac Valve Procedures with Cardiac Cath), DRGs 106 and 107 (Coronary Bypass), and DRG 108 (Other Cardiothoracic Procedures). Of the 18 cases assigned to DRG 110, the average charge is about $96,000 and the average length of stay is 22.5 days. The average charges for all cases assigned to DRG 110 is about $36,500 and the average length of stay is 10.1 days.

Thus, the cases coded with procedure code 37.66 are much more resource intensive than the other cases assigned to DRG 110. In reviewing the other surgical DRGs in MDC 5 for possible reassignment of this procedure, we find there are two DRGs that contain cases that are clinically similar to implant of heart assist device cases: DRG 103 and DRG 108. For FY 1996, the average charge of cases in DRG 103 is approximately $164,000 and the length of stay is 46 days. For DRG 108, these statistics are about $54,000 and 12.1 days. Thus, the average charge for DRG 103 is approximately $68,000 higher than the average charge of the heart assist device cases and the average charge for DRG 108 is approximately $42,000 lower.

Because our general policy is to assign a procedure code to a DRG with clinically similar cases that is the best match in terms of resource use, we are proposing to assign procedure code 37.66 to DRG 108. We realize that there is still a large difference in the resource use for DRG 108 and the heart assist device cases; however, there is not a more appropriate assignment in MDC 5 for these cases. Our proposal would improve the payment for these cases by approximately 46 percent. We note that because DRG 108 is ranked above DRGs 106 and 107 in the MDC 5 surgical hierarchy, the cases coded with 37.66 that would have been classified to these DRGs would be assigned to DRG 108 beginning in FY 1998.

b. Automatic Implantable Cardioverter Defibrillators (AICD). For several years, we have received correspondence concerning the appropriate DRG assignment of procedures involving automatic implantable cardioverter defibrillators (AICDs). These cases are currently assigned to DRG 116 (Other Permanent Cardiac Pacemaker Implant or AICD Generator or Lead Procedure), and are represented by the following procedure codes:

37.95 Implantation of automatic cardioverter/defibrillator lead(s) only
37.96 Implantation of automatic cardioverter/defibrillator pulse generator only
37.97 Replacement of automatic cardioverter/defibrillator lead(s) only
37.98 Replacement of automatic cardioverter/defibrillator pulse generator only

As explained in detail in the September 1, 1992 final rule (57 FR 39749), the clinical composition and relative weights of the surgical DRGs in MDC 5 do not offer a perfect match with the AICD cases. However, review of those DRGs in terms of clinical coherence and similar resource consumption led to the determination

that DRG 116 was the best possible fit. In that document, we stated that we would continue to monitor these cases.

We last discussed this issue in the September 1, 1995 final rule (60 FR 45780). At that time, we concluded that, although the average charge for AICD cases was much higher than the average charge for DRG 116 overall, the AICD cases were clinically similar to the DRG 116 cases and should not be moved. In addition, a slight decrease in the average charge for the cases between the FY 1993 and FY 1994 MedPAR files led us to believe further reductions might be forthcoming since there were new AICD devices entering the market that might lead to increased price competition.

We reviewed the most current AICD cases as contained in the FY 1996 MedPAR file and found that the average standardized charge for AICD cases assigned to DRG 116 was $28,777 compared to an average charge of $21,330 for all cases in DRG 116. These data demonstrate that the average charge for AICD cases continues to be much higher than the average charge for all other DRG 116 cases. Therefore, in order to more appropriately compensate hospitals for these cases, we are proposing to move them to DRG 115 (Permanent Cardiac Pacemaker Implantation with AMI, Heart Failure or Shock). Although the resource consumption of DRG 115 cases is similar to the AICD cases, they are not clinically similar. In general, the patients classified to DRG 115 are seriously ill and have a relatively long length of stay (10.2 days). However, there are no other suitable DRGs in MDC 5 and we do not wish to create a separate DRG for the AICD cases. As we have often stated in the past, we are reluctant to create device-specific DRGs where the cost of the device dominates the charges. We continue to believe that it is the cost of the AICD device which is responsible for the high average charge for these cases and not the intensity of hospital services required to treat the patient. We are also proposing to revise the title of DRG 115 to ''Permanent Cardiac Pacemaker Implant with AMI, Heart Failure or Shock or AICD Lead or Generator Procedure.''

c. Coronary Artery Stent. Effective October 1, 1995, procedure code 36.06 (Insertion of coronary artery stent(s)) was introduced. As dictated by our longstanding practice, we assigned this code to the same DRG category as its predecessor codes. Therefore, procedure code 36.06 was assigned to DRG 112 (Percutaneous Cardiovascular Procedures), as insertion of a stent is usually performed in conjunction with percutaneous transluminal coronary angioplasty (PTCA).

We discussed this assignment and public comments we received in both the September 1, 1995 final rule (60 FR 45785) and the August 30, 1996 final rule (61 FR 46171). Commenters protested the assignment of procedure code 36.06 to DRG 112 because the hospital costs for inserting coronary stents along with an angioplasty are significantly greater than those for conventional angioplasty alone. The commenters presented an analysis of the average charges and length of stay for stent and nonstent cases assigned to DRG 112. Our response to these commenters was that we would review the stent cases as soon as the FY 1996 MedPAR file was available, as these would be the first Medicare data available for these cases.

Our analysis of the FY 1996 MedPAR data on coronary stent implantation in Medicare beneficiaries has shown the following findings:

- The difference between the average length of stay for the stent cases and the nonstent cases is 0.19 days (4.39 days versus 4.20 days).
- Charges for patients receiving a stent were approximately $23,650, while charges for patients without stent implant were approximately $17,480, for a difference of $6,170.
- Of those beneficiaries who had a PTCA procedure in FY 1996, approximately 34 percent received a stent.

As review of stent cases in DRG 112 has shown a significant variation in hospital charges, we are proposing to move these cases out of that DRG. Although the coronary artery stent cases are not clinically similar to the pacemaker cases in DRG 116, the resource consumption of those cases is very similar. Therefore, absent any other appropriate DRG, we are proposing to add cases including procedure codes for PTCA in combination with insertion of coronary stent into DRG 116. Therefore, we are proposing to move into DRG 116 the following procedure codes when performed in conjunction with procedure code 36.06:

35.96 Percutaneous valvuloplasty
36.01 Single vessel percutaneous transluminal coronary angioplasty [PTCA] or coronary atherectomy without mention of thrombolytic agent
36.02 Single vessel percutaneous transluminal coronary angioplasty [PTCA] or coronary atherectomy with mention of thrombolytic agent
36.05 Multiple vessel percutaneous transluminal coronary angioplasty [PTCA] or coronary atherectomy performed during the same operation, with or without mention of thrombolytic agent
36.09 Other removal of coronary artery obstruction
37.34 Catheter ablation of lesion or tissues of the heart

We further propose to change the title of DRG 116 to ''Other Permanent Cardiac Pacemaker Implant or PTCA with Coronary Artery Stent Implant.''

We will continue to monitor the stent cases and their assignment to DRG 116. If PTCA cases with stent become a higher percentage of the PTCA cases or the average charge for stent cases falls, we may reconsider this assignment.

d. Circulatory Disorders (DRGs 121 and 122). In response to a comment on the May 31, 1996 proposed rule, we stated in the August 30, 1996 final rule (61 FR 46172) that we would conduct a comprehensive review of cases currently assigned to DRG 121 (Circulatory Disorders with Acute Myocardial Infarction (AMI) and Cardiovascular Complications, Discharged Alive) and DRG 122 (Circulatory Disorders with AMI without Cardiovascular Complications, Discharged Alive) to determine whether changes were needed to the list of complicating conditions that can result in assignment to DRG 121. To carry out this review, we analyzed the cases in the FY 1996 MedPAR file that were assigned to either DRG 121 or 122. Through a variety of statistical analyses of length of stay and standardized charge data, we assessed the impact on resource use of all coded secondary diagnoses.

Our analysis of these secondary diagnosis codes revealed many cases now assigned to DRG 122 in which certain secondary diagnoses are associated with resource use comparable to cases assigned to DRG 121. Although many of these cases involve secondary diagnoses that are not strictly cardiovascular in nature, such as diagnosis code category 482 (Other bacterial pneumonia), we now believe that it is appropriate to expand DRG 121 to include such major complications when they are represented in significant volume among the cases in the DRG. Continuing to limit DRG 121 only to cases involving the existing list of cardiovascular complications would contribute to large variations in the charges and lengths of stay for cases in DRG 122.

Therefore, we are proposing to change the title of DRG 121 to ''Circulatory Disorders with AMI and Major Complications, Discharged Alive,'' and to add the following diagnosis codes to the list of complications that would produce assignment to DRG 121 when present in conjunction with the existing list of AMI diagnoses:

398.91 Rheumatic heart failure
416.0 Primary pulmonary hypertension
430 Subarachnoid hemorrhage
431 Intracerebral hemorrhage
432.0 Nontraumatic extradural hemorrhage
432.1 Subdural hemorrhage
432.9 Unspecified intracranial hemorrhage
433.01 Occluded basilar artery with cerebral infarction
433.11 Occluded carotid artery with cerebral infarction
433.21 Occluded vertebral artery with cerebral infarction
433.31 Occluded multiple and bilateral artery with cerebral infarction
433.81 Occluded specified precerebral artery with cerebral infarction
433.91 Occluded precerebral artery NOS with cerebral infarction
434.00 Cerebral thrombosis
434.01 Cerebral thrombosis with cerebral infarction
434.10 Cerebral embolism
434.11 Cerebral embolism with cerebral infarction
434.90 Cerebral artery occlusion
434.91 Cerebral artery occlusion with cerebral infarction
436 Acute, but ill-defined, cerebrovascular disease
481 Pneumococcal pneumonia
482.xx Other bacterial pneumonia (all 4th and 5th digits)
483.x Pneumonia due to other specified organism (all 4th digits)
484.x Pneumonia in infectious diseases classified elsewhere (all 4th digits)
485 Bronchopneumonia, organism unspecified
486 Pneumonia, organism unspecified
487.0 Influenza with pneumonia
507.x Pneumonitis due to solids and liquids (all 4th digits)
518.0 Pulmonary collapse
518.5 Pulmonary insufficiency following trauma and surgery
518.81 Respiratory failure
707.0 Decubitus ulcer
996.62 Infection and inflammatory reaction due to other vascular device, implant, and graft
996.72 Other complications due to other cardiac device, implant, and graft

In conjunction with these proposed changes, we note that the title of DRG 122 would be revised to read ''Circulatory Disorders with AMI without Major Complications, Discharged Alive.''

4. MDC 8 (Diseases and Disorders of the Musculoskeletal System and Connective Tissue)

a. Introduction. As discussed in detail below, we are proposing to create several new DRGs in MDC 8 effective for discharges on or after October 1, 1997. Specifically, we would replace current DRGs 214 and 215 (Back and Neck Procedures) with the following new DRGs:

DRG 496 Combined Anterior/Posterior Spinal Fusion
DRG 497 Spinal Fusion with CC
DRG 498 Spinal Fusion without CC
DRG 499 Back and Neck Procedures Except Spinal Fusion with CC
DRG 500 Back and Neck Procedures Except Spinal Fusion without CC

In addition, we are proposing to replace existing DRGs 221 and 222 (Knee Procedures) with new DRGs 501 and 502 (Knee Procedures with Principal Diagnosis of Infection) and DRG 503 (Knee Procedures without Principal Diagnosis of Infection). We believe that both of these proposals would improve payment equity by increasing the DRG system's ability to capture variations in resource costs for these cases.

b. Back and Neck Procedures. Currently, hospital inpatient cases involving back and neck procedures generally are assigned to DRGs 214 and 215 (assuming a principal diagnosis that groups the case to MDC 8). We have received correspondence indicating that within these DRGs, cases involving spinal fusion procedures represent a distinctly more complex and resource-intensive subset, and that payment under DRGs 214 and 215 is inadequate to cover the costs of treating patients that require spinal fusion. Therefore, we conducted an analysis of the cases assigned to DRGs 214 and 215 using the FY 1996 MedPAR file.

Within our sample, cases involving fusion procedures (procedure codes 81.00–81.09) constituted approximately 35 percent of cases in DRG 214 (Back and Neck Procedures with CC) and 23 percent of those in DRG 215 (Back and Neck Procedures without CC). In DRG 214, the average standardized charges for the fusion cases were nearly double the charges of the nonfusion cases (approximately $25,300 versus $12,900). There were also significant differences in charges in DRG 215; $14,400 for fusion cases and $8,500 for nonfusion cases. Lengths of stay for fusion cases were also longer, although not dramatically so; 7.1 days for fusion cases versus 5.4 days for other cases in DRG 214, and 3.8 days versus 3.1 days in DRG 215. In view of the volume of cases involved and the clear differences in resource use, we concluded that it would be appropriate to create additional DRGs to separate spinal fusion cases from the other back and neck procedures.

Next, we expanded our analysis to determine whether it would be appropriate to subdivide the spinal fusion cases according to whether both anterior and posterior spinal fusion were performed. This combination of procedures, which involves fusing both the front and rear of the vertebrae, typically is performed on patients who have had previous fusions that have not bonded effectively or who have several vertebrae that need extensive fusion on both sides of the spine. As the table below illustrates, the average charges and lengths of stay for the cases involving both anterior and posterior spinal fusion were markedly greater than for the other spinal fusion cases in either DRG 214 or 215.

Type of case	Avg. charges	Avg. length of stay (in days)
Anterior and Posterior Spinal Fusion	$51,200	12.3
DRG 214—Other Spinal Fusion	24,300	6.9
DRG 215—Other Spinal Fusion	14,300	3.8

Even though the cases in which both anterior and posterior spinal fusions were performed represented only about 3 percent of all spinal fusion cases in our sample, we concluded that the magnitude of the differences in both average charges and lengths of stay warranted a further subdivision of the spinal fusion cases.

Based on this analysis, we are proposing to replace the two existing DRGs for back and neck procedures with five new DRGs. For ease of reference and classification, current DRGs 214 and 215 would be made invalid and we would establish new DRGs 496 through 500 to contain all the cases that are currently grouped in DRGs 214 and 215. We believe that the division of these cases into the new DRGs would improve clinical coherence and provide for more appropriate payment for both spinal fusion cases and cases involving other back and neck procedures. Discharges would be assigned to each of the five proposed DRGs as follows:

DRG 496 Combined Anterior/Posterior Spinal Fusion

DRG 496 would include any combination of procedure codes as follows:

One or more of the following procedure codes—

81.02 Other cervical fusion anterior
81.04 Dorsal/dorsulum fusion anterior
81.06 Lumbar/lumbosac fusion anterior

AND

One or more of the following procedure codes—

81.03 Other cervical fusion posterior
81.05 Dorsal/dorsulum fusion posterior
81.08 Lumbar/lumbosac fusion posterior

DRGs 497 and 498 Spinal Fusion With and Without CC

DRGs 497 and 498 would include any of the following procedure codes, as long as any combination of procedure codes would not otherwise result in assignment to proposed DRG 496—

81.00 Spinal fusion NOS
81.01 Atlas-axis fusion
81.02 Other cervical fusion anterior
81.03 Other cervical fusion posterior
81.04 Dorsal/dorsulum fusion anterior
81.05 Dorsal/dorsulum fusion posterior
81.06 Lumbar/lumbosac fusion anterior
81.07 Lumbar/lumbosac fusion lateral
81.08 Lumbar/lumbosac fusion posterior
81.09 Refusion of spine

DRGs 499 and 500 Back and Neck Procedures Except Spinal Fusion With and Without CC

All procedure codes in current DRGs 214 and 215 other than procedure codes 81.00 through 81.09 would be assigned to DRGs 499 and 500.

c. Knee Procedures. On several occasions, most recently in our September 1, 1993 final rule (58 FR 46286), we have examined cases in DRG 209 (Major Joint and Limb Reattachment of the Lower Extremity) to see whether hip replacement cases that involve infections or other complications should be classified separately from the less complicated cases in DRG 209. We have found that the average charges and lengths of stay for cases with principal diagnoses of infection or complications were only slightly higher than for all cases in DRG 209. When we limited our analysis to cases with a principal diagnosis of infection, we found that the cases had significantly higher charges than for DRG 209 overall, but in view of the small volume of cases (less than 0.5 percent of the total DRG 209 cases), we decided that changes in the classification of cases in DRG 209 were not warranted.

In recent months, we have received several letters asking that we revisit the issue of whether DRG refinements are needed to address differences in resource use associated with orthopedic procedures where deep infections are present. Our correspondents stated that these cases are extremely resource intensive, and, because these complex cases are often referred to specialty hospitals, such hospitals routinely receive DRG payments for these cases that are much lower than the costs incurred by the hospital. They believe that we should investigate the possibility of creating a separate DRG for orthopedic surgical cases that have serious infections, specifically, a new DRG for cases involving orthopedic procedures of the lower extremities or spine with a principal diagnosis of deep orthopedic infection of the lower extremity or spine.

To evaluate this issue, we analyzed various classifications of cases in MDC 8. We began by identifying all cases with a principal diagnosis indicating deep orthopedic infection of the lower extremities or spine. The diagnosis codes used were as follows:

711.05 Pyogenic arthritis pelvic region and thigh
711.06 Pyogenic arthritis lower leg
711.07 Pyogenic arthritis ankle and foot
711.08 Pyogenic arthritis other specified sites
730.05 Acute osteomyelitis pelvic region and thigh
730.06 Acute osteomyelitis lower leg
730.07 Acute osteomyelitis ankle and foot
730.08 Acute osteomyelitis other specified sites
730.15 Chronic osteomyelitis pelvic region and thigh
730.16 Chronic osteomyelitis lower leg
730.17 Chronic osteomyelitis ankle and foot
730.18 Chronic osteomyelitis other specified sites
730.25 Unspecified osteomyelitis pelvic region and thigh
730.26 Unspecified osteomyelitis lower leg
730.27 Unspecified osteomyelitis ankle and foot
730.28 Unspecified osteomyelitis other specified sites
996.66 Infection and inflammatory reaction due to internal joint prosthesis
996.67 Infection and inflammatory reaction due to other internal orthopedic device

For each of the DRGs into which these cases grouped, we then compared the average standardized charges and average length of stay for cases with any of the infection diagnoses listed above with other cases in the DRGs. Unlike in the past, we did not limit our analysis to DRG 209 but examined all DRGs within MDC 8 that focus on surgical procedures of the lower extremities or spine, including DRGs 209; 210, 211, and 212 (Hip and Femur Procedures Except Major Joint); 214 and 215 (Back and Neck Procedures); and 221 and 222 (Knee Procedures).

For the most part, we again found that these cases represented only a very small proportion of the total cases in the DRGs in question. In DRG 209, for example, cases with one of the above diagnosis codes as the principal diagnosis continued to constitute less than 1 percent of all cases in the DRG. Moreover, although the average standardized charges for the deep infection cases ($24,834) were approximately 21 percent higher than the charges for the remaining cases in the DRG ($19,297), the differences are well within one standard deviation of the average charge. Given the small volume of cases, we again conclude that changes in DRG 209 are not justified.

The only DRGs that we examined in which cases with a principal diagnosis of deep infection represented more than 1 percent of total cases in our sample were DRGs 221 and 222. As illustrated in the chart below, there are significant differences in both average charges and average length of stay between infection cases in these DRGs and other cases in the DRGs.

Type of case	Number of cases*	Average charges (in dollars)	Average length of stay (in days)
DRG 221 (All cases)	451	16,529	7.2
DRG 221 with infection	152	23,174	11.4
DRG 221 w/out infection	299	13,151	5.1
DRG 222 (All cases)	340	9,149	3.9
DRG 222 with infection	37	14,452	7.0
DRG 222 w/out infection	303	8,502	3.5

*Based on the 10-percent random sample of the FY 1996 MedPAR file.

Thus, more than one-third of cases in DRG 221 had a principal diagnosis of deep infection, the average length of stay for these cases was more than twice as long as for the remaining cases, and average charges were approximately 76 percent higher. Similarly, for the 12 percent of total DRG 222 cases with infection as the principal diagnosis, the average length of stay was double that for other cases, with average charges approximately 70 percent higher. Given

the proportional volume of cases involved, and the significant differences in both average charges and length of stay for infection cases in these DRGs, we concluded that DRG refinements are appropriate.

Based on this analysis, we are proposing to replace the two existing DRGs for knee procedures with three new DRGs. Again, for ease of reference and classification, current DRGs 221 and 222 would be made invalid and we would establish new DRGs 501 through 503 to contain all the cases that are currently grouped in DRGs 221 and 222. Discharges would be assigned to each of the 3 proposed DRGs as follows:

DRG 501 Knee Procedures With Principal Diagnosis of Infection With CC

DRG 502 Knee Procedures With Principal Diagnosis of Infection Without CC

DRG 501 and 502 would include any of the operating room procedures now assigned to DRGs 221 and 222, when the principal diagnosis is any of the following:

711.06 Pyogenic arthritis lower leg
730.06 Acute osteomyelitis lower leg
730.16 Chronic osteomyelitis lower leg
730.26 Unspecified osteomyelitis lower leg
996.66 Infection and inflammatory reaction due to internal joint prosthesis
996.67 Infection and inflammatory reaction due to other internal orthopedic device

DRG 503 Knee Procedures Without Principal Diagnosis of Infection

DRG 503 would include any of the operating room procedures now assigned to DRGs 221 and 222 when the principal diagnosis is not listed above under DRGs 501 and 502.

5. MDC 11 (Diseases and Disorders of the Kidney and Urinary Tract)

Among the ICD–9-CM coding changes that took effect October 1, 1995 was the addition of new procedure code 59.72 (injection of implant into urethra or bladder neck). Although this procedure is not routinely performed in an operating room, the code was previously included within codes classified as operating room procedures. Thus, as is our practice, we assigned this procedure code to the surgical DRGs to which the procedure had formerly been assigned as a non-OR procedure that affects DRG assignment. Therefore, procedure code 59.72 was assigned to DRGs 308 and 309 (Minor Bladder Procedures) and DRG 356 (Female Reproductive System Reconstructive Procedures).

In the June 2, 1995 proposed rule (60 FR 29209), we stated that we would reevaluate the DRG classification of this code when data on its use became available for analysis in 2 years, that is, in preparation for the FY 1998 rulemaking process. We indicated that possible changes would include moving the procedure code to a different surgical DRG or classifying the code as a non-OR procedure that did not affect DRG assignment.

In the FY 1996 MedPAR file, there were several cases with procedure code 59.72 assigned to DRGs 308 and 309. The chart below compares average charges and length of stay for cases in these DRGs with and without the injection procedure.

Type of case	Number of cases*	Avg. charge (in dollars)	Avg. length of stay (in days)
DRG 308 with procedure 59.72	5	6,978	4.2
DRG 308 w/out procedure 59.72	910	13,254	6.5
DRG 309 with procedure 59.72	7	5,879	1.4
DRG 309 w/out procedure 59.72	311	7,888	2.7

*Based on the 10-percent random sample of the FY 1996 MedPAR file.

As the table illustrates, cases in which injection of implant into the urethra or bladder neck is the only relevant procedure for DRG assignment purposes constitute a very small minority of the cases in DRGs 308 and 309. However, these cases have lower average charges and length of stay than other cases in the DRGs. Thus, we are proposing to reclassify the procedure code as a non-OR procedure that does not affect DRG assignment.

Under this proposal, cases currently assigned to DRGs 308 and 309 because of the performance of an implant injection would be reassigned to medical DRGs in MDC 11. We believe that most of the cases involved would be assigned to either DRGs 320, 321, and 322 (Kidney and Urinary Tract Infections) or DRGs 331 and 332 (Other Kidney and Urinary Tract Diagnoses). Both of these sets of DRGs have average charges closely in line with the charges for cases in which procedure 59.72 now determines DRG assignment.

We note that this change would also affect DRG 356 in MDC 13 (Diseases and Disorders of the Female Reproductive System). Within the 10 percent sample used for this analysis, only 2 of the 2,689 cases in DRG 356 were assigned based on the presence of procedure code 59.72, and as in DRGS 308 and 309, both the average charges and length of stay were lower than for other cases.

6. Surgical Hierarchies

Some inpatient stays entail multiple surgical procedures, each one of which, occurring by itself, could result in assignment of the case to a different DRG within the MDC to which the principal diagnosis is assigned. It is, therefore, necessary to have a decision rule by which these cases are assigned to a single DRG. The surgical hierarchy, an ordering of surgical classes from most to least resource intensive, performs that function. Its application ensures that cases involving multiple surgical procedures are assigned to the DRG associated with the most resource-intensive surgical class.

Because the relative resource intensity of surgical classes can shift as a function of DRG reclassification and recalibration, we reviewed the surgical hierarchy of each MDC, as we have for previous reclassifications, to determine if the ordering of classes coincided with the intensity of resource utilization, as measured by the same billing data used to compute the DRG relative weights.

A surgical class can be composed of one or more DRGs. For example, in MDC 5, the surgical class ''heart transplant'' consists of a single DRG (DRG 103) and the class ''coronary bypass'' consists of two DRGs (DRGs 106 and 107). Consequently, in many cases, the surgical hierarchy has an impact on more than one DRG. The methodology for determining the most resource-intensive surgical class, therefore, involves weighting each DRG for frequency to determine the average resources for each surgical class. For example, assume surgical class A includes DRGs 1 and 2 and surgical class B includes DRGs 3, 4, and 5, and that the average charge of DRG 1 is higher than that of DRG 3, but the average charges of DRGs 4 and 5 are higher than the average charge of DRG 2. To determine whether surgical class A should be higher or lower than

surgical class B in the surgical hierarchy, we would weight the average charge of each DRG by frequency (that is, by the number of cases in the DRG) to determine average resource consumption for the surgical class. The surgical classes would then be ordered from the class with the highest average resource utilization to that with the lowest, with the exception of ''other OR procedures'' as discussed below.

This methodology may occasionally result in a case involving multiple procedures being assigned to the lower-weighted DRG (in the highest, most resource-intensive surgical class) of the available alternatives. However, given that the logic underlying the surgical hierarchy provides that the GROUPER searches for the procedure in the most resource-intensive surgical class, which may sometimes occur in cases involving multiple procedures, this result is unavoidable.

We note that, notwithstanding the foregoing discussion, there are a few instances when a surgical class with a lower average relative weight is ordered above a surgical class with a higher average relative weight. For example, the ''other OR procedures'' surgical class is uniformly ordered last in the surgical hierarchy of each MDC in which it occurs, regardless of the fact that the relative weight for the DRG or DRGs in that surgical class may be higher than that for other surgical classes in the MDC. The ''other OR procedures'' class is a group of procedures that are least likely to be related to the diagnoses in the MDC but are occasionally performed on patients with these diagnoses. Therefore, these procedures should only be considered if no other procedure more closely related to the diagnoses in the MDC has been performed.

A second example occurs when the difference between the average weights for two surgical classes is very small. We have found that small differences generally do not warrant reordering of the hierarchy since, by virtue of the hierarchy change, the relative weights are likely to shift such that the higher-ordered surgical class has a lower average weight than the class ordered below it.

Based on the preliminary recalibration of the DRGs, we are proposing to modify the surgical hierarchy as set forth below. As we stated in the September 1, 1989 final rule (54 FR 36457), we are unable to test the effects of the proposed revisions to the surgical hierarchy and to reflect these changes in the proposed relative weights due to the unavailability of revised GROUPER software at the time this proposed rule is prepared. Rather, we simulate most major classification changes to approximate the placement of cases under the proposed reclassification and then determine the average charge for each DRG. These average charges then serve as our best estimate of relative resource use for each surgical class. We test the proposed surgical hierarchy changes after the revised GROUPER is received and reflect the final changes in the DRG relative weights in the final rule. Further, as discussed below in section II.C of this preamble, we anticipate that the final recalibrated weights will be somewhat different from those proposed, since they will be based on more complete data. Consequently, further revision of the hierarchy, using the above principles, may be necessary in the final rule.

We propose to revise the surgical hierarchy for the Pre-MDC DRGs, MDC 9 (Diseases and Disorders of the Skin, Subcutaneous Tissue and Breast), MDC 10 (Endocrine, Nutritional and Metabolic Diseases and Disorders), and MDC 12 (Diseases and Disorders of the Male Reproductive System) as follows:

- In the Pre-MDC DRGs, we would reorder Bone Marrow Transplant (DRG 481) above Liver Transplant (DRG 480).
- In MDC 9, we would reorder Perianal and Pilonidal Procedures (DRG 267) above Breast Procedures (DRGs 257–262).
- In MDC 10, we would reorder OR Procedures for Obesity (DRG 288) above Skin Graft and Wound Debridement (DRG 287).
- In MDC 12, we would reorder Circumcision (DRGs 342 and 343) above Transurethral Prostatectomy (DRGs 336 and 337).

7. Refinement of Complications and Comorbidities List

There is a standard list of diagnoses that are considered complications or comorbidities (CCs). We developed this list using physician panels to include those diagnoses that, when present as a secondary condition, would be considered a substantial complication or comorbidity.

In previous years, we have made changes to the standard list of CCs, either by adding new CCs or deleting CCs already on the list. At this time, we do not propose to delete any of the diagnosis codes on the CC list.

In the September 1, 1987 final notice concerning changes to the DRG classification system (52 FR 33143), we modified the GROUPER logic so that certain diagnoses included on the standard list of CCs would not be considered a valid CC in combination with a particular principal diagnosis. Thus, we created the CC Exclusions List. We made these changes to preclude coding of CCs for closely related conditions, to preclude duplicative coding or inconsistent coding from being treated as CCs, and to ensure that cases are appropriately classified between the complicated and uncomplicated DRGs in a pair.

In the May 19, 1987 proposed notice concerning changes to the DRG classification system (52 FR 18877), we explained that the excluded secondary diagnoses were established using the following five principles:

- Chronic and acute manifestations of the same condition should not be considered CCs for one another (as subsequently corrected in the September 1, 1987 final notice (52 FR 33154)).
- Specific and nonspecific (that is, not otherwise specified (NOS)) diagnosis codes for a condition should not be considered CCs for one another.
- Conditions that may not co-exist, such as partial/total, unilateral/bilateral, obstructed/unobstructed, and benign/malignant, should not be considered CCs for one another.
- The same condition in anatomically proximal sites should not be considered CCs for one another.
- Closely related conditions should not be considered CCs for one another.

The creation of the CC Exclusions List was a major project involving hundreds of codes. The FY 1988 revisions were intended to be only a first step toward refinement of the CC list in that the criteria used for eliminating certain diagnoses from consideration as CCs were intended to identify only the most obvious diagnoses that should not be considered complications or comorbidities of another diagnosis. For that reason, and in light of comments and questions on the CC list, we have continued to review the remaining CCs to identify additional exclusions and to remove diagnoses from the master list that have been shown not to meet the definition of a CC. (See the September 30, 1988 final rule for the revision made for the discharges occurring in FY 1989 (53 FR 38485); the September 1, 1989 final rule for the FY 1990 revision (54 FR 36552); the September 4, 1990 final rule for the FY 1991 revision (55 FR 36126); the August 30, 1991 final rule for the FY 1992 revision (56 FR 43209); the September 1, 1992 final rule for the FY 1993 revision (57 FR 39753); the September 1, 1993 final rule for the FY 1994 revisions (58 FR 46278); the September 1, 1994 final rule for the FY 1995 revisions (59 FR 45334); the September 1, 1995 final rule for the FY 1996 revisions (60 FR 45782); and the August 30, 1996 final rule for the FY 1997 revisions (61 FR 46171).

We are proposing a limited revision of the CC Exclusions List to take into account the changes that will be made

in the ICD–9–CM diagnosis coding system effective October 1, 1997, as well as the proposed CC changes described above. (See section II.B.9, below, for a discussion of ICD–9–CM changes.) These proposed changes are being made in accordance with the principles established when we created the CC Exclusions List in 1987.

The changes discussed above have been added to Table 6E, Additions to the CC Exclusions List, in section V. of the Addendum to this proposed rule.

Tables 6E and 6F in section V. of the Addendum to this proposed rule contain the proposed revisions to the CC Exclusions List that would be effective for discharges occurring on or after October 1, 1997. Each table shows the principal diagnoses with proposed changes to the excluded CCs. Each of these principal diagnoses is shown with an asterisk and the additions or deletions to the CC Exclusions List are provided in an indented column immediately following the affected principal diagnosis.

CCs that are added to the list are in Table 6E—Additions to the CC Exclusions List. Beginning with discharges on or after October 1, 1997, the indented diagnoses will not be recognized by the GROUPER as valid CCs for the asterisked principal diagnosis.

CCs that are deleted from the list are in Table 6F—Deletions from the CC Exclusions List. Beginning with discharges on or after October 1, 1997 the indented diagnoses will be recognized by the GROUPER as valid CCs for the asterisked principal diagnosis.

Copies of the original CC Exclusions List applicable to FY 1988 can be obtained from the National Technical Information Service (NTIS) of the Department of Commerce. It is available in hard copy for $92.00 plus $6.00 shipping and handling and on microfiche for $20.50, plus $4.00 for shipping and handling. A request for the FY 1988 CC Exclusions List (which should include the identification accession number, (PB) 88–133970) should be made to the following address: National Technical Information Service; United States Department of Commerce; 5285 Port Royal Road; Springfield, Virginia 22161; or by calling (703) 487–4650.

Users should be aware of the fact that all revisions to the CC Exclusions List (FYs 1989, 1990, 1991, 1992, 1993, 1994, 1995, 1996, and 1997) and those in Tables 6E and 6F of this document must be incorporated into the list purchased from NTIS in order to obtain the CC Exclusions List applicable for discharges occurring on or after October 1, 1997.

Alternatively, the complete documentation of the GROUPER logic, including the current CC Exclusions List, is available from 3M/Health Information Systems (HIS), which, under contract with HCFA, is responsible for updating and maintaining the GROUPER program. The current DRG Definitions Manual, Version 14.0, is available for $195.00, which includes $15.00 for shipping and handling. Version 15.0 of this manual, which will include the final FY 1998 DRG changes, will be available in October 1997 for $195.00. These manuals may be obtained by writing 3M/HIS at the following address: 100 Barnes Road; Wallingford, Connecticut 06492; or by calling (203) 949–0303. Please specify the revision or revisions requested.

8. Review of Procedure Codes in DRGs 468, 476, and 477

Each year, we review cases assigned to DRG 468 (Extensive OR Procedure Unrelated to Principal Diagnosis), DRG 476 (Prostatic OR Procedure Unrelated to Principal Diagnosis), and DRG 477 (Nonextensive OR Procedure Unrelated to Principal Diagnosis) in order to determine whether it would be appropriate to change the procedures assigned among these DRGs.

DRGs 468, 476, and 477 are reserved for those cases in which none of the OR procedures performed is related to the principal diagnosis. These DRGs are intended to capture atypical cases, that is, those cases not occurring with sufficient frequency to represent a distinct, recognizable clinical group. DRG 476 is assigned to those discharges in which one or more of the following prostatic procedures are performed and are unrelated to the principal diagnosis:

60.0 Incision of prostate
60.12 Open biopsy of prostate
60.15 Biopsy of periprostatic tissue
60.18 Other diagnostic procedures on prostate and periprostatic tissue
60.21 Transurethral prostatectomy
60.29 Other transurethral prostatectomy
60.61 Local excision of lesion of prostate
60.69 Prostatectomy NEC
60.81 Incision of periprostatic tissue
60.82 Excision of periprostatic tissue
60.93 Repair of prostate
60.94 Control of (postoperative) hemorrhage of prostate
60.95 Transurethral balloon dilation of the prostatic urethra
60.99 Other operations on prostate

All remaining OR procedures are assigned to DRGs 468 and 477, with DRG 477 assigned to those discharges in which the only procedures performed are nonextensive procedures that are unrelated to the principal diagnosis. The original list of the ICD–9–CM procedure codes for the procedures we consider nonextensive procedures if performed with an unrelated principal diagnosis was published in Table 6C in section IV of the Addendum to the September 30, 1988 final rule (53 FR 38591). As part of the final rules published on September 4, 1990, August 30, 1991, September 1, 1992, September 1, 1993, September 1, 1994, September 1, 1995, and August 30, 1996, we moved several other procedures from DRG 468 to 477. (See 55 FR 36135, 56 FR 43212, 57 FR 23625, 58 FR 46279, 59 FR 45336, 60 FR 45783, and 61 FR 46173, respectively.)

a. Adding Procedure Codes to MDCs. We annually conduct a review of procedures producing DRG 468 or 477 assignments on the basis of volume of cases in these DRGs with each procedure. Our medical consultants then identify those procedures occurring in conjunction with certain principal diagnoses with sufficient frequency to justify adding them to one of the surgical DRGs for the MDC in which the diagnosis falls. Based on this year's review, we are proposing to move procedure code 54.92 (Removal of foreign body from peritoneal cavity) to MDC 11 and assign it to DRG 315 (Other Kidney and Urinary Tract OR Procedures). We note that, under the current DRGs, when procedure code 54.92 is coded in addition to a principal diagnosis code of 868.14 (injury with open wound into retroperitoneum), the case is assigned to DRG 468.

b. Reassignment of Procedures Among DRGs 468, 476, and 477. We also reviewed the list of procedures that produce assignments to DRGs 468, 476, and 477 to ascertain if any of those procedures should be moved from one of these DRGs to another based on average charges and length of stay. Generally, we move only those procedures for which we have an adequate number of discharges to analyze the data. Based on our review this year, we are proposing to move one procedure from DRG 468 to DRG 477.

In reviewing the list of OR procedures that produce DRG 468 assignments, we analyzed the average charge and length of stay data for cases assigned to that DRG to identify those procedures that are more similar to the discharges that currently group to either DRG 476 or 477. We identified two procedures—other surgical occlusion of abdominal arteries (procedure code 38.86) and other arthrotomy of knee (procedure code 80.16)—that are significantly less resource intensive than the other procedures assigned to DRG 468.

Therefore, we are proposing to move procedure codes 38.86 and 80.16 to the list of procedures that result in assignment to DRG 477.

In reviewing the list of procedures assigned to DRG 477, we did not identify any procedures that should be assigned to either DRG 468 or 476.

All of these proposed changes would be effective with discharges occurring on or after October 1, 1997.

9. Changes to the ICD–9–CM Coding System

As discussed above in section II.B.1 of this preamble, the ICD–9–CM is a coding system that is used for the reporting of diagnoses and procedures performed on a patient. In September 1985, the ICD–9–CM Coordination and Maintenance Committee was formed. This is a Federal interdepartmental committee charged with the mission of maintaining and updating the ICD–9–CM. That mission includes approving coding changes, and developing errata, addenda, and other modifications to the ICD–9–CM to reflect newly developed procedures and technologies and newly identified diseases. The Committee is also responsible for promoting the use of Federal and non-Federal educational programs and other communication techniques with a view toward standardizing coding applications and upgrading the quality of the classification system.

The Committee is co-chaired by the National Center for Health Statistics (NCHS) and HCFA. The NCHS has lead responsibility for the ICD–9–CM diagnosis codes included in *Volume 1—Diseases: Tabular List* and *Volume 2—Diseases: Alphabetic Index,* while HCFA has lead responsibility for the ICD–9–CM procedure codes included in *Volume 3—Procedures: Tabular List and Alphabetic Index*.

The Committee encourages participation in the above process by health-related organizations. In this regard, the Committee holds public meetings for discussion of educational issues and proposed coding changes. These meetings provide an opportunity for representatives of recognized organizations in the coding fields, such as the American Health Information Management Association (AHIMA) (formerly American Medical Record Association (AMRA)), the American Hospital Association (AHA), and various physician specialty groups as well as physicians, medical record administrators, health information management professionals, and other members of the public to contribute ideas on coding matters. After considering the opinions expressed at the public meetings and in writing, the Committee formulates recommendations, which then must be approved by the agencies.

The Committee presented proposals for coding changes at public meetings held on June 6 and December 5 and 6, 1996, and finalized the coding changes after consideration of comments received at the meetings and in writing within 60 days following the December 1996 meeting. The initial meeting for consideration of coding issues for implementation in FY 1999 will be held on June 6, 1997. Copies of the minutes of the June 1996 meeting may be obtained by writing to one of the co-chairpersons representing NCHS and HCFA. The minutes of the December 1996 meeting can be obtained from the HCFA Home Page @ http://www.hcfa.gov.pubaffr.htm. Paper copies of these minutes will no longer be available and the mailing list will be discontinued. We encourage commenters to address suggestions on coding issues involving diagnosis codes to: Donna Pickett, Co-Chairperson; ICD–9–CM Coordination and Maintenance Committee; NCHS; Room 1100; 6525 Belcrest Road; Hyattsville, Maryland 20782. Comments may be sent by E-mail to: dfp4@nch11a.em.cdc.gov.

Questions and comments concerning the procedure codes should be addressed to: Patricia E. Brooks, Co-Chairperson; ICD–9–CM Coordination and Maintenance Committee; HCFA, Office of Hospital Policy; Division of Prospective Payment System; C5–06–27; 7500 Security Boulevard; Baltimore, Maryland 21244–1850. Comments may be sent by E-mail to: pbrooks@hcfa.gov.

The ICD–9–CM code changes that have been approved will become effective October 1, 1997. The new ICD–9–CM codes are listed, along with their proposed DRG classifications, in Tables 6A and 6B (New Diagnosis Codes and New Procedure Codes, respectively) in section V. of the Addendum to this proposed rule. As we stated above, the code numbers and their titles were presented for public comment in the ICD–9–CM Coordination and Maintenance Committee meetings. Both oral and written comments were considered before the codes were approved. Therefore, we are soliciting comments only on the proposed DRG classification.

Further, the Committee has approved the expansion of certain ICD–9–CM codes to require an additional digit for valid code assignment. Diagnosis codes that have been replaced by expanded codes, other codes, or have been deleted are in Table 6C (Invalid Diagnosis Codes). These invalid diagnosis codes will not be recognized by the GROUPER beginning with discharges occurring on or after October 1, 1997. The corresponding new or expanded diagnosis codes are included in Table 6A. Revisions to diagnosis code titles are in Table 6D (Revised Diagnosis Code Titles), which also include the proposed DRG assignments for these revised codes. For FY 1998, there are no procedure codes that have been replaced or deleted nor are there any revisions to procedure code titles.

10. Other Issues—MDC 22 (Burns)

Under the current DRG system, burn cases generally are assigned to one of six DRGs in MDC 22 (Burns). These DRGs—DRGs 456 through 460 and 472—have been in place without change since 1986. Recently, we have received several letters from representatives of facilities that specialize in treating burn cases asserting that the existing DRGs do not adequately capture the variation in resource use associated with different types of burn cases. Among these correspondents' concerns are the following:

- In general, burn centers are disadvantaged because these facilities tend to treat the most complicated and costly burn cases, which are not always adequately defined and compensated under the existing burn DRGs. At the same time, less complicated cases (with lower costs and shorter lengths of stay) in the same DRGs can be treated by hospitals that do not specialize in the treatment of burn cases. As a result, some burn centers are experiencing a net loss of income on cases in each of the burn DRGs. In some cases, this has led to coding decisions that result in burn patients being assigned to non-burn DRGs because these DRGs result in higher payments to hospitals.
- DRG 456 (Burns, Transferred to Another Acute Care Facility) either should be revised to include only cases transferred to hospitals with a burn center or should be eliminated. This DRG originally was designed to encourage transfers of burn patients to hospitals with burn centers. Although it provides appropriate payment in these situations, problems arise when burn centers treat patients with extensive burns and then transfer them to hospitals closer to the patients' homes for the final stages of acute care. Burn centers might be severely penalized financially for such transfers, even though the transfers may be both cost-effective and in the best interests of the patient.
- DRG 472 (Extensive Burns with OR Procedure) does not capture fully the universe of critically ill, high cost

patients with extensive burn injuries. Currently, a patient must have a burn of at least 50 percent of the total body surface area (or a third degree burn covering at least 10 percent of the body) to be assigned to DRG 472, which is by far the highest-weighted burn DRG. However, some patients not assigned to this DRG experience equally high rates of mortality and morbidity, with concomitant high resource use and long lengths of stay. To address this problem, a new critical care burn DRG should be created that would define patients by age, burn size, and presence of co-morbidities, such as the presence of smoke inhalation, liver or renal failure, and others.

To begin to examine these assertions, we have conducted a preliminary analysis of cases assigned to the burn DRGs. Although the overall volume of cases assigned to the burn DRGs is relatively small (a combined total of about 5,000 Medicare cases in FY 1996), there is clearly a large degree of heterogeneity in both charges and lengths of stay for burn cases. For example, although approximately 75 percent of cases in DRG 456 show lengths of stay below the mean of 7.3 days, a small but significant group of cases have lengths of stay of 21 days or more, resulting in DRG 456 having the largest length of stay coefficient of variation of all DRGs (The coefficient of variation is a statistical measure used to evaluate relative dispersions among all values in a set of data.) Other DRGs in MDC 22 also have above-average coefficients of variation. Although indications of statistical heterogeneity are not uncommon in small volume DRGs, we believe that a more in-depth analysis of the burn DRGs is appropriate.

Therefore, as part of our FY 1999 rulemaking agenda, we intend to conduct a comprehensive review of MDC 22 to determine whether changes in these DRGs can increase their ability to explain the variation in resource use among burn cases. We welcome public comments on this issue, particularly specific suggestions on the most appropriate ways to categorize related diagnosis and procedure codes to produce DRG groupings that would reflect more homogeneous resource use. We note that any suggestions involving other types of payment adjustments for hospitals designated as burn centers would require legislative action. We intend to discuss our findings and, if appropriate, propose modifications to MDC 22, in the FY 1999 proposed rule.

C. Recalibration of DRG Weights

We are proposing to use the same basic methodology for the FY 1998 recalibration as we did for FY 1997. (See the August 30, 1996 final rule (61 FR 46176).) That is, we would recalibrate the weights based on charge data for Medicare discharges. However, we would use the most current charge information available, the FY 1996 MedPAR file, rather than the FY 1995 MedPAR file. The MedPAR file is based on fully-coded diagnostic and surgical procedure data for all Medicare inpatient hospital bills.

The proposed recalibrated DRG relative weights are constructed from FY 1996 MedPAR data, based on bills received by HCFA through December 1996, from all hospitals subject to the prospective payment system and short-term acute care hospitals in waiver States. The FY 1996 MedPAR file includes data for approximately 11.1 million Medicare discharges.

The methodology used to calculate the proposed DRG relative weights from the FY 1996 MedPAR file is as follows:

- To the extent possible, all the claims were regrouped using the proposed DRG classification revisions discussed above in section II.B of this preamble. As noted in section II.B.6, due to the unavailability of revised GROUPER software, we simulate most major classification changes to approximate the placement of cases under the proposed reclassification. However, there are some changes that cannot be modeled.
- Charges were standardized to remove the effects of differences in area wage levels, indirect medical education costs, disproportionate share payments, and, for hospitals in Alaska and Hawaii, the applicable cost-of-living adjustment.
- The average standardized charge per DRG was calculated by summing the standardized charges for all cases in the DRG and dividing that amount by the number of cases classified in the DRG.
- We then eliminated statistical outliers, using the same criteria as was used in computing the current weights. That is, all cases that are outside of 3.0 standard deviations from the mean of the log distribution of both the charges per case and the charges per day for each DRG.
- The average charge for each DRG was then recomputed (excluding the statistical outliers) and divided by the national average standardized charge per case to determine the relative weight. A transfer case is counted as a fraction of a case based on the ratio of its length of stay to the geometric mean length of stay of the cases assigned to the DRG. That is, a 5-day length of stay transfer case assigned to a DRG with a geometric mean length of stay of 10 days is counted as 0.5 of a total case.
- We established the relative weight for heart and heart-lung, liver, and lung transplants (DRGs 103, 480, and 495) in a manner consistent with the methodology for all other DRGs except that the transplant cases that were used to establish the weights were limited to those Medicare-approved heart, heart-lung, liver, and lung transplant centers that have cases in the FY 1995 MedPAR file. (Medicare coverage for heart, heart-lung, liver, and lung transplants is limited to those facilities that have received approval from HCFA as transplant centers.)
- Acquisition costs for kidney, heart, heart-lung, liver, and lung transplants continue to be paid on a reasonable cost basis. Unlike other excluded costs, the acquisition costs are concentrated in specific DRGs (DRG 302 (Kidney Transplant); DRG 103 (Heart Transplant for heart and heart-lung transplants); DRG 480 (Liver Transplant); and DRG 495 (Lung Transplant)). Because these costs are paid separately from the prospective payment rate, it is necessary to make an adjustment to prevent the relative weights for these DRGs from including the effect of the acquisition costs. Therefore, we subtracted the acquisition charges from the total charges on each transplant bill that showed acquisition charges before computing the average charge for the DRG and before eliminating statistical outliers.

When we recalibrated the DRG weights for previous years, we set a threshold of 10 cases as the minimum number of cases required to compute a reasonable weight. We propose to use that same case threshold in recalibrating the DRG weights for FY 1998. Using the FY 1996 MedPAR data set, there are 36 DRGs that contain fewer than 10 cases. We computed the weights for the 36 low-volume DRGs by adjusting the FY 1997 weights of these DRGs by the percentage change in the average weight of the cases in the other DRGs.

The weights developed according to the methodology described above, using the proposed DRG classification changes, result in an average case weight that is different from the average case weight before recalibration. Therefore, the new weights are normalized by an adjustment factor, so that the average case weight after recalibration is equal to the average case weight before recalibration. This adjustment is intended to ensure that recalibration by itself neither increases

nor decreases total payments under the prospective payment system.

Section 1886(d)(4)(C)(iii) of the Act requires that beginning with FY 1991, reclassification and recalibration changes be made in a manner that assures that the aggregate payments are neither greater than nor less than the aggregate payments that would have been made without the changes. Although normalization is intended to achieve this effect, equating the average case weight after recalibration to the average case weight before recalibration does not necessarily achieve budget neutrality with respect to aggregate payments to hospitals because payment to hospitals is affected by factors other than average case weight. Therefore, as we have done in past years and as discussed in section II.A.4.b of the Addendum to this proposed rule, we are proposing to make a budget neutrality adjustment to assure that the requirement of section 1886(d)(4)(C)(iii) of the Act is met.

III. Proposed Changes to the Hospital Wage Index

A. Background

Section 1886(d)(3)(E) of the Act requires that, as part of the methodology for determining prospective payments to hospitals, the Secretary must adjust the standardized amounts ''for area differences in hospital wage levels by a factor (established by the Secretary) reflecting the relative hospital wage level in the geographic area of the hospital compared to the national average hospital wage level.'' In accordance with the broad discretion conferred under the Act, we currently define hospital labor market areas based on the definitions of Metropolitan Statistical Areas (MSAs), Primary MSAs (PMSAs), and New England County Metropolitan Areas (NECMAs) issued by the Office of Management and Budget (OMB). OMB also designates Consolidated MSAs (CMSAs). A CMSA is a metropolitan area with a population of one million or more, comprised of two or more PMSAs (identified by their separate economic and social character). For purposes of the hospital wage index, we use the PMSAs rather than CMSAs since they allow a more precise breakdown of labor costs. If a metropolitan area is not designated as part of a PMSA, we use the applicable MSA. Rural areas are areas outside a designated MSA, PMSA, or NECMA.

We note that effective April 1, 1990, the term Metropolitan Area (MA) replaced the term Metropolitan Statistical Area (MSA) (which had been used since June 30, 1983) to describe the set of metropolitan areas comprised of MSAs, PMSAs, and CMSAs. The terminology was changed by OMB in the March 30, 1990 **Federal Register** to distinguish between the individual metropolitan areas known as MSAs and the set of all metropolitan areas (MSAs, PMSAs, and CMSAs) (55 FR 12154). For purposes of the prospective payment system, we will continue to refer to these areas as MSAs.

Section 1886(d)(3)(E) of the Act also requires that the wage index be updated annually beginning October 1, 1993. Furthermore, this section provides that the Secretary base the update on a survey of wages and wage-related costs of short-term, acute care hospitals. The survey should measure, to the extent feasible, the earnings and paid hours of employment by occupational category, and must exclude the wages and wage-related costs incurred in furnishing skilled nursing services. We also adjust the wage index, as discussed below in section III.B.3, to take into account the geographic reclassification of hospitals in accordance with sections 1886(d)(8)(B) and 1886(d)(10) of the Act.

B. FY 1998 Wage Index Update

The proposed FY 1998 wage index in section V. of the Addendum (effective for hospital discharges occurring on or after October 1, 1997 and before October 1, 1998) is based on the data collected from the Medicare cost reports submitted by hospitals for cost reporting periods beginning in FY 1994 (the FY 1997 wage index was based on FY 1993 wage data). We propose to use the same categories of data that were used in the FY 1997 wage index. Therefore, the proposed FY 1998 wage index reflects the following:

- Total salaries and hours from short-term, acute care hospitals.
- Home office costs and hours.
- Fringe benefits associated with hospital and home office salaries.
- Direct patient care contract labor costs and hours.
- The exclusion of salaries and hours for nonhospital type services such as skilled nursing facility services, home health services, or other subprovider components that are not subject to the prospective payment system.

We are proposing to calculate a separate Puerto Rico-specific wage index to be applied to the Puerto Rico standardized amount. This wage index will be calculated in the same manner as the national wage index described below, but will be based solely on Puerto Rico's data. For further explanation, see sections II.B.5 and III.A.6 of the Addendum to this proposed rule.

Also, in response to a comment in the August 30, 1996 final rule, we considered using data from Worksheet A–8–2 for the purpose of excluding physician Part A salaries from the FY 1998 wage index calculation (61 FR 46177). We stated that we would explore the technical feasibility of using the data from that worksheet. However, primarily because the intermediaries had already begun reviewing the FY 1994 cost report data and finalizing the Worksheet S–3 data, we did not believe it would be appropriate to revise their instructions and require them to make a change to their procedure. Therefore, we will wait for the data from cost reporting periods beginning on or after October 1, 1994, for which we revised the Medicare cost report to provide for the separate reporting of physician salaries. As we have stated previously, we will review and evaluate these salary cost data when considering appropriate changes to the FY 1999 wage index.

1. Verification of Wage Data From the Medicare Cost Report

The data for the proposed FY 1998 wage index were obtained from Worksheet S–3, Part II of the Medicare cost report. The data file used to construct the proposed wage index includes FY 1994 data submitted to the Health Care Provider Cost Report Information System (HCRIS) as of the end of January 1997. As in past years, we performed an intensive review of the wage data, mostly through the use of edits designed to identify aberrant data.

Of the 5,197 hospitals in the database, 2,652 hospitals had data elements that failed an initial edit. From mid-February 1997 through early March 1997, intermediaries contacted hospitals to revise or verify data elements that resulted in the edit failures. In addition, intermediaries reviewed the database to ensure that no hospitals had been inadvertently excluded from the database. As a result of that review, data for two hospitals were added to the database.

Next, to check any revisions since the first edit, as well as to apply additional edits based on the distribution of the data, we subjected all of the data to edits a second time. As of March 14, 1997, 70 hospitals still had unresolved data elements. These unresolved data elements are included in the calculation of the proposed FY 1998 wage index pending their resolution before calculation of the final FY 1998 wage index. We have instructed the intermediaries to complete their verification of questionable data elements and to transmit any changes to the wage data (through HCRIS) no later

than June 16, 1997. We expect that all unresolved data elements will be resolved by that date, and that the revised data will be reflected in the final rule.

2. Computation of the Wage Index

The method used to compute the proposed wage index is as follows:

Step 1—As noted above, we are proposing to base the FY 1998 wage index on wage data reported on the FY 1994 Medicare cost reports. We gathered data from each of the non-Federal, short-term, acute care hospitals for which data were reported on the Worksheet S–3, Part II of the Medicare cost report for the hospital's cost reporting period beginning on or after October 1, 1993 and before October 1, 1994. In addition, we included data from a few hospitals that had cost reporting periods beginning in September 1993 and reported a cost reporting period exceeding 52 weeks. These data were included because no other data from these hospitals would be available for the cost reporting period described above, and particular labor market areas might be affected due to the omission of these hospitals. However, we generally describe these wage data as FY 1994 data.

Step 2—For each hospital, we subtracted the excluded salaries (that is, direct salaries attributable to skilled nursing facility services, home health services, and other subprovider components not subject to the prospective payment system) from gross hospital salaries to determine net hospital salaries. To determine total salaries plus fringe benefits, we added direct patient care contract labor costs, hospital fringe benefits, and any home office salaries and fringe benefits reported by the hospital, to the net hospital salaries.

Step 3—For each hospital, we adjusted the total salaries plus fringe benefits resulting from Step 2 to a common period to determine total adjusted salaries. To make the wage inflation adjustment, we used the percentage change in average hourly earnings estimated for each 30-day increment from October 14, 1993 through April 15, 1995, for hospital industry workers from Standard Industry Classification 806, Bureau of Labor Statistics Employment and Earnings Bulletin. The annual inflation rates used were 3.6 percent for FY 1993, 2.7 percent for FY 1994, and 3.3 percent for FY 1995. The inflation factors used to inflate the hospital's data were based on the midpoint of the cost reporting period as indicated below.

MIDPOINT OF COST REPORTING PERIOD

After	Before	Adjustment factor
10/14/93	11/15/93	1.038679
11/14/93	12/15/93	1.036376
12/14/93	01/15/94	1.034077
01/14/94	02/15/94	1.031784
02/14/94	03/15/94	1.029496
03/14/94	04/15/94	1.027213
04/14/94	05/15/94	1.024935
05/14/94	06/15/94	1.022662
06/14/94	07/15/94	1.020394
07/14/94	08/15/94	1.018131
08/14/94	09/15/94	1.015873
09/14/94	10/15/94	1.013620
10/14/94	11/15/94	1.010881
11/14/94	12/15/94	1.008150
12/14/94	01/15/95	1.005426
01/14/95	02/15/95	1.002709
02/14/95	03/15/95	1.000000
03/14/95	04/15/95	0.997298

For example, the midpoint of a cost reporting period beginning January 1, 1994 and ending December 31, 1994 is June 30, 1994. An inflation adjustment factor of 1.020394 would be applied to the wages of a hospital with such a cost reporting period. In addition, for the data for any cost reporting period that began in FY 1994 and covers a period of less than 360 days or greater than 370 days, we annualized the data to reflect a 1-year cost report. Annualization is accomplished by dividing the data by the number of days in the cost report and then multiplying the results by 365.

Step 4—For each hospital, we subtracted the reported excluded hours from the gross hospital hours to determine net hospital hours. We increased the net hours by the addition of any direct patient care contract labor hours and home office hours to determine total hours.

Step 5—As part of our editing process, we deleted data for 17 hospitals for which we lacked sufficient documentation to verify data that failed edits because the hospitals are no longer participating in the Medicare program or are in bankruptcy status. We retained the data for other hospitals that are no longer participating in the Medicare program because these hospitals reflected the relative wage levels in their labor market areas during their FY 1994 cost reporting period.

Step 6—Each hospital was assigned to its appropriate urban or rural labor market area prior to any reclassifications under sections 1886(d)(8)(B) or 1886(d)(10) of the Act. Within each urban or rural labor market area, we added the total adjusted salaries plus fringe benefits obtained in Step 3 for all hospitals in that area to determine the total adjusted salaries plus fringe benefits for the labor market area.

Step 7—We divided the total adjusted salaries plus fringe benefits obtained in Step 6 by the sum of the total hours (from Step 4) for all hospitals in each labor market area to determine an average hourly wage for the area.

Step 8—We added the total adjusted salaries plus fringe benefits obtained in Step 3 for all hospitals in the Nation and then divided the sum by the national sum of total hours from Step 4 to arrive at a national average hourly wage. Using the data as described above, the national average hourly wage is $20.0804.

Step 9—For each urban or rural labor market area, we calculated the hospital wage index value by dividing the area average hourly wage obtained in Step 7 by the national average hourly wage computed in Step 8.

Step 10—Following the process set forth above, we developed a separate Puerto Rico-specific wage index for purposes of adjusting the Puerto Rico standardized amounts. We added the total adjusted salaries plus fringe benefits (as calculated in Step 3) for all hospitals in Puerto Rico and divided the sum by the total hours for Puerto Rico (as calculated in Step 4) to arrive at an overall average hourly wage of $9.1956 for Puerto Rico. For each labor market area in Puerto Rico, we calculated the hospital wage index value by dividing the area average hourly wage (as calculated in Step 7) by the overall Puerto Rico average hourly wage.

3. Revisions to the Wage Index Based on Hospital Redesignation

Under section 1886(d)(8)(B) of the Act, hospitals in certain rural counties adjacent to one or more MSAs are considered to be located in one of the adjacent MSAs if certain standards are met. Under section 1886(d)(10) of the Act, the Medicare Geographic Classification Review Board (MGCRB) considers applications by hospitals for geographic reclassification for purposes of payment under the prospective payment system.

The methodology for determining the wage index values for redesignated hospitals is applied jointly to the hospitals located in those rural counties that were deemed urban under section 1886(d)(8)(B) of the Act and those hospitals that were reclassified as a result of the MGCRB decisions under section 1886(d)(10) of the Act. Section 1886(d)(8)(C) of the Act provides that the application of the wage index to redesignated hospitals is dependent on the hypothetical impact that the wage data from these hospitals would have on the wage index value for the area to

which they have been redesignated. Therefore, as provided in section 1886(d)(8)(C) of the Act, the wage index values were determined by considering the following:

- If including the wage data for the redesignated hospitals would reduce the wage index value for the area to which the hospitals are redesignated by 1 percentage point or less, the area wage index value determined exclusive of the wage data for the redesignated hospitals applies to the redesignated hospitals.
- If including the wage data for the redesignated hospitals reduces the wage index value for the area to which the hospitals are redesignated by more than 1 percentage point, the hospitals that are redesignated are subject to that combined wage index value.
- If including the wage data for the redesignated hospitals increases the wage index value for the area to which the hospitals are redesignated, both the area and the redesignated hospitals receive the combined wage index value.
- The wage index value for a redesignated rural hospital cannot be reduced below the wage index value for the rural areas of the State in which the hospital is located.
- Rural areas whose wage index values would be reduced by excluding the wage data for hospitals that have been redesignated to another area continue to have their wage index values calculated as if no redesignation had occurred.
- Rural areas whose wage index values increase as a result of excluding the wage data for the hospitals that have been redesignated to another area have their wage index values calculated exclusive of the wage data of the redesignated hospitals.
- The wage index value for an urban area is calculated exclusive of the wage data for hospitals that have been reclassified to another area. However, geographic reclassification may not reduce the wage index value for an urban area below the statewide rural wage index value, provided the urban area's wage index value prior to reclassification was greater than the statewide rural wage index value.
- Reclassification of hospitals may not result in the reduction of the wage index value for any urban area whose wage index value is below the statewide rural wage index value. This provision also applies to any urban area that encompasses an entire State.

We note that, except for those rural areas where redesignation would reduce the rural wage index value, and those urban areas whose wage index values are already below the statewide rural wage index value and would be reduced by redesignations, the wage index value for each area is computed exclusive of the wage data for hospitals that have been redesignated from the area for purposes of their wage index. As a result, several urban areas listed in Table 4a have no hospitals remaining in the area. This is because all the hospitals originally in these urban areas have been reclassified to another area by the MGCRB. These areas with no remaining hospitals receive the prereclassified wage index value. The prereclassified wage index value will apply as long as the area remains empty.

The proposed revised wage index values for FY 1998 are shown in Tables 4A, 4B, 4C, and 4F in the Addendum to this proposed rule. Hospitals that are redesignated should use the wage index values shown in Table 4C. Areas in Table 4C may have more than one wage index value because the wage index value for a redesignated rural hospital cannot be reduced below the wage index value for the rural areas of the State in which the hospital is located. When the wage index value of the area to which a rural hospital is redesignated is lower than the wage index value for the rural areas of the State in which the rural hospital is located, the redesignated rural hospital receives the higher wage index value, that is, the wage index value for the rural areas of the State in which it is located, rather than the wage index value otherwise applicable to the redesignated hospitals. Tables 4D and 4E list the average hourly wage for each labor market area, prior to the redesignation of hospitals, based on the FY 1994 wage data. In addition, Table 3C in the Addendum to this proposed rule includes the adjusted (inflated) average hourly wage for each hospital based on the FY 1994 data. The MGCRB will use the average hourly wage published in the final rule to evaluate a hospital's application for reclassification, unless that average hourly wage is later revised in accordance with the wage data correction policy described in § 412.63(s)(2). In such cases, the MGCRB will use the most recent revised data used for purposes of the hospital wage index. Hospitals that choose to apply before publication of the final rule can use the proposed wage data in applying to the MGCRB for wage index reclassifications that would be effective for FY 1999. We note that in adjudicating these wage index reclassification requests during FY 1998, the MGCRB will use the average hourly wages for each hospital and labor market area that are reflected in the final FY 1998 wage index.

At the time this proposed wage index was constructed, the MGCRB had completed its review. The proposed FY 1998 wage index values incorporate all 364 hospitals redesignated for purposes of the wage index (hospitals redesignated under section 1886(d)(8)(B) or 1886(d)(10) of the Act) for FY 1998. The final number of reclassifications may be different because some MGCRB decisions are still under review by the Administrator and because some hospitals may withdraw their requests for reclassification.

Any changes to the wage index that result from withdrawals of requests for reclassification, wage index corrections, appeals, and the Administrator's review process will be incorporated into the wage index values published in the final rule. The changes may affect not only the wage index value for specific geographic areas, but also whether redesignated hospitals receive the wage index value for the area to which they are redesignated, or a wage index value that includes the data for both the hospitals already in the area and the redesignated hospitals. Further, the wage index value for the area from which the hospitals are redesignated may be affected.

Under § 412.273, hospitals that have been reclassified by the MGCRB are permitted to withdraw their applications within 45 days of the publication of this **Federal Register** document. The request for withdrawal of an application for reclassification that would be effective in FY 1998 must be received by the MGCRB by July 17, 1997. A hospital that requests to withdraw its application may not later request that the MGCRB decision be reinstated.

C. Requests for Wage Data Corrections

To allow hospitals more time to evaluate the wage data used to construct the proposed FY 1998 hospital wage index, we have made available to the public a data file containing the FY 1994 hospital wage data. In a memorandum dated February 28, 1997, we instructed all Medicare intermediaries to inform the prospective payment hospitals they serve that the wage data file would be available approximately mid-March 1997. The intermediaries were also instructed to advise hospitals of the alternative availability of these data through the Internet at HCFA's home page (http://www.hcfa.gov), their representative hospital organizations, or directly from HCFA (using order forms provided by the intermediary). Additional details on ordering this data file are discussed in

section IX.A. of this preamble, ''Requests for Data from the Public.''

In addition, as discussed in section III.B.3 of this preamble, Table 3C in the Addendum to this proposed rule contains each hospital's adjusted average hourly wage used to construct the proposed wage index values. A hospital can verify its average hourly wage as reflected on its cost report (after taking into account any adjustments made by the intermediary) by dividing the adjusted average hourly wage in Table 3C by the applicable wage inflation adjustment factors as set forth above in Step 3 of the computation of the wage index. An updated Table 3C (along with applicable wage inflation adjustment factors) will be included in the final rule.

We believe hospitals have had ample time to ensure the accuracy of their FY 1994 wage data. Moreover, the ultimate responsibility for accurately completing the cost report rests with the hospital, which must attest to the accuracy of the data at the time the cost report is filed. However, if after review of the wage data file or Table 3C, a hospital believes that its FY 1994 wage data have been incorrectly reported, the hospital must submit corrections along with complete, detailed supporting documentation to its intermediary by May 15, 1997. To be reflected in the final wage index, any wage data corrections must be reviewed and verified by the intermediary and transmitted to HCFA (through HCRIS) on or before June 16, 1997. These deadlines, which correspond to the deadlines we used last year for developing the FY 1997 wage index, are necessary to allow sufficient time to review and process the data so that the final wage index calculation can be completed for development of the final prospective payment rates to be published by August 29, 1997. We cannot guarantee that corrections transmitted to HCFA after June 16, 1997, will be reflected in the final wage index.

After reviewing requested changes submitted by hospitals, intermediaries will transmit any revised cost reports to HCRIS and forward a copy of the revised Worksheet S–3, Part II to the hospitals. If requested changes are not accepted, fiscal intermediaries will notify hospitals in writing of reasons why the changes were not accepted. This procedure will ensure that hospitals have every opportunity to verify the data that will be used to construct their wage index values. We believe that fiscal intermediaries are generally in the best position to make evaluations regarding the appropriateness of a particular cost and whether it should be included in the wage index data. However, if a hospital disagrees with the intermediary's resolution of a requested change, the hospital may contact HCFA in an effort to resolve the dispute. We note that the June 16 deadline also applies to these requested changes, and we will not consider requests to resolve such disputes that are not received by June 16.

We have created the process described above to resolve all substantive wage data correction disputes before we finalize the wage data for the FY 1998 payment rates. Accordingly, hospitals that do not meet the procedural deadlines set forth above will not be afforded a later opportunity to submit wage corrections or to dispute the intermediary's decision with respect to requested changes.

We intend to make another file available in mid-August that will contain the wage data that will be used to construct the wage index values in the final rule. As with the file made available in March 1997, HCFA will make the August wage data file available to hospital associations and the public. This August file, however, is being made available only for the limited purpose of identifying any potential errors made by HCFA or the intermediary in the entry of the final wage data that result from the process described above, not for the initiation of new wage data correction requests. Hospitals are encouraged to review their hospital wage data promptly after the release of the second file.

If, after reviewing the August file, a hospital believes that its wage data are incorrect due to a fiscal intermediary or HCFA error in the entry or tabulation of the final wage data, it should send a letter to both its fiscal intermediary and HCFA. The letters should outline why the hospital believes an error exists and provide all supporting information, including dates. These requests must be *received* by HCFA and the intermediaries no later than September 15, 1997. Requests mailed to HCFA should be sent to: Health Care Financing Administration; Office of Hospital Policy; Attention: Stephen Phillips, Technical Advisor; Division of Prospective Payment System; C5–06–27; 7500 Security Boulevard; Baltimore, MD 21244–1850. Each request also must be sent to the hospital's fiscal intermediary. The intermediary will review requests upon receipt and contact HCFA immediately to discuss its findings.

After mid-August, we will make changes to the hospital wage data only in those very limited situations involving an error by the intermediary or HCFA that the hospital could not have known about before its review of the August wage data file. Specifically, after that point, neither the intermediary nor HCFA will accept the following types of requests in conjunction with this process:

- Requests for wage data corrections that were submitted too late to be included in the data transmitted to HCRIS on or before June 16, 1997.
- Requests for correction of errors that were not, but could have been, identified during the hospital's review of the March 1997 data.
- Requests to revisit factual determinations or policy interpretations made by the intermediary or HCFA during the wage data correction process.

Verified corrections to the wage index received timely (that is, by September 15, 1997) will be effective October 1, 1997.

Again, we believe the wage data correction process described above provides hospitals with sufficient opportunity to bring errors in their wage data to the intermediary's attention. Moreover, because hospitals will have access to the wage data in mid-August, they will have the opportunity to detect any data entry or tabulation errors made by the intermediary or HCFA before the implementation of the FY 1998 wage index on October 1, 1997. If hospitals avail themselves of this opportunity, the wage index implemented on October 1 should be free of such errors. Nevertheless, in the unlikely event that such errors should occur, we retain the right to make midyear changes to the wage index under very limited circumstances.

Specifically, in accordance with § 412.63(s)(2), we may make midyear corrections to the wage index only in those limited circumstances where a hospital can show: (1) That the intermediary or HCFA made an error in tabulating its data; and (2) that the hospital could not have known about the error, or did not have an opportunity to correct the error, before the beginning of FY 1998 (that is, by the September 15, 1997 deadline). As indicated earlier, since a hospital will have the opportunity to verify its data, and the intermediary will notify the hospital of any changes, we do not foresee any specific circumstances under which midyear corrections would be made. However, should a midyear correction be necessary, the wage index change for the affected area will be effective prospectively from the date the correction is made.

D. Modification of the Process and Timetable for Updating the Wage Index

Although the wage data correction process described above has proven successful in the past for ensuring that the wage data used each year to calculate the wage indexes are generally reliable and accurate, we are concerned that there have been an excessive number of wage data revisions occurring after the release of the wage data in mid-March. Last year, in developing the FY 1997 wage index, the wage data were revised between the proposed and the final rules for more than 13 percent of the hospitals (approximately 700 of 5,200). Since hospitals are expected to submit complete and accurate data, and the data are reviewed and edited by the intermediaries and HCFA, we believe that we should be making few revisions after the release of the March wage data file. According to information received from the intermediaries, these late revisions are partly due to the lack of responsiveness of hospitals in providing sufficient information to the intermediaries during the desk reviews (that is, during the intermediary's review of the hospital's cost report).

Our analysis of last year's wage data also shows that, although the volume of revisions was high, the effect of the changes on the wage index was minimal. Of the 368 labor market areas affected, only 4 (1.1 percent) experienced a change of 5 percent or more in their wage index value and 39 (10.6 percent) experienced a change of 1 percent or more. Thus, the intensity of work that must be performed in order to incorporate these revisions in the 1 month available between the mid-June date for revision requests and the mid-July date by which we must begin calculation of the final wage index is not warranted in light of the minimal changes to the actual wage index values.

Another problem with the current process is that it results in corrections to the final wage index after the September 1 final rule publication and before the October 1 effective date of the wage index. Immediately following the development of the final wage index, a second wage data file is made available in mid-August so that hospitals may again verify the accuracy of their wage data. If a hospital detects an error made by the intermediary or HCFA in the handling (entry or transmission) of the wage data, the hospital may request a correction (this year, by September 15). The corrections are published in the **Federal Register** after the October 1 implementation date in a correction notice to the final rule. We would prefer to eliminate the need to republish certain wage index values after the final rule is in effect.

Finally, hospitals base their geographic reclassification decisions (whether or not to withdraw their applications) on the wage index published in the proposed rule. Although the FY 1997 proposed and final wage indexes were quite similar, we cannot ensure this will happen each year if increasing numbers of hospitals delay the submittal to their intermediaries of wage data supporting documentation until the May 15 deadline. We believe that a more informed reclassification decision could be made if the proposed wage index more closely resembles the final wage index. Therefore, we are proposing to revise the wage data verification process beginning with the FY 1999 wage index.

1. Proposed Process and Timetable

The major change we are proposing to the current process would be the requirement that wage data revisions be requested (and resolved) earlier, before publication of the proposed rule. Subsequent corrections would be allowed only for errors in handling the data (our current timetable allows for such corrections after the final rule is published). For example, the FY 1999 wage index will use FY 1995 cost report data (that is, cost reports beginning in FY 1995) and become effective October 1, 1998. Under the proposed timetable, hospitals would be required to submit all requests for wage data revisions to their intermediary by mid-December 1997. This would provide ample opportunity for hospitals to evaluate the results of intermediaries' desk reviews and prepare any requests for corrections. We note that the desk reviews are performed on an ongoing basis as cost reports are received from hospitals and, for the FY 1995 wage data, must be completed prior to the mid-November 1997 deadline for submitting all FY 1995 wage data to HCRIS.

As under the current process, after reviewing requests for wage data revisions submitted by hospitals, fiscal intermediaries will transmit any revised cost report to HCRIS and forward a copy of the revised Worksheet S–3, Part II to the hospital. If requested revisions are not accepted, the fiscal intermediaries will notify the hospital in writing of reasons why the changes were not accepted. We believe that fiscal intermediaries are generally in the best position to make evaluations regarding the appropriateness of a particular cost and whether it should be included in the wage index data. However, if a hospital disagrees with the intermediary's resolution of a requested change, the hospital may contact HCFA in an effort to resolve the dispute. All policy issues must be resolved by mid-January.

The proposed timetable for developing the annual update to the wage index is as follows (an asterisk indicates no change from prior years):

Mid-November *
- All desk reviews for hospital wage data are completed and revised data transmitted by intermediaries to HCRIS.

Mid-December
- Deadline for hospitals to request wage data revisions and provide adequate documentation to support the request.

Mid-January
- Deadline for intermediaries to submit to HCRIS all revisions resulting from hospitals' requests for adjustments (as of mid-December) (and verification of data submitted to HCRIS (as of mid-November)).

Early April
- Edited wage data are available for release to the public.

May 1 *
- Proposed rule published with 60-day comment period and 45-day withdrawal deadline for geographic reclassification.

June 16, 1997
- Deadline for hospitals to notify HCFA and intermediary that wage data are incorrect due to mishandling of data (that is, error in data entry or transmission) by intermediary or HCFA.

June 30, 1997
- Deadline for intermediaries to transmit all revisions to HCRIS.

September 1 *
- Publication of the final rule.

October 1 *
- Effective date of updated wage index.

2. Cost Reporting Timetable

This proposed change will not significantly alter the time hospitals have to ensure the accuracy of their data. In developing the wage index for a given fiscal year, we use the most recent, reviewed wage data, that is, wage data from cost reports that began in the fiscal year 4 years earlier. For example, for the FY 1999 wage index, we will use data from cost reporting periods beginning in FY 1995. Hospitals must submit cost reports to their intermediaries within 150 days of the end of their cost reporting periods. Once the cost report is received, the intermediary has 12 months to review and settle it.

As part of the settlement process, we require intermediaries to conduct a desk

review of the wage data. The desk review program for hospital wage data targets potentially aberrant data and checks the completeness and accuracy of the data, including verifying that reported costs are in conformance with our policy, before it is used in calculating the wage index. The intermediary checks the wage data and supporting documentation submitted by the hospital and contacts the hospital if additional information is needed to verify the accuracy of the data. When it is necessary for the intermediary to adjust a hospital's wage data, the intermediary notifies the hospital in writing of the change to the cost report and hospitals then have the opportunity to request adjustments. This would continue to be the case.

Since intermediaries must settle cost reports within 12 months of their receipt, most of the cost reports are settled by the time we compile the data to calculate the wage index. We note, however, that the annual update of the wage index is not tied directly to the cost report settlement process since extensions or reopenings of settled cost reports may be granted.

The following is an illustration of the process for settling a typical cost report beginning in FY 1995. Of course, hospitals' cost reporting periods may begin at any time during the year.

January 1, 1995
Cost reporting period begins.
December 31, 1995
Cost reporting period ends.
May 31, 1996
Cost report must be submitted by the hospital to the intermediary.
July 31, 1996
Cost report must be transmitted by the intermediary to HCRIS.
May 31, 1997
Cost report must be settled by the intermediary. (Desk review of hospital wage data is performed on an ongoing basis by the intermediary before the cost report is settled.)
July 31, 1997
Settled cost report must be transmitted by the intermediary to HCRIS.

3. Impact of the Proposed Revised Timetable for Finalizing Wage Data

The most significant change from our current process is that we would no longer release a preliminary wage data file prior to hospitals' final opportunity to request corrections. We would instead release a single data file in early April for the limited purpose of identifying errors made by the intermediaries or HCFA in handling the data. We no longer believe that the benefit of releasing the preliminary data file outweighs the disadvantages in terms of increased workload for the intermediaries. Under the current process, intermediaries are required to verify the inclusion and accuracy of all hospitals' wage data twice during the wage index development. Verification is done in December and in July before the wage data public use files are released in mid-March and mid-August.

Therefore, hospitals would no longer have until mid-May to request wage data revisions. Instead, hospitals would have to request revisions and provide supporting documentation by mid-December of the previous year, and all policy issues would have to be resolved by mid-January. We believe this proposed timetable for finalizing the wage data used in the hospital wage index gives hospitals ample opportunity to ensure the accuracy of the data and at the same time addresses the concerns we have discussed (the number of revisions, the necessity of making numerous corrections after the final rule, and the differences between the proposed and final wage indexes). Moreover, we do not believe the timetable change would impose any increased burden. Hospitals are required to certify the completeness and the accuracy of the wage data when they submit their cost reports, and the intermediaries complete desk reviews before we begin to develop the wage index for a given year. Hospitals would still have an opportunity to request revisions to the cost report data. Although those requests would have to be made earlier, hospitals would continue to have ample time to request appropriate revisions given the timetable for cost report submission and review.

We believe the proposed timetable is a logical step in the evolution of the process for compiling the wage data used to calculate the hospital wage index. For a number of years, the hospital wage index was based on a wage survey that was not updated every year. Applicable policies permitted hospitals to request and receive mid-year corrections to the data on the wage survey. Beginning with FY 1994 (beginning on October 1, 1993), we used wage data submitted by hospitals on Worksheet S–3, Part II of the hospital cost report, and we update the wage data every year. We revised our wage data process accordingly—we stopped making mid-year corrections to the wage data, and instead attempted to finalize the wage data by the final rule.

The proposed timetable would shorten the time for revisions somewhat further, in order to finalize wage data as much as possible before publication of the proposed rule. Because we have used cost report data for 5 years now, hospitals should be well aware of the importance of submitting accurate wage data on the worksheet S–3, Part II. And as intermediaries and hospitals have become increasingly familiar with the data collection and verification process, handling the data has become more routine and streamlined. For instance, over the past year, we have greatly improved the overall efficiency of our communications with the intermediaries through greater reliance on electronic transmission of wage data. In short, then, there should be less need for revising wage data after desk reviews, and we believe it is reasonable and appropriate to revise the timetable for requesting and resolving wage data revisions.

We would continue to make midyear corrections to the wage index in accordance with § 412.63(s)(2), in those limited circumstances where a hospital can show: (1) That the intermediary or HCFA made an error in tabulating its data; and (2) that the hospital could not have known about the error, or did not have an opportunity to correct the error, before the beginning of the fiscal year. Although we do not anticipate that such situations would arise, this regulatory authority would remain unchanged.

E. Proposed Wage Index Workgroup

We are concerned that the rapid and dramatic changes occurring in hospitals' operating environments, combined with the current time lag in the data used to construct the wage index, is leading to a situation where the wage index may be becoming less representative of hospitals' current labor costs. Hospitals' increasing reliance on contract labor for a broadening array of functions, hospital mergers and the development of integrated delivery systems, and the probable expansion of the prospective payment system to other sites of care are factors that indicate a need for a concerted effort to ensure that the data required for calculating the wage index are available and reliable. Furthermore, despite the improvements that resulted from the work of the special Medicare Technical Advisory Group (MTAG) several years ago, technical questions about the treatment of certain types of labor costs continue to arise.

For these reasons, we believe there is a need for an ongoing workgroup to address wage index related issues periodically. We are interested in receiving input from representatives of the hospital industry (and other provider types interested in the collection of wage data) regarding the

need for such a workgroup and their willingness to participate. We are also seeking public input regarding the structure and scope of such a workgroup. In particular, we welcome comments on whether the workgroup should be formally established (for example, a special MTAG), encompass other provider types, or operate on an ongoing basis. We will respond to comments we receive on this issue in the final rule.

IV. Revising the Hospital Operating Market Baskets

A. General Discussion

We use a hospital input price index (that is, the hospital ''market basket'') to develop the inflation component update factors for operating costs. Although ''market basket'' technically describes the mix of goods and services used to produce hospital care, this term is also commonly used to denote the input price index (that is, cost category weights and price proxies combined) derived from that market basket. Accordingly, the term ''market basket'' as used in this document refers to the hospital input price index.

The terms rebasing and revising, although often used interchangeably, actually denote different activities. Rebasing moves the base year for the structure of costs of an input price index (for example, moving the base year cost structure from FY 1987 to FY 1992). Revising means changing data sources, cost categories, or price proxies used in the input price index for a given base year. In the August 30, 1996 final rule, effective for FY 1997, we both rebased and revised the hospital operating market baskets (61 FR 46186).

B. Revising the Hospital Market Basket

We propose this year to use a revised hospital market basket in developing the FY 1998 update factor for the operating prospective payment rates. In the August 30, 1996 final rule, we discussed the possibility of revising the market basket when additional data became available (61 FR 46187). Consistent with that discussion, we propose to use a revised market basket which would still have a base year of FY 1992, but would incorporate additional data, specifically the Asset and Expenditure Survey, 1992 Census of Service Industries, by the Bureau of the Census, Economics and Statistics Administration, U.S. Department of Commerce, which did not become available until after the FY 1997 final rule was published. (For further discussion of the differences between the proposed revised market basket and the current market basket, see Appendix C of this proposed rule.)

In the current market basket, data for four major expense categories (wages and salaries, employee benefits, pharmaceuticals, and a residual category) are from Medicare hospital cost reports for periods beginning in FY 1992 (that is, periods beginning on or after October 1, 1991 and before October 1, 1992). These cost reports, which we refer to as PPS–9 cost reports (the 9th year of PPS), are reported in the Health Care Provider Cost Report Information System (HCRIS). In the proposed hospital market basket, we still use the cost report data, and categories and weights are unchanged from the current market basket. Within the residual category, the categories and weights for nonmedical professional fees and professional liability insurance are also unchanged. (For a detailed discussion of the determination of weights, see the August 30, 1996 final rule (61 FR 46187)).

Table 1 shows a comparison of the current and the proposed revised operating market basket cost categories, weights, and price proxies. For the proposed market basket, weights for the ''Utilities'' and ''All Other'' cost categories, as well as most subcategories, were derived using the Asset and Expenditure Survey, published by the Bureau of the Census, Economics and Statistics Administration, U.S. Department of Commerce, in conjunction with the latest available (1987) Input-Output Table, produced by the Bureau of Economic Analysis (BEA), U.S. Department of Commerce. The 1987 input-output cost shares, aged to 1992 using historical price changes between 1987 and 1992 for each category, were allocated to be consistent with the newly available 1992 asset and expenditure data.

The resulting combined data were allocated to be consistent with the 1992 hospital cost report data. Revised relative weights for the base year were then calculated for various expenditure categories. This work resulted in the identification of 22 separate cost categories in the revised market basket. Four categories previously separate were combined with existing categories. Specifically, Business Services, and Computer and Data Processing Services were combined with All Other Labor-Intensive Services. Transportation Services was combined with All Other Nonlabor-Intensive Services, and the Fuel, Oil, Coal etc. category was split between Fuels (nonhighway) and Miscellaneous Products. We combined these categories so that the market basket would conform more closely with the 1992 Asset and Expenditure Survey. Detailed descriptions of each of the four categories and their respective price proxies can be found in the August 30, 1996 final rule (61 FR 46323). Changing the structure of the market basket using the 1992 Asset and Expenditure Survey allows for a more accurate reflection of the cost structures faced by hospitals. When the Bureau of the Census or the BEA improves methodologies for the collection and categorization of data, it is likely the weights will also change.

TABLE 1.—COMPARISON OF CURRENT 1992-BASED PROSPECTIVE PAYMENT HOSPITAL MARKET BASKET WITH PROPOSED REVISED 1992-BASED PROSPECTIVE PAYMENT HOSPITAL MARKET BASKET

Expense categories	Price proxy	Current 1992-based excluded market basket [1]	Proposed revised 1992-based excluded market basket
1. Compensation		61.390	61.390
A. Wages and Salaries	HCFA Occupational Wage Index	50.244	50.244
B. Employee Benefits	HCFA Occupational Benefits Index	11.146	11.146
2. Nonmedical Professional Fees	ECI-Compensation for Professional, Specialty, and Technical.	2.127	2.127
3. Utilities		2.470	1.542
A. Electricity	PPI Commercial Electric Power	1.349	0.927
B. Fuels (Nonhighway)	PPI Commercial Natural Gas	1.015	0.369
C. Water and Sewerage	CPI–U Water and Sewerage Maintenance	0.106	0.246

TABLE 1.—COMPARISON OF CURRENT 1992-BASED PROSPECTIVE PAYMENT HOSPITAL MARKET BASKET WITH PROPOSED REVISED 1992-BASED PROSPECTIVE PAYMENT HOSPITAL MARKET BASKET—Continued

Expense categories	Price proxy	Current 1992-based excluded market basket [1]	Proposed revised 1992-based excluded market basket
4. Professional Liability Insurance	HCFA Professional Liability Insurance Premium Index	1.189	1.189
5. All Other Expenses		32.825	33.752
A. All Other Products		24.033	24.825
(1) Pharmaceuticals	PPI Ethical (Prescription) Drugs	4.162	4.162
(2) Food		3.459	3.386
(a) Direct Purchase	PPI Processed Foods and Feeds	2.363	2.314
(b) Contract Service	CPI Food Away From Home	1.096	1.072
(3) Chemicals	PPI Industrial Chemicals	3.795	3.666
(4) Medical Instruments	PPI Medical Instruments and Equipment	3.128	3.080
(5) Photographic Supplies	PPI Photographic Supplies	0.399	0.391
(6) Rubber and Plastics	PPI Rubber and Plastic Products	4.868	4.750
(7) Paper Products	PPI Converted Paper and Paperboard Products	2.062	2.078
(8) Apparel	PPI Apparel	0.875	0.869
(9) Machinery and Equipment	PPI Machinery and Equipment	0.211	0.207
(10) Miscellaneous Products	PPI Finished Goods	1.074	2.236
B. All Other Services		8.792	8.927
(1) Postage	CPI–U Postage	0.272	0.272
(2) Telephone Services	CPI–U Telephone Services	0.531	0.581
(3) All Other: Labor Intensive	ECI Compensation for Private Service Occupations	7.457	7.277
(4) All Other: Nonlabor Intensive	CPI-U All Items	0.532	0.796
Total		100.000	100.000

Note: Due to rounding, weights may not sum to total.

[1] Expense categories based on proposed 1992-based hospital market basket for comparison purposes.

In calculating payments to hospitals, the labor-related portion of the standardized amounts is adjusted by the hospital wage index. As discussed in the August 30, 1996 final rule (61 FR 46189), for purposes of determining the labor-related portion of the standardized amounts, we sum the percentages of the labor-related items (that is, wages and salaries, employee benefits, professional fees, business services, computer and data processing services, postage, and all other labor-intensive services) in the operating hospital market basket. Effective for FY 1997, this summation resulted in a labor-related portion of the hospital market basket of 71.246 percent, and a nonlabor-related portion of 28.754 percent. Thus, since October 1, 1996, we have considered 71.2 percent of operating costs to be labor-related for purposes of the prospective payment system (we rounded to the nearest tenth).

In connection with the revisions to the hospital market basket, we have reestimated the labor-related share of the standardized amounts. Based on the relative weights described in Table 2, the labor-related portion (wages and salaries, employee benefits, professional fees, postage, and all other labor-intensive services) is 71.066 percent, and the nonlabor-related portion is 28.934 percent. Accordingly, effective with discharges occurring on or after October 1, 1997, we are proposing to revise the labor-related and nonlabor-related shares of the large urban and other areas' standardized amounts used to establish the prospective payment rates to 71.1 and 28.9, respectively. The amounts in Table 2 reflect the revised labor-related and nonlabor-related portions. We note that the labor-related portions of the rates published in Table 2 have remained approximately the same. The labor-related portion has decreased from 71.246 percent to 71.066 percent.

TABLE 2.—LABOR-RELATED SHARE OF PROPOSED 1992-BASED PROSPECTIVE PAYMENT HOSPITAL MARKET BASKET

Cost category	Weight
Wages and salaries	50.244
Employee benefits	11.146
Professional fees	2.127
Postal services	0.272
All other labor intensive	7.277
Total labor-related	71.066
Total nonlabor-related	28.934

C. Selection of Price Proxies

Only four categories that are part of the current hospital market basket do not appear in the proposed revised hospital market basket. Of the 22 categories that are part of both the current and the proposed revised market baskets, only the weights might differ. The wage and price proxies selected for these cost categories are the same as those selected last year. A description and discussion of each price proxy are set forth in the August 30, 1996 final rule (61 FR 46324). The price proxies are shown in Table 1, above. The makeup of the HCFA Blended Occupational Wage Index and the HCFA Blended Occupational Benefits Index used as proxies for Wages and Salaries and Employee Benefits, respectively, remain the same as last year. (See 61 FR 27463.)

To examine the impact of the changes to the weights and the reduction of the number of cost categories, we developed a comparison for the period FY 1994 through FY 1999. Using historical data for FY 1994 through FY 1996, and forecasts for FY 1997 through FY 1999 for the prospective payment market basket, we compared the percentage changes for the current and the proposed revised market baskets.

TABLE 3.—COMPARISON OF THE PROPOSED PROSPECTIVE PAYMENT HOSPITAL MARKET BASKET AND THE CURRENT PROSPECTIVE PAYMENT HOSPITAL MARKET BASKET PERCENT CHANGE, FY 1994–1999

Federal fiscal year	Current hospital market basket	Proposed hospital market basket	Difference
Historical:			
1994	2.6	2.6	0.0
1995	3.2	3.2	0.0
1996	2.5	2.4	−0.1
Forecasted:			
1997	2.4	2.3	−0.1
1998	2.7	2.8	0.1
1999	3.0	2.9	−0.1
Historical Average:			
1994–1996	2.8	2.7	−0.1

TABLE 3.—COMPARISON OF THE PROPOSED PROSPECTIVE PAYMENT HOSPITAL MARKET BASKET AND THE CURRENT PROSPECTIVE PAYMENT HOSPITAL MARKET BASKET PERCENT CHANGE, FY 1994–1999—Continued

Federal fiscal year	Current hospital market basket	Proposed hospital market basket	Difference
Forecasted Average:			
1997–1999	2.7	2.7	0.0

Note that the historical average rate of growth for 1994 through 1996 for the improved proposed revised prospective payment hospital market basket is almost equal to that of the current market basket. The 0.1 percentage point difference is less than the +/−0.25 percent threshold for corrections for forecast error. The forecasted average rate of growth for 1997 through 1999 for the revised market basket is equal to that of the current market basket.

D. Separate Market Basket for Hospitals and Hospital Units Excluded From the Prospective Payment System

As in the prospective payment hospital market basket, weights for the six main cost categories contained in the excluded hospital market basket (that is, weights for wages and salaries, employee benefits, professional fees, malpractice insurance, pharmaceuticals, and the residual category) remain the same. Only the weights for ''Utilities'' and the categories within ''All Other'' have been revised. Table 4 below shows weights for the current and proposed excluded hospital market basket.

TABLE 4.—COMPARISON OF CURRENT 1992-BASED EXCLUDED HOSPITAL MARKET BASKET WITH PROPOSED REVISED 1992-BASED EXCLUDED HOSPITAL MARKET BASKET

Expense categories	Price proxy	Current 1992-based excluded market basket [1]	Proposed revised 1992-based excluded market basket
1. Compensation		63.721	63.721
A. Wages and Salaries	HCFA Occupational Wage Index	52.152	52.152
B. Employee Benefits	HCFA Occupational Benefits Index	11.569	11.569
2. Nonmedical Professional Fees	ECI-Compensation for Professional, Specialty, and Technical.	2.098	2.098
3. Utilities		2.557	1.675
A. Electricity	WPI Commercial Electric Power	1.396	1.007
B. Fuels (Nonhighway)	WPI Commercial Natural Gas	1.051	0.401
C. Water and Sewerage	CPI–U Water and Sewerage Maintenance	0.110	0.267
4. Professional Liability Insurance	HCFA Professional Liability Insurance Premium Index	1.081	1.081
5. All Other Expenses		30.541	31.425
A. All Other Products		23.640	24.227
(1) Pharmaceuticals	PPI Ethical (Prescription) Drugs	3.070	3.070
(2) Food		3.581	3.468
(a) Direct Purchase	PPI Processed Foods and Feeds	2.446	2.370
(b) Contract Service	CPI Food Away From Home	1.135	1.098
(3) Chemicals	PPI Industrial Chemicals	3.929	3.754
(4) Medical Instruments	PPI Medical Instruments and Equipment	3.238	3.154
(5) Photographic Supplies	PPI Photographic Supplies	0.413	0.400
(6) Rubber and Plastics	PPI Rubber and Plastic Products	5.039	4.865
(7) Paper Products	PPI Converted Paper and Paperboard Products	2.134	2.182
(8) Apparel	PPI Apparel	0.906	0.890
(9) Machinery and Equipment	PPI Machinery and Equipment	0.218	0.212
(10) Miscellaneous Products	PPI Finished Goods	1.112	2.232
B. All Other Services		6.901	7.198
(1) Postage	CPI–U Postage	0.282	0.295
(2) Telephone Services.	CPI–U Telephone Services	0.549	0.631
(3) All Other: Labor Intensive	ECI Compensation for Private Service Occupations	5.519	5.439
(4) All Other: Nonlabor Intensive	CPI–U All Items	0.551	0.833
Total		100.000	100.000

Note: Due to rounding, weights may not sum to total.

[1] Expense categories based on proposed 1992-based hospital market basket for comparison purposes.

V. Other Decisions and Changes to the Prospective Payment System for Inpatient Operating Costs

A. Elimination of Day Outlier Payments (§§ 412.80 and 412.82)

Section 1886(d)(5)(A) of the Act provides for payments in addition to the basic prospective payments for ''outlier'' cases, that is, cases involving extraordinarily high costs (cost outliers) or long lengths of stay (day outliers). That section also provides that, beginning with FY 1995, payments for day outliers will be phased out over 3 years. We have discussed this phase out and its implementation in detail in the September 1, 1994, September 1, 1995, and August 30, 1996 final rules (59 FR 45366, 60 FR 45854, and 61 FR 46228, respectively). Since payment for day outliers will be eliminated effective with discharges occurring in FY 1998, we are proposing to make conforming revisions to the regulations at §§ 412.80, 412.82, 412.84, and 412.86. At the same time, we are making a technical change to the provision concerning outlier payments for transfer cases to conform the regulations text to policies that we have stated in previous prospective payment system rules but did not codify. See the final rules published September 1, 1995 (60 FR 45804) and September 1, 1993 (58 FR 46306–07).

B. Rural Referral Centers (§ 412.96)

Under section 1886(d) of the Act, hospitals generally are paid by the Medicare program for inpatient hospital services covered by Medicare in accordance with the prospective payment system. Certain hospitals, however, receive special treatment under that system. Section 1886(d)(5)(C)(i) of the Act specifically provides for exceptions and adjustments to prospective payment amounts, as the Secretary deems appropriate, to take into account the special needs of rural referral centers.

Section 412.96(d) of the regulations provides that, for discharges occurring before October 1, 1994, rural referral centers received the benefit of payment for inpatient operating costs per discharge based on the other urban payment amount rather than the rural standardized amount. As of October 1, 1994, the other urban and rural standardized amounts are the same. However, rural referral centers continue to receive special treatment under both the disproportionate share hospital payment adjustment and the criteria for geographic reclassification. One of the ways that a rural hospital may qualify as a rural referral center is to meet two mandatory criteria (specifying a minimum case-mix index and a minimum number of discharges) and at least one of three optional criteria (relating to specialty composition of medical staff, source of inpatients, or volume of referrals). These criteria are described in detail in 42 CFR 412.96(c).

1. Case-Mix Index Criteria

Section 412.96(c)(1) sets forth the case-mix index criteria and provides that, for cost reporting periods beginning on or after October 1, 1986, a hospital's case-mix index for discharges ''during the Federal fiscal year that ended 1 year prior to the beginning of the cost reporting period for which the hospital is seeking referral center status'' must be at least equal to the national case-mix index value as established by HCFA or the median case-mix value for urban hospitals in the region in which the hospital is located (excluding hospitals receiving indirect medical education payments), whichever is lower. It has come to our attention that the language in § 412.96(c)(1) does not clearly address situations in which the Federal fiscal year does not end exactly 1 year prior to the beginning of the cost reporting period for which the hospitals are seeking referral center status. In order to minimize any confusion, we propose to clarify which case-mix index values are used to determine referral center status.

Our policy, which we have applied consistently since 1986, is that the case-mix index used for an individual hospital in the determination of whether it meets the case-mix index criterion is the case-mix index for discharges during the *most recent* Federal fiscal year that ended *at least* 1 year prior to the beginning of the cost reporting period for which the hospital is seeking referral center status.

In this proposed rule, we would revise § 412.96(c)(1) to clarify the time period used to calculate the case-mix index. We emphasize that this clarification represents no substantive change in policy.

2. Updated Case-Mix and Discharge Criteria

As noted above, a rural hospital can qualify as a rural referral center if the hospital meets two mandatory criteria (case-mix index and number of discharges) and at least one of three optional criteria (medical staff, source of inpatients, or volume of referrals). With respect to the two mandatory criteria, a hospital may be classified as a rural referral center if its—

- Case-mix index is at least equal to the lower of the median case-mix index for urban hospitals in its census region, excluding hospitals with approved teaching programs, or the median case-mix index for all urban hospitals nationally; and
- Number of discharges is at least 5,000 discharges per year or, if fewer, the median number of discharges for urban hospitals in the census region in which the hospital is located. (The number of discharges criterion for an osteopathic hospital is at least 3,000 discharges per year.)

a. Case-Mix Index. Section 412.96(c)(1) provides that HCFA will establish updated national and regional case-mix index values in each year's annual notice of prospective payment rates for purposes of determining rural referral center status. In determining the proposed national and regional case-mix index values, we follow the same methodology we used in the November 24, 1986 final rule, as set forth in regulations at § 412.96(c)(1)(ii). Therefore, the proposed national case-mix index value includes all urban hospitals nationwide, and the proposed regional values are the median values of urban hospitals within each census region, excluding those with approved teaching programs (that is, those hospitals receiving indirect medical education payments as provided in § 412.105).

These values are based on discharges occurring during FY 1996 (October 1, 1995 through September 30, 1996) and include bills posted to HCFA's records through December 1996. Therefore, in addition to meeting other criteria, we are proposing that to qualify for initial rural referral center status or to meet the triennial review standards for cost reporting periods beginning on or after October 1, 1997, a hospital's case-mix index value for FY 1996 would have to be at least—

- 1.3525; or
- Equal to the median case-mix index value for urban hospitals (excluding hospitals with approved teaching programs as identified in § 412.105) calculated by HCFA for the census region in which the hospital is located.

The median case-mix values by region are set forth in the table below:

Region	Case-mix index value
1. New England (CT, ME, MA, NH, RI, VT)	1.2324
2. Middle Atlantic (PA, NJ, NY)	1.2424
3. South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)	1.3671
4. East North Central (IL, IN, MI, OH, WI)	1.2625
5. East South Central (AL, KY, MS, TN)	1.3076

Region	Case-mix index value
6. West North Central (IA, KS, MN, MO, NE, ND, SD)	1.2089
7. West South Central (AR, LA, OK, TX)	1.3270
8. Mountain (AZ, CO, ID, MT, NV, NM, UT, WY)	1.3449
9. Pacific (AK, CA, HI, OR, WA)	1.3429

The above numbers will be revised in the final rule to the extent required to reflect the updated MedPAR file, which will contain data from additional bills received for discharges through September 30, 1996.

For the benefit of hospitals seeking to qualify as referral centers or those wishing to know how their case-mix index value compares to the criteria, we are publishing each hospital's FY 1996 case-mix index value in Table 3C in section IV. of the Addendum to this proposed rule. In keeping with our policy on discharges, these case-mix index values are computed based on all Medicare patient discharges subject to DRG-based payment.

b. Discharges. Section 412.96(c)(2)(i) provides that HCFA will set forth the national and regional numbers of discharges in each year's annual notice of prospective payment rates for purposes of determining referral center status. As specified in section 1886(d)(5)(C)(ii) of the Act, the national standard is set at 5,000 discharges. However, we are proposing to update the regional standards. The proposed regional standards are based on discharges for urban hospitals' cost reporting periods that began during FY 1995 (that is, October 1, 1994 through September 30, 1995). That is the latest year for which we have complete discharge data available.

Therefore, in addition to meeting other criteria, we are proposing that to qualify for initial rural referral center status or to meet the triennial review standards for cost reporting periods beginning on or after October 1, 1997, the number of discharges a hospital must have for its cost reporting period that began during FY 1996 would have to be at least—

- 5,000; or
- Equal to the median number of discharges for urban hospitals in the census region in which the hospital is located, as indicated in the table below.

Region	Number of discharges
1. New England (CT, ME, MA, NH, RI, VT)	6725
2. Middle Atlantic (PA, NJ, NY)	8511
3. South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV)	6991
4. East North Central (IL, IN, MI, OH, WI)	6607
5. East South Central (AL, KY, MS, TN)	5805
6. West North Central (IA, KS, MN, MO, NE, ND, SD)	4625
7. West South Central (AR, LA, OK, TX)	5085
8. Mountain (AZ, CO, ID, MT, NV, NM, UT, WY)	8167
9. Pacific (AK, CA, HI, OR, WA)	5945

We reiterate that, to qualify for rural referral center status for cost reporting periods beginning on or after October 1, 1997, an osteopathic hospital's number of discharges for its cost reporting period that began during FY 1996 would have to be at least 3,000.

3. Retention of Referral Center Status

Section 412.96(f) states that each hospital receiving the referral center adjustment is reviewed every 3 years to determine if the hospital continues to meet the criteria for referral center status. To retain status as a referral center, a hospital must meet the criteria for classification as a referral center specified in § 412.96 (b)(1) or (b)(2) or (c) for 2 of the last 3 years, or for the current year. A hospital may meet any one of the three sets of criteria for individual years during the 3-year period or the current year. For example, a hospital may meet the two mandatory requirements in § 412.96(c)(1) (case-mix index) and (c)(2) (number of discharges) and the optional criterion in paragraph (c)(3) (medical staff) during the first year. During the second or third year, the hospital may meet the criteria under § 412.96(b)(1) (rural location and appropriate bed size).

A hospital must meet all of the criteria within any one of these three sections of the regulations in order to meet the retention requirement for a given year. That is, it will have to meet all of the criteria of § 412.96(b)(1) or § 412.96(b)(2) or § 412.96(c). For example, if a hospital meets the case-mix index standards in § 412.96(c)(1) in years 1 and 3 and the number of discharge standards in § 412.96(c)(2) in years 2 and 3, it will not meet the retention criteria. All of the standards would have to be met in the same year.

In accordance with § 412.96(f)(2), the review process is limited to the hospital's compliance during the last 3 years. Thus, if a hospital meets the criteria in effect for at least 2 of the last 3 years or if it meets the criteria in effect for the current year (that is, the criteria for FY 1998 outlined above in this section of the preamble), it will retain its status for another 3 years. We have constructed the following chart and example to aid hospitals that qualify as referral centers under the criteria in § 412.96(c) in projecting whether they will retain their status as a referral center.

Under § 412.96(f), to qualify for a 3-year extension effective with cost reporting periods beginning in FY 1998, a hospital must meet the criteria in § 412.96(c) for FY 1998 or it must meet the criteria for 2 of the last 3 years as follows:

For the cost reporting period beginning during FY	Use hospital's case-mix index for FY	Use the discharges for the hospital's cost reporting period beginning during FY	Use numerical standards as published in the FEDERAL REGISTER on
1997	1995	1995	Aug. 30, 1996.
1996	1994	1994	Sept. 1, 1995.
1995	1993	1993	Sept. 1, 1994.

Example: A hospital with a cost reporting period beginning July 1 qualified as a referral center effective July 1, 1995. The hospital has fewer than 275 beds. Its 3-year status as a referral center is protected through June 30, 1998 (the end of its cost reporting period beginning July 1, 1997). To determine if the hospital should retain its status as a referral center for an additional 3-year period, we will review its compliance with the applicable criteria for its cost reporting periods beginning July 1, 1995, July 1, 1996, and July 1, 1997. The hospital must meet the criteria in effect either for its cost reporting period beginning July 1, 1998, or for two out of the three past periods. For example, to be found to have met the criteria at § 412.96(c) for its cost reporting period beginning July 1,

1996, the hospital's case-mix index value during FY 1994 must have equaled or exceeded the lower of the national or the appropriate regional standard as published in the September 1, 1995 final rule with comment period. The hospital's total number of discharges during its cost reporting year beginning July 1, 1994, must have equaled or exceeded 5,000 or the regional standard as published in the September 1, 1995 final rule with comment period.

For those hospitals that seek to retain referral center status by meeting the criteria of § 412.96(b)(1) (i) and (ii) (that is, rural location and at least 275 beds), we will look at the number of beds shown for indirect medical education purposes (as defined at § 412.105(b)) on the hospital's cost report for the appropriate year. We will consider only full cost reporting periods when determining a hospital's status under § 412.96(b)(1)(ii). This definition varies from the number of beds criterion used to determine a hospital's initial status as a referral center because we believe it is important for a hospital to demonstrate that it has maintained at least 275 beds throughout its entire cost reporting period, not just for a particular portion of the year.

C. Determining the Total Number of Full-Time Equivalent Residents for Indirect Medical Education Adjustment (§ 412.105)

Section 1886(d)(5)(B) of the Act provides that prospective payment hospitals that have residents in an approved graduate medical education program receive an additional payment to reflect the higher indirect operating costs associated with graduate medical education. The regulations regarding the calculation of this additional payment, known as the indirect medical education (IME) adjustment, are at § 412.105. The additional payment is calculated by multiplying a hospital's DRG revenue (including outlier payments) by the applicable IME adjustment factor. The adjustment factor is calculated by using a hospital's ratio of residents-to-beds in the formula set forth at section 1886(d)(5)(B)(ii) of the Act.

The criteria governing whether a program is considered approved are at § 412.105(g)(1)(i). These criteria are the same as those used to identify approved programs for the direct graduate medical education payment under § 413.86(b). In the August 30, 1991 final rule (56 FR 43237), we added a criterion to § 413.86(b), but inadvertently did not add it to § 412.105(g)(1)(i). This criterion added the Annual Report and Reference Handbook of the American Board of Medical Specialties (ABMS) as another publication to be used to identify approved programs. To correct this inadvertent omission, we are proposing a technical change to § 412.105(g)(1) to parallel the provisions of § 413.86(b).

In addition, we are proposing to delete § 412.105(g)(1)(iv), which excludes from the IME resident count any anesthesiology residents employed to replace anesthetists. This exclusion was originally intended to prevent hospitals from hiring residents in lieu of nonphysician anesthetists. Given that certain rural hospitals continue to receive pass-through cost reimbursement for their anesthetist costs, we no longer believe this provision is warranted. Nor are we aware of any specific instances where it has been applied.

D. Direct Graduate Medical Education: Newly Participating Hospitals (§ 413.86)

Under section 1886(h) of the Act and implementing regulations, Medicare pays hospitals for the direct costs of graduate medical education on the basis of per resident costs in a 1984 base year. Under existing regulations at § 413.86(e)(4), if a hospital did not have residents in the 1984 base period but later participates in teaching activities, the fiscal intermediaries calculate a per resident amount based on a weighted average of all the hospitals in the same geographic wage area. There must be at least three hospitals for this calculation. If there are fewer than three hospitals, the regulations require the fiscal intermediary to contact the HCFA Central Office for a determination of the appropriate amount to use.

We are proposing to modify the regulations for determining base year per resident amounts for hospitals that participated in residency training after the 1984 base period. Under the proposed changes to § 413.86(e)(4)(i)(B), we would sequentially follow the criteria listed below until we can base the weighted average calculation on a minimum of 3 per resident amounts:

- If there are fewer than three hospitals in the hospital's geographic wage area, the intermediary will determine a weighted average based on the per resident amounts for all hospitals in the hospital's own wage area, plus hospitals in geographically contiguous wage areas.
- If there are still fewer than three hospitals in the hospital's own wage area, plus hospitals in contiguous wage areas, the weighted average will be based on the per resident amounts for all hospitals in the State.
- If there are fewer than three hospitals in the entire State, the weighted average will be based on the per resident amounts for all hospitals in that State plus hospitals in contiguous States.
- If there are fewer than three hospitals in that State and contiguous States, the weighted average per resident amount will be based on the national average per resident amount.

E. Technical Change: Correction of Statutory Citation

The August 30, 1996 final rule (61 FR 46165) included an amendment to § 489.27 that reprinted the statutory reference governing the distribution of an ''Important Message from Medicare.'' This reference, ''section 1886(a)(1)(M)'', was incorrect. We propose to correct this reference to read ''section 1866(a)(1)(M)''.

VI. Changes to the Prospective Payment System for Capital-Related Costs

A. Possible Adjustment to Capital Prospective Payment System Minimum Payment Levels

Section 412.348(b) of the regulations provides that, during the capital prospective payment system transition period, any hospital may receive an additional payment under an exceptions process if its total inpatient capital-related payments under its payment methodology (that is, fully prospective or hold-harmless) are less than a minimum percentage of its allowable Medicare inpatient capital-related costs. The minimum payment levels are established by class of hospitals under § 412.348(c). The minimum payment levels for portions of cost reporting periods occurring in FY 1997 are:

- Sole community hospitals (located in either an urban or rural area), 90 percent;
- Urban hospitals with at least 100 beds and a disproportionate share patient percentage of at least 20.2 percent and urban hospitals with at least 100 beds that qualify for disproportionate share payments under § 412.106(c)(2), 80 percent; and,
- All other hospitals, 70 percent.

Under § 412.348(d), the amount of the exceptions payment is determined by comparing the cumulative payments made to the hospital under the capital prospective payment system to the cumulative minimum payment levels applicable to the hospital for each cost reporting period subject to that system. Any amount by which the hospital's cumulative payments for previous cost reporting periods exceed its cumulative minimum payment is deducted from the additional payment that would otherwise be payable for a cost reporting period.

Section 412.348(g) also provides for a separate special exceptions process for hospitals undertaking major renovations or replacement of aging facilities during the decade of the transition. For as long

as 10 years beyond the end of the transition period, certain hospitals may be eligible to receive special exceptions payments at a 70 percent minimum payment level. For hospitals that qualify for the special exceptions provision before the end of the transition, the general and special exceptions provisions will run concurrently during the later years of the transition. However, since the minimum payment level for the special exceptions provision is at the same level that applies to all hospitals under the general provision (currently 70 percent), the special exceptions provision will generate no additional payment to hospitals until the end of the transition period.

Section 412.348(h) further provides that total estimated exceptions payments under both the regular exceptions process and the special exceptions process may not exceed 10 percent of the total estimated capital prospective payments (exclusive of hold-harmless payments for old capital) for the same fiscal year. In the FY 1997 final rule implementing the prospective payment system for capital-related costs, we stated that the minimum payment levels in subsequent transition years would be revised, if necessary, to keep the projected percentage of payments under the exceptions process at no more than 10 percent of capital prospective payments.

In section III of the Addendum to this proposed rule, we discuss the factors and adjustments used to develop the FY 1998 Federal and hospital-specific rates. In particular, we discuss the FY 1998 exceptions payment reduction factor. This factor adjusts the annual payment rates for the estimated amount of additional payments for exceptions in FY 1998. In this proposed rule, we estimate that exceptions will equal 7.24 percent of aggregate payments based on the Federal rate and the hospital-specific rate. We will develop a new estimate of the level of exceptions payments in FY 1998, and revise the exceptions payment adjustment factor accordingly, on the basis of the data that becomes available to us in time for developing the final rule for FY 1998. While it is not necessary at this time to propose reductions in the minimum payment levels, it is possible that it will be necessary to implement adjustments to the minimum payment levels in the final rule. Our current projections show that it will almost certainly be necessary to adjust the minimum payment levels for FY 1999. We are therefore providing public notification that adjustments to the minimum payment levels are possible in the final rule, and almost certain for FY 1999.

When it does become necessary to adjust the minimum payment levels in accordance with § 412.348(h), our current intent is to adjust each of the existing levels (that is, 90 percent for sole community hospitals, 80 percent for large urban DSH hospitals, and 70 percent for all other hospitals and special exceptions) by 5 percentage point increments until estimated exceptions payments are within the 10 percent limit. For example, we would set minimum payment levels at 85 percent for sole community hospitals, 75 percent for large urban DSH hospitals, and 65 percent for all other hospitals and special exceptions, provided that aggregate exceptions payments at those minimum payment levels were projected to be no more than 10 percent of total rate-based payments. We believe that this policy appropriately provides for all classes of hospitals to share in the reduction in exceptions payments, while simultaneously preserving the special protections provided by higher minimum payment levels for sole community hospitals and large urban DSH hospitals relative to all other hospitals. If aggregate exceptions payments at those minimum payment levels still exceed 10 percent of total rate-based payments, we would continue to reduce the minimum payment levels by 5 percentage point increments each until the requirement of § 412.348(h) was satisfied. We are providing notification of our current thinking on this issue in order to allow opportunity for public comment on the appropriate method for adjusting the minimum payment levels.

We made a similar proposal on the possibility of adjusting minimum payment levels in the FY 1997 proposed rule (61 FR 27481). In the FY 1997 final rule (61 FR 46219) we noted that some commenters objected to our proposed method for handling necessary reductions to the minimum payment levels. One commenter suggested that we develop a more sophisticated methodology that would allow more refined adjustment of the minimum payment levels. Another commenter suggested a 1- or 2-percent reduction increment, rather than the proposed 5-percent increment. We will take these comments into consideration when it becomes necessary to adjust the minimum payment levels in accordance with § 412.348(h). We welcome other comments on this matter as well.

B. Special Exceptions Application Process

As discussed section VI.A. above, a separate special exceptions provision extends protection to certain hospitals undertaking major renovation or replacement of aging facilities during the decade of the transition. The regulation establishing eligibility for this special exceptions provision, and describing the criteria by which eligible hospitals qualify for special exceptions payments (§ 412.348(g)), was finalized on September 1, 1994 (59 FR 45385). At this time, we are not proposing to make any policy changes to the special exceptions provision. (We are (or may be), however, revising the minimum payment level for this exceptions provision, along with the minimum payment levels under the regular exceptions provision, as described in section VI.A. above). However, we have received questions from hospitals and intermediaries about the special exceptions process, and we would therefore like to clarify a few aspects of that process.

Providers seeking special exceptions payments should submit documentation to their fiscal intermediary to demonstrate that they meet the eligibility and qualifying requirements in § 412.348(g). Documentation establishing that the hospital meets one of the eligibility criteria, the project need requirement, the age of assets test, and the project size requirement must be submitted to the intermediary no later than the date on which the cost report is due for the first cost reporting period in which the exceptions payment is expected. (As noted in section VI.A. above, since the 70-percent minimum payment level for the special exceptions provision is at the same level that applies to all hospitals under the general provision, the special exceptions provision will generate no additional payment to hospitals until the end of the transition period.) The fiscal intermediary will make an initial determination of whether the provider has met these criteria for receiving special exceptions payments. Further documentation demonstrating that the hospital continues to meet one of the eligibility criteria, that it meets the excess capacity test, as required, and that the hospital's regular payments fall short of the minimum payment level (accounting for the cumulative payment comparison and offsetting amounts, § 412.348(g)(8)) will be required for each successive cost reporting period in which the exception is claimed.

To qualify, an eligible hospital must meet both project need and project size

requirements. For hospitals in States with CON requirements, the project need requirement is satisfied by obtaining CON approval. A copy of the State CON approval should be submitted to the intermediary. For other hospitals, the project need requirement is satisfied by meeting an age of assets test. To meet the age of asset test, a hospital must have an average age of buildings and fixed equipment at or above the 75th percentile nationally in the first year of capital prospective payment. The hospital should submit to the intermediary copies of Worksheets A–7 and G from the first cost reporting under the capital prospective payment system, and a calculation of its average age of assets for that cost reporting year. The average age of assets is determined as the ratio of accumulated depreciation for buildings and fixed equipment to current depreciation for buildings and fixed equipment. (The data required for the age of assets computation are found on HCFA 2552–92, Worksheet G, lines 14, 14.01, 16, 16.01, 18, 18.01, 20, and 20.01, and Worksheet A–7, Part III, Column 9, lines 1 and 3.)

At the time that the special exceptions process was finalized in the September 1, 1994 final rule (59 FR 45385), data from the June 1994 update of the cost report file showed that the 75th percentile for buildings and fixed equipment was 16.4 years. At that time, we stated that we would make a final determination of the 75th percentile on the basis of more complete cost report information for FY 1992. We believe that the cost report information for FY 1992 is now sufficiently complete and reliable to make the final determination of the 75th percentile. As computed from the December 1996 update of the cost report data, the 75th percentile nationally for buildings and fixed equipment is 15.4 years.

We note that, in making this computation, we took account of the fact that hospitals do not always report accumulated and current year depreciation amounts consistently. For example, a hospital might report accumulated depreciation amounts on Worksheet G on an accelerated depreciation basis. In such a case, current year depreciation amounts on Worksheet A–7 should be adjusted to reflect straight line depreciation. This is because the program recognizes only straight line depreciation for cost accounting and payment purposes. Obviously, the numerator and denominator of the ratio used to establish average age of assets must be consistent. In determining the 75th percentile of average age of assets for FY 1992, we have employed only 4,611 hospitals. We eliminated hospitals that did not report both accumulated and current year depreciation on a straight line basis in their FY 1992 cost reports. We also eliminated any hospital whose computed age of assets was greater than 35.0 years. We took this step to eliminate obvious outliers and to assure that hospitals are not disadvantaged in meeting the 75th percentile requirement by the inclusion of hospitals whose computed age of assets is relatively higher merely because the Worksheet G data were not thoroughly audited. Eliminating these latter hospitals is to the advantage of hospitals trying to qualify for an exception, since it results in a lower threshold for meeting the average age of assets test. Eliminating these latter hospitals from the computation is the major reason why the 75th percentile has declined to 15.4 years from the 16.4 years that we previously estimated.

We note that, in the case of an individual hospital that reported accumulated and current depreciation on a different basis, it would be necessary to reconstruct accumulated depreciation for fixed assets that were in use for patient care in FY 1992 for purposes of determining whether that hospital met the average age of assets test. The following information would be necessary for this purpose: the purchase prices for each fixed asset in use in 1992, useful life of each asset, and the number of years each asset had been in use prior to FY 1992. Reconstructing FY 1992 accumulated depreciation for each asset would involve dividing the purchase price by the useful life and multiplying the result by the years in which the asset had been in service.

A hospital must also demonstrate that it meets a project size requirement to qualify for a special exceptions payment. The project size requirement is satisfied if the hospital completes, during the capital PPS transition period, a project whose costs for replacement and/or renovation of fixed assets (buildings and fixed equipment, but not movable equipment) are at least $200 million, or 100 percent of its operating costs during the first cost reporting period under the prospective payment system. The hospital should, therefore, submit to the intermediary auditable documentation establishing the costs for its project to replace and/or renovate fixed assets. This documentation also should establish that this project was completed during the capital PPS transition period (that is, not before the start of its first cost reporting period beginning on or before October 1, 1991, and not later than the end of its last cost reporting period beginning before October 1, 2001). Relevant documentation would include, but would not be restricted to, the plans for the relevant construction and/or renovation project, the total bills for construction and/or renovation related to the project, and records showing that the new or renovated facilities entered service for patient care during the capital PPS transition period.

For hospitals in States without CON requirements, an urban hospital must demonstrate either that it is in a MSA that does not have an overall occupancy rate less than 80 percent, or that its capacity is no more than 80 percent of its capacity (in terms of bed size) prior to the completion of its qualifying project of construction or renovation of fixed assets. (This test does not apply to rural hospitals.) An urban hospital in a non-CON State must thus meet one of two tests in order to satisfy the excess capacity requirement. We have been contacted by hospitals and fiscal intermediaries about how to determine if the excess capacity requirement has been met. Therefore, we would like to clarify what is necessary to satisfy both the excess capacity tests for urban hospitals.

For the bed size test, we use the same definition of bed size that is used for indirect graduate medical education and DSH payments. Under § 412.105(b), the number of beds in a hospital is determined by counting the number of available bed days during the cost reporting period, not including beds or bassinets in the healthy newborn nursery, custodial care beds, or beds in excluded distinct part hospital units, and dividing that number by the number of days in the cost reporting period. The number of beds is computed, using this formula, and entered on Worksheet S–3 of the cost report. Section 2405.3 of the Medicare Provider Reimbursement Manual provides additional information on bed size. Bed size must be determined for the last cost reporting period prior to completion of the qualifying project, and for each cost reporting period, subsequent to the completion of that project, for which a special exceptions payment is claimed. The ratio of bed size in the latter period to bed size in the former period must be less than or equal to 0.80. Hospitals electing to satisfy the excess capacity requirement by meeting the bed size test must satisfy this requirement *for each year* in which an exceptions payment might be claimed. In other words, a hospital does not qualify for an exceptions payment during any year in which its bed size ratio is greater than 0.80, even if its ratio

was less than or equal to 0.80 in a previous year.

For the MSA occupancy test, overall average occupancy is determined by dividing total patient days for all PPS hospitals in the MSA by available beds days (as defined in prior paragraph) for all those hospitals. Total patient days and available bed days are found on Worksheet S–3 of the Medicare cost report. We would use the same restrictions, as applicable, that were used in the definition of bed size. HMO, organ acquisition, or observation bed days are not included. Hospitals electing to meet the excess capacity requirement by satisfying the MSA occupancy test must satisfy this requirement *for each year* in which an exceptions payment might be claimed. In other words, a hospital does not qualify for an exceptions payment during any year in which overall average occupancy in its MSA is less than 80 percent, even if the occupancy in its MSA was greater than or equal to 80 percent in a previous year.

We welcome further questions and requests for clarification of these requirements. As appropriate we will respond to the questions and requests in future PPS rules.

VII. Proposed Changes for Hospitals and Units Excluded From the Prospective Payment System

A. New Requirements for Certain Hospitals Excluded From the Prospective Payment System (§ 412.22(e))

In the September 1, 1994 final rule (59 FR 45330), we established several additional criteria for excluding long-term care hospitals that occupy space in the same building or on the same campus as another hospital from the PPS (§ 412.23(e)). Under these criteria, such facilities (sometimes called ''hospitals within hospitals'') could qualify for exclusion only if the two entities have separate governing bodies, chief executive officers, medical staffs, and chief medical officers. In addition, they were required to be capable of performing certain basic hospital functions without assistance from the hospitals with which they are co-located, or they had to receive at least 75 percent of their inpatients from sources other than the co-located hospital. We further revised these regulations on September 1, 1995 (60 FR 45778), by adding a third option under which hospitals that did not meet the criteria specified above could establish separate operation by showing that no more than 15 percent of their inpatient operating costs were attributable to the hospital with which they share space.

The regulations were necessary to prevent inappropriate Medicare payments to entities that are effectively long-stay units of other hospitals. At the same time, the regulations set forth criteria to ensure that entities may qualify for exclusion from the PPS if an exclusion is warranted. Exclusion of long-term care hospitals from the PPS is appropriate when hospitals have few short-stay or low-cost cases and might be systematically underpaid if the PPS were applied to them. These reasons for exclusion do not apply if the entity that provides the long-term care is part of a larger hospital, which does have short-stay and low-cost cases and can be paid appropriately under the PPS.

ProPAC has recommended that HCFA monitor the growth in the number of long term care hospitals within hospitals and evaluate whether the current Medicare certification rules that apply to these facilities should be changed (Recommendation 31). ProPAC noted that there is concern that the hospital within a hospital model was devised as a way for acute care hospitals to receive higher payments for their long-stay cases. At the same time, the model may be an appropriate and efficient alternative to acute inpatient care for cases that require additional services, but at a more intensive level than those provided in other post-acute settings. ProPAC recommended that HCFA conduct a comprehensive study of the characteristics, patient mix, treatment patterns, costs, and financial performance of hospitals within hospitals.

We have been monitoring the development of the hospital within a hospital model. We agree with ProPAC that our policy should simultaneously strive to prevent inappropriate exclusions of units as separate hospitals, while allowing an appropriate degree of flexibility for facilities to respond to changing patient care needs. As a result of our monitoring efforts, we are proposing two changes to the hospital-within-a-hospital regulations. We propose to add a new § 412.22(f) to address hospitals that are unable to meet certain exclusion criteria solely because of State law. In addition, we propose to extend the application of these rules to other classes of facilities that might seek exclusion from the PPS as hospitals within hospitals.

The first proposed change concerns the relationship between the exclusion criteria and State laws. Following publication of the original regulations governing long-term care hospitals within hospitals, we received comments stating that it would not be equitable to abruptly impose new criteria on long-term care hospitals that had operated for many years under other organizational patterns. To accommodate these hospitals, we allowed them an additional one-year delay in the effective date of the ''hospital within a hospital'' regulations. Thus, a hospital that was excluded under prior rules was not required to meet the new criteria until its first cost reporting period beginning on or after October 1, 1995. (For other hospitals, the rule was effective for the first cost reporting period beginning on or after October 1, 1994.)

By delaying the effective date of these regulations for hospitals within hospitals that had been excluded from the PPS before October 1, 1994, we intended to allow the hospitals adequate time to restructure themselves to comply with the new criteria. However, it has since become clear that some hospitals within hospitals operated by State universities have not been able to make the necessary changes, because the hospitals are required by State law to be subject to the ultimate authority of the governing body of the same entity (the university) that operates the hospital from which they obtain space. Thus, these hospitals have not been able to comply with the hospital-within-a-hospital criteria.

We continue to believe that it is important to exclude, as hospitals, only facilities that actually operate as separate hospitals, not as units of larger hospitals. At the same time, however, we are concerned that certain hospitals might, as a matter of State law, be unable to make the necessary organizational changes to meet our criteria. We believe two considerations justify exclusion of these facilities. First, the organizational arrangements under which they operate were in place when the new regulation was adopted, and to the extent the arrangements are required by State law, we believe they do not reflect attempts by entities to establish nominal hospitals and, in turn, seek inappropriate exclusions. Second, we believe it would be inequitable to deny exclusions to hospitals solely because State statutory requirements prevent them from having the same flexibility as other institutions to reorganize themselves to meet our criteria.

Accordingly, we propose to add § 412.22(f) to provide that if a hospital cannot meet the criteria in §§ 412.23(e)(3) (i) or (iii) (proposed to be redesignated as §§ 412.22(e) (1) and (3)) solely because its governing body or medical staff is under the control of a third entity that also controls the

hospital with which it shares a building or a campus or cannot meet the criteria in §§ 412.23(e)(3) (ii) or (iv) (proposed to be redesignated as §§ 412.22 (e)(2) and (e)(4)) solely because its chief medical officer or chief executive officer is employed by, or under contract with such a third entity, the hospital can nevertheless qualify for an exclusion if that hospital meets the other applicable criteria and:

- Is owned and operated by a State university;
- Has been continuously owned and operated by that university since October 1, 1994;
- Is required by State law to be subject to the ultimate authority of the university's governing body; and
- Was excluded from the prospective payment system as a long-term care hospital for any cost reporting period beginning on or after October 1, 1993, but before October 1, 1994.

We wish to emphasize that we intend to allow an exception to the criteria in § 412.23(e)(3) (i) through (iv) only if the hospital cannot meet those criteria because of State law. We do not intend to provide similar treatment for other State university or other hospitals which are not subject to such statutory requirements but have chosen not to undertake such a reorganization. We welcome comments and suggestions on this issue and on whether the language of the proposed rule effectively addresses the situation of hospitals disadvantaged by State law.

We also propose to redesignate the specific criteria for hospitals within hospitals now in § 412.23 (e)(3) through (e)(5) under a new § 412.22 (e), (g), and (h). At the time of the adoption of the final rule governing long-term care hospitals within hospitals, we did not extend its application to other types of excluded facilities that might seek to organize themselves on that model. Since the publication of the final rule governing long-term care hospitals within hospitals, we have received scattered inquiries from some providers and regional offices about the appropriateness of other types of facilities organizing themselves as hospitals within hospitals. It has become apparent that, while rehabilitation and psychiatric facilities may be granted exemptions from the PPS as units of larger hospitals, there may be cases where such facilities may rather seek exclusion as hospitals within hospitals in order to take advantage of certain payment rules that favor hospitals. For example, new hospitals within hospitals qualify for the new hospital exemption from the rate of increase ceiling, which is not available to new units.

We believe that extension of the hospital-within-a-hospital rules is appropriate to avoid recognizing nominal hospitals, while allowing adequate flexibility for legitimate and efficient sharing of services. We continue to believe it is important to exclude only separate long-term care hospitals, not units, of larger hospitals. We believe that the same principle should apply to cancer and children's facilities, which the statute provides for excluding only as hospitals, not as units. We also believe that it is important to exclude, *as hospitals*, only separate rehabilitation and psychiatric hospitals that may share space with another hospital. Rehabilitation and psychiatric facilities that actually function as units of larger hospitals should seek exclusion as units rather than as hospitals.

As stated earlier, we are proposing to extend the application of the hospital-within-a-hospital rules to all types of facilities that can be excluded from the PPS. We would also incorporate, within this extended hospital-within-a-hospital rule, the provision that we have proposed above for facilities owned and operated by a State university. At the same time, we are considering whether it is appropriate for new hospitals within hospitals to receive the exemption from the TEFRA rate-of-increase ceiling during the first 2 years of operation. The purpose of the new hospital exemption is to recognize that a hospital might face a period of cost distortions as it begins operations and tries to establish its presence in its market. We do not believe that newly established hospitals within hospitals would necessarily face the same degree of cost distortion during their initial periods of operation. This is because such hospitals begin operation within other hospitals that have established facilities and identifiable market presence. While we are not formally proposing elimination of the new hospital exemption for hospitals within hospitals at this time, we are considering whether to adopt such a provision in this year's final rule. We invite comment on whether elimination of the new hospital exemption for hospitals within hospitals would be advisable.

Finally, we will continue monitoring the development of the hospital within a hospital model. While we have not yet conducted the kind of comprehensive study of these facilities that ProPAC has recommended, we will consider whether doing so is worthwhile within the limits our available resources.

B. Exclusion of New Rehabilitation Units and Expansion of Existing Rehabilitation Units (§ 412.30(b)(4))

In the September 1, 1995 final rule (60 FR 45839), we made certain changes to clarify the regulations applicable to the exclusion of new rehabilitation units and the expansion of units already excluded. These changes were intended only to clarify existing policy, not to change it. However, in making these changes we inadvertently omitted a paragraph that explicitly allowed newly participating hospitals to open new rehabilitation units and also to allow the new rehabilitation units to be excluded immediately from the PPS. In omitting this paragraph, we had no intention of rescinding the policy. We are proposing to restore this paragraph to the regulations, which this proposed rule would redesignate at § 412.30(b)(4), to correct this omission and to reaffirm current policy. (For further information on this policy, see the **Federal Register** published September 1, 1992 (57 FR 39746).)

C. Delicensing and Relicensing of Beds (§ 412.30)

We have received a number of questions about cases in which hospitals remove some bed capacity from their State license and Medicare certifications, then later increase the number of their licensed and certified beds and seek to have the bed capacity ''added'' and considered part of a new, or newly expanded, PPS-exempt rehabilitation unit. Assuming that simultaneous delicensure and relicensure of beds would not be accepted as the addition of new bed capacity, we also have been asked how long bed capacity would have to be excluded from a hospital's licensure and certification to be considered ''new'' for purposes of the PPS exclusion rules at § 412.30.

Section 412.30 establishes separate ways for new and converted units to meet the exclusion criterion related to the type of patient population treated. New units are allowed to qualify for initial exclusion based in part on a certification regarding their intent to treat a patient population of the kind described in § 412.23(b)(2), rather than on a showing that they have actually treated such a population during the hospital's most recent cost reporting period. Converted units may not be excluded based on a certification, but must show that they actually met the § 412.23(b) requirement during the hospital's most recent 12-month cost reporting period. New units are defined as those that are part of a hospital that

has not previously sought exclusion for any rehabilitation unit and that comprise greater than 50 percent of the newly licensed and certified bed capacity, while converted units are those that do not qualify as new. Section 412.30 also provides for separate treatment of new and converted bed capacity that is used to expand existing units.

Different rules apply to the addition of new (as opposed to converted) bed capacity, and it would not be appropriate to recognize an ''increase'' in the bed capacity that coincides with a decrease in bed capacity in another area, resulting in no net increase in the hospital's total licensed and certified bed capacity. Similarly, it would not be appropriate to allow a hospital to circumvent those rules simply by removing some bed capacity from its licensure and certification on a temporary basis, and then increasing its bed size a few days, weeks, or months later. Thus, when a hospital seeks to add a new PPS-excluded rehabilitation unit, or to increase the size of an existing unit by adding new bed capacity, the bed size of the hospital in the past must be taken into account.

The current regulations do not specify how long a decrease in a hospital's bed capacity must be effective before a subsequent increase in the hospital's licensure and certification can be considered as ''new'' capacity. However, to ensure consistent and equitable treatment of all hospitals with PPS-excluded rehabilitation units, we propose to provide in the regulations (proposed § 412.30(a)) that a decrease in capacity must remain effective for at least a full 12-month cost reporting period before an equal or lesser number of beds can be added to the hospital's licensure and certification and considered ''new''. This means that when a hospital seeks to establish a new unit, or to enlarge an existing unit, under the criteria in § 412.30, the Regional Office will review its records on the facility to determine whether any beds have been delicensed and decertified during the 12-month cost reporting period before the period for which the new beds are to be added. To the extent that bed capacity was removed from the hospital's licensure and certification during that period, that amount of bed capacity cannot be considered ''new'' under § 412.30. For example, if a hospital with a calendar year cost reporting period had removed 15 beds from its licensure and certification in calendar year 1997 and, for calendar year 1998, sought to set up a new rehabilitation unit that would include 20 beds that would be added to its licensure and certification as of January 1, 1998, only 5 of those beds could be considered ''new'' under section 412.30. The remaining beds would be considered converted beds.

This guideline applies to changes in a hospital's total licensed and certified bed capacity, regardless of whether specific beds or physical areas within a hospital have previously been operational and available to rehabilitation patients. Thus, if a hospital delicenses 25 beds on one floor in the third month of a cost reporting period and, 2 months later, increases its licensure and certification by adding a 25-bed unit in a previously unoccupied area on another floor, that unit could not be considered ''new'' under § 412.30 even though it occupies different space from the beds that represented the delicensed capacity. This guideline applies only for purposes of PPS exclusion and is not intended to limit a hospital's ability to add to its licensed and certified bed capacity for the provision of services paid for under the PPS.

VIII. ProPAC Recommendations

We have reviewed the March 1, 1997 report submitted by ProPAC to Congress and have given its recommendations careful consideration in conjunction with the proposals set forth in this document. Recommendation 2, concerning the update for the prospective payment system operating payment rates, is discussed in Appendix E of this proposed rule. Recommendations 3 and 4, concerning the prospective payment system capital payment rates, are discussed in section III. of the Addendum of this proposed rule. Recommendation 13, concerning updating the target amounts for PPS-excluded hospitals and distinct part units, is discussed in section VII. of this proposed rule. Recommendation 31, concerning long-term care hospitals within hospitals, is discussed in section VI. of this proposed rule. The remaining recommendations are discussed below.

A. Ensuring Quality of Care (Recommendation 1)

Recommendation: The Medicare program needs to be vigilant in monitoring and improving the quality of care delivered to its beneficiaries in both the fee-for-service and risk contracting options. ProPAC supports a comprehensive approach to quality assurance that includes both pattern analysis and systematic review of individual cases.

Response: We concur with ProPAC's recommendation that ''continuous quality improvement activities need to be accompanied by effective methods to identify and monitor providers with questionable performance.'' We are pursuing two complementary strategies in this area: strengthening the mechanisms for soliciting, investigating, and monitoring complaints; and establishing an ongoing pattern monitoring system. We believe that there is ample evidence that returning to case review of randomly selected cases would not be an effective way to monitor providers with questionable performance.

Beneficiary Complaints

Peer Review Organizations (PROs) have had greater success identifying quality of care concerns through the beneficiary complaint process than through traditional case review. The number of such complaints is relatively small but has proven in the past to be an excellent source of problem identification. Complaints provide PROs with the opportunity to identify and remedy instances of poor quality. We are committed to improving the beneficiary complaint process. We have formed the Beneficiary Protection and Documentation Issues Task Force as a subgroup of the Medicare Technical Advisory Group. This task force includes representatives from PROs, intermediaries, carriers, provider groups, consumer organizations, the Office of the Inspector General, and the Office of the General Counsel. The task force is charged with reexamining the PRO beneficiary complaint process. Its work plan includes the development of a proposed rule concerning the beneficiary complaint process (expected to be published soon) that will enable the PRO to be more responsive to beneficiary needs; and to conduct studies that evaluate potential alternative approaches to handling beneficiary complaints. The studies are being designed to test a variety of new and innovative methods of investigating complaints including exploring the possibility of working with other entities such as licensing agencies, private accreditation bodies, State medical societies, and consumer groups, in the resolution of beneficiary complaints. The final report is due to the Medicare Technical Advisory Group in January 1999.

A vital element of our strategy is to increase awareness among beneficiaries of their rights as patients to file complaints, and the ease with which they can submit their complaints. A number of efforts are underway. HCFA plans to test a toll free hotline in four States that will, for the first time, provide a single 1–800 number for all

beneficiary inquiries. Complaints about the quality of care will be automatically routed to the appropriate HCFA agent (for example, the PRO or the End Stage Renal Disease (ESRD) Network) for action. This hotline will be advertised to ensure that Medicare beneficiaries are aware of this service.

The conditions of participation for Medicare providers are being revised to transition towards a patient outcome-based system, and to stimulate improvements in processes, outcomes of care, and patient satisfaction. Under the revised conditions, providers would be required to prominently display a list of patient's rights, including the patient's right to complain about the quality of the care provided.

In response to concerns expressed about the managed care appeals process, we have recently published a final rule with comment period that will require managed care plans contracting with Medicare to add an expedited appeals procedure to their appeals process. This will allow Medicare enrollees to obtain coverage decisions as well as to have those decisions reconsidered within very short timeframes in certain time-sensitive situations. We also are developing a separate notice of proposed rulemaking that would shorten the timeframes for standard appeals that are not time-sensitive and therefore not expedited. Currently, Health Maintenance Organizations (HMOs) and Competitive Medical Plans (CMPs) have 60 days to make decisions regarding the necessity of beneficiary requests for services and 60 days to complete reconsiderations. These timeframes will be reduced significantly.

In addition to improving the beneficiary complaint process, there are efforts underway to ensure that these complaints are consolidated and analyzed to improve our ability to identify and correct problems. They currently arrive at a variety of points of contact, including HCFA central office, 10 regional offices, PROs, ESRD Networks, fiscal intermediaries, and carriers. We are developing a standard set of definitions for use by HCFA and all of its agents in categorizing inquiries, along with developing an integrated automated system to continually track issues, provide timely and accurate responses, and effectuate improvements.

The enhancements in the responsiveness of PROs to beneficiary complaints, the pilots to improve our accessibility to beneficiaries, the activities underway to improve beneficiary awareness of their right to file a complaint, and the development of systems to categorize, track, and analyze beneficiary inquiries will all improve our effectiveness in identifying providers with questionable performance.

Pattern Monitoring

We recently implemented a national surveillance system for PROs to use in identifying patterns, trends, and variations in the health and health care of Medicare beneficiaries and in identifying sentinel events or clusters that may indicate less-than-optimal care. We are analyzing data from HCFA's National Claims History files to present national and State-specific descriptive epidemiology of the Medicare population, overall health care utilization, and selected markers of potential quality issues. Updates will be provided on a quarterly basis. PROs have the capacity to refine the analyses to the community or hospital-specific level, in order to identify providers with questionable performance and will use the surveillance information to identify and act on opportunities to improve care.

We do not currently have encounter data for managed care plans, and thus the national surveillance system does not focus on managed care providers. There is a pilot program underway to test the development and use of such data. In addition, there are efforts underway to ensure that managed care plans with questionable performance are identified, and actions taken to resolve concerns. All managed care plans will be required to provide Health Plan Employer Data and Information System (HEDIS) quality measures by the summer of 1997. In addition, we are participating in the development of the Foundation for Accountability (FACCT) measures and will be testing their use in at least five States. To complement the collection of these quality of care measures from the plans, we have developed a Medicare-specific consumer satisfaction survey in collaboration with the Agency for Health Care Policy and Research through its Consumer Assessment of Health Plan Study (CAHPS) process. The survey will be plan-specific and administered on an annual basis. It is designed to collect information on satisfaction with quality of care, access, and utilization of care and will provide another source of information about care provided by managed care plans.

Other Sources

We also have other sources for identifying poor performers. PROs are still obligated to review cases referred to them by carriers and intermediaries, usually for quality concerns that may affect coverage and payment. Hospitals are required to provide patients with a Notice of Noncoverage if they believe that a beneficiary does not require inpatient level of care. If the beneficiary disagrees with the hospital's decision, he or she may ask the PRO to review the case. The PRO may identify a quality concern in the process that would require some type of intervention at the hospital or physician level.

B. Improving the Distribution of Medicare's Indirect Medical Education (IME) Payments (Recommendation 5)

Recommendation: Medicare's IME payments should reflect the historical relationship between hospital costs and teaching intensity. Further, they should continue to be based on the hospital's volume of Medicare patients. These payments should no longer change in proportion to annual variations in the number of residents or beds. In addition, the payment method should be flexible enough to allow and support training in settings outside of the hospital.

Response: The President's FY 1998 budget includes several proposals consistent with ProPAC's recommendations. As set forth in those proposals, the total number of residents and the number of nonprimary care residents would be capped on a hospital-specific basis; the resident-to-bed ratios would be capped at the level of hospitals' cost reporting periods ending on or before December 31, 1996; residents would be counted based on a multi-year rolling average; and hospitals could include residents training in nonhospital-based training sites in their resident-to-bed ratios (as long as the hospital continues to pay the residents' salaries).

We believe the incentives associated with the current IME adjustment are contrary to the Administration's policy of decreasing the number of residents trained in the United States, increasing the relative number of residents trained in primary care, and encouraging more training in nonhospital-based sites. Our proposals would end the incentives to increase the number of residents, encourage more training in primary care, decrease the financial penalty for reducing the number of residents trained (thereby encouraging that reduction over time), and provide funding for training in nonhospital-based sites.

C. Reducing the Level of Medicare's Indirect Medical Education Payments (Recommendation 6)

Recommendation: The indirect medical education adjustment should be

reduced from its current level of 7.7 percent to 7.0 percent in fiscal year 1998.

Response: We agree with ProPAC that the current level of payment for the indirect costs of medical education is too high. The President's FY 1998 budget would reduce the adjustment to 7.4 percent in FY 1998, 7.0 percent in FY 1999, 6.8 percent in FY 2000, 6.6 percent in FY 2001, and 5.5 percent in FY 2002 and thereafter. A gradual reduction in IME adjustment over several years would allow teaching hospitals time to adjust to lower payments, while accomplishing our objective of reducing the adjustment to a more analytically justifiable level, which we estimate to be in the 4-to-5 percent range.

D. Improving Medicare's Payments for Direct Graduate Medical Education (GME) Costs (Recommendation 7)

Recommendation: Medicare's payments to hospitals for the direct costs of GME programs should not change in proportion to annual variations in the number of residents trained. The method for determining the level and distribution of these payments should be as neutral as possible concerning the number and speciality mix of residents and the site of their training.

Response: We share many of ProPAC's concerns regarding the way Medicare currently pays for direct medical education, and we are hopeful that the graduate medical education demonstration in New York State will provide insights into how Medicare can establish more appropriate incentives. Under the demonstration, participating New York hospitals will receive declining financial protections for residency reductions. We believe that these financial protections, which will phase out over 6 years, will provide incentives for participating hospitals to realize appropriate reductions in their residency programs, to increase the proportion of residents in primary care training, and to provide more training opportunities in ambulatory sites.

Although we do not support lump sum payments to hospitals for direct graduate medical education, the President's FY 1998 budget includes proposals that would address ProPAC concerns. For instance, the budget provisions would base a hospital's direct graduate medical education payment on a 3-year rolling average of full-time equivalent (FTE) residents. This measure would reduce the adverse financial impact on a hospital that reduces the size of its residency programs. The proposals would further encourage training in primary care specialties by providing payments to nonhospitals (federally qualified health centers, rural health clinics, and health maintenance organizations) for residents when the residents' salaries are not paid by hospitals.

E. Establishing a Broader-Based Financing Mechanism for Graduate Medical Education and Teaching Hospitals (Recommendation 8)

Recommendation: Explicit payments for graduate medical education and teaching hospital costs should not be limited to the Medicare program. Mechanisms to broaden financial support for training physicians in hospitals and other locations should be developed. The payments should reflect the reasonable costs of training at each facility and protect the access of beneficiaries and other populations to the services they provide.

Response: We agree that all payers should contribute their fair share toward physician training, particularly for the patient care services that are provided in the course of this training. In addition, we agree that academic medical centers play an important role as training and research centers and are an integral part of our health care system.

In response to ProPAC's observation that Medicare is the only payer that explicitly supports graduate medical education, we note that some Medicaid programs explicitly pay hospitals for the indirect and direct costs of graduate medical education in a manner similar to Medicare. In addition, some States (for example, New York, through the New York Health Care Reform Act) provide explicit support for teaching hospitals using private payers.

We note that although the President's health care reform bill in 1993 attempted to involve private insurers in directly supporting medical education, we do not currently have a proposal to broaden support for teaching hospitals beyond that currently provided by Medicare. We have, however, proposed to broaden financial support for teaching hospitals by changing the way Medicare funds medical education through its managed care programs. Currently, Medicare payments to HMOs are based on the average cost of providing services to Medicare patients in the fee-for-service part of Medicare. These Medicare payments to HMOs include payments for medical education. We have proposed revising Medicare's payments to HMOs to exclude the portion associated with medical education. Instead, we would pay these funds directly to teaching hospitals and managed care plans with teaching programs. Our proposal would thus benefit teaching hospitals, by increasing their Medicare payments, as well as more appropriately target Medicare funds designated for medical education.

F. Principles for Improving Medicare's Disproportionate Share (DSH) Payment Adjustment (Recommendation 9)

Recommendation: Medicare's DSH payments should be aimed at protecting access to hospital care for its beneficiaries. Payments should be distributed based on each hospital's share of low-income patient care and volume of Medicare cases. The low-income share measure should reflect the costs of services provided to low-income groups in both inpatient and outpatient settings. These groups include Medicare patients eligible for SSI, patients sponsored by Medicaid and local indigent care programs, and uninsured and underinsured patients as represented by uncompensated care.

Response: The Medicare disproportionate share adjustment is linked to hospital payments under the prospective payment system. In this way, Medicare funds a share of the inpatient costs generated by hospitals that are caring for a large number of indigent patients. The Medicare disproportionate share adjustment was established by Congress effective May 1, 1986, under section 1886(d)(5)(F) of the Act. It was intended to be a mechanism through which hospitals that treated a high proportion of indigent patients could be compensated for the higher Medicare costs associated with treating that population. Medicaid also provides a disproportionate share adjustment.

When the disproportionate share adjustment was enacted, eligible hospitals were expected to be the exception, not the rule. However, almost half of the hospitals under the prospective payment system currently receive some level of Medicare disproportionate share payments. In addition, as a result of recent court decisions concerning HCFA's interpretation of Medicaid eligible days, not only will payments increase to currently eligible disproportionate share hospitals, but we expect that additional hospitals will qualify for disproportionate share payments.

ProPAC believes that HCFA should continue to use a combination of Medicare, Supplemental Security Income (SSI), and Medicaid data as eligibility criteria and, in addition, uncompensated care data should be collected on an individual hospital basis and included in the calculation. We are

seeking to move away from the SSI and Medicaid measures that currently exist within this adjustment formula due to the concerns outlined in the May 31, 1996 proposed rule (61 FR 27473). None of the public comments we received in response to these concerns suggested the collection of uncompensated care data. In addition, such data would be unverifiable, except through arduous auditing procedures, which would be expensive and time-consuming for the fiscal intermediaries and the hospitals.

The President's FY 1998 budget includes a provision to freeze disproportionate share payment adjustments for 2 years while we develop an alternative methodology for identifying and paying hospitals that treat a disproportionate share of low-income patients. Our intention is to move away from the current eligibility measures and to target payments to those hospitals with the highest shares of low-income patients.

G. Improving the Distribution of Disproportionate Share Payments (Recommendation 10)

Recommendation: DSH payments should be concentrated among hospitals with the highest shares of poor patients. Therefore, a minimum threshold should be established for the low-income patient cost share. Hospitals falling just above the threshold should receive only a minimal per case payment, with the amount then increasing as low-income share rises. The same general approach for distributing payments should apply to all PPS hospitals.

Response: Congress set the current threshold payments for Medicare disproportionate share hospitals in section 6003(c) of the Omnibus Budget Reconciliation Act of 1989. This provision expanded both the number of hospitals that could qualify for disproportionate share payments as well as the level of those payments for some categories. We note that large urban hospitals already receive payments based on this graduated payment structure. ProPAC notes that 95 percent of the hospitals receiving disproportionate share payments are designated as large urban hospitals. A May 1990 Congressional Budget Office (CBO) report to Congress, found that only large urban hospitals were overburdened by the cost of caring for the indigent population.

We agree with ProPAC that the disproportionate share payments should be concentrated on the hospitals in greatest need of assistance.

H. Collecting Data To Support Disproportionate Share Payment Reform (Recommendation 11)

Recommendation: The Secretary should collect the data necessary to implement a revised DSH payment mechanism. Due to recent and planned changes in the Medicaid and SSI programs, the measure now used to distribute DSH payments is becoming increasingly untenable. Although several new data elements would be required, this need not substantially increase the current hospital reporting burden. Periodic audits of these data would also be necessary.

Response: Currently, hospitals are not required to distinguish between bad debts and uncollectible accounts. When a patient does not pay a bill, the hospital is required to proceed through a series of steps in an attempt to collect the amount before it can be declared a bad debt. If the hospital were also seeking to collect data on uncompensated care, it would be required to further investigate whether or not the patient had the ability to pay. This could be a very burdensome task. ProPAC's solution to this problem is to include bad debts and charity care as a lump sum. However, Medicare currently pays hospitals for bad debts, and bad debts are removed from the exception to the disproportionate share adjustment calculation under our regulations at § 412.106(c)(2). In addition, we believe that the inclusion of bad debts in this calculation would encourage some hospitals to relax their collection efforts, at Medicare's expense. In any event, cost reporting forms would have to be changed and any data collected would have to be audited extensively by the fiscal intermediaries. Therefore, we question whether a data collection effort is feasible.

Our preference would be to use data that are already available and verifiable on a national basis for the Medicare disproportionate share adjustment calculation. We are currently pursuing such data sources as we fashion our legislative proposal.

I. Making Teaching and Disproportionate Share Payments to Facilities That Treat Medicare Risk Plan Enrollees (Recommendation 12)

Recommendation: Facilities that receive explicit direct GME, IME, or DSH payments for their Medicare fee-for-service patients should also receive additional payments for their Medicare risk plan patients. Mechanisms should be developed to distribute these payments in a way that reflects the policy goals of the Medicare program.

Response: ProPAC is concerned that explicit support for teaching and disproportionate share hospitals is eroding as managed care plans enroll more Medicare patients. According to ProPAC, managed care plans may be unwilling to pay the extra costs that these hospitals incur and separate mechanisms need to be developed to allow teaching and disproportionate share hospitals to remain competitive with other hospitals.

We are concerned that Medicare's payment to managed care plans includes compensation for direct and indirect graduate medical education and a disproportionate share adjustment that may not be reflected in the payments managed care plans are making to teaching and disproportionate share hospitals. The President's FY 1998 budget includes a proposal to remove funding included in Medicare's payment to managed care plans for teaching and disproportionate share activities and to pay these funds directly to teaching and disproportionate share hospitals based on their Medicare risk plan discharges.

J. Modifying the Tax Equity and Fiscal Responsibility Act (TEFRA) Payment System (Recommendation 14)

Recommendation: Congress should consider modifying the TEFRA payment system to correct for the payment disparity between new and old providers.

Response: HCFA has developed legislative proposals to modify the TEFRA payment system. Our proposals include rebasing the target rates for excluded hospitals and units using an average of each facility's two most recent cost reporting periods. This measure would realign payment rates with costs for both old and new providers. In conjunction with rebasing, the new target rates would be capped at 150 percent of a national mean rate for each type of facility in order to prevent newer high cost hospitals from receiving excessive target rates. Lower cost hospitals would be protected by establishing a floor of 70 percent of the national mean rate for each type of facility. Incentive payments would be modified by providing that no such payment would be made where a provider incurs costs that are less than or equal to 110 percent of the target amount. Finally, the President's FY 1998 budget proposal would revise the payment of capital costs to excluded hospitals and units by reducing reimbursement for capital to 85 percent of reasonable costs. TEFRA providers are the only hospitals that continue to be reimbursed for capital on a dollar-for-

dollar basis; consequently, they have no incentive to control their capital expenditures. This policy would make capital reimbursement policy more consistent among all hospitals and provide a needed incentive for cost control, particularly for newer excluded hospitals and units that may have more resources for capital expenditures because they are not as limited by the target rates on inpatient operating costs.

K. Prospective Payment System for Hospital Outpatient Services (Recommendation 15)

Recommendation: The Secretary should implement a prospective payment system for hospital outpatient services as soon as possible. Such a system should incorporate methods for controlling the volume of services.

Response: We agree with the need to implement a prospective payment system for outpatient services. Under the President's FY 1998 budget, a prospective payment system for outpatient services would be implemented on January 1, 1999.

While we await legislative authority, we will continue to develop and refine the Medicare-specific factors of the ambulatory patient group (APG) classification system that we recommend using. We plan to analyze the payments that would be made across sites (for example in ambulatory surgical centers (ASCs) or physician radiology practices) to ensure that we have not created unwarranted incentives to perform procedures in a given setting for financial reasons.

We are concerned as well about the potential for increases in the volume of services provided, both in outpatient departments and in other settings. We are examining approaches to volume measurement and control, including the level of packaging for ancillary services and the monitoring of patterns of care. For example, we could track whether Medicare beneficiaries received more clinic visits per patient under APGs than they did under reasonable cost-based payment. If so, we could take corrective action in one of two ways: We could adjust for the over utilization of outpatient services under a prospective payment system by incorporating the adjustments into the total system, which may impact on all hospitals; or we could target the specific hospitals identified as over utilizing services and apply the corrective action specifically to them.

L. Reducing Beneficiary Liability for Hospital Outpatient Services (Recommendation 16)

Recommendation: Beneficiary liability for hospital outpatient services should be reduced from 20 percent of charges to 20 percent of the allowed payment, as it is for other services. Further, Congress should correct the blended payment formula. This would help offset the increase in Medicare outlays resulting from a reduction in beneficiary liability.

Response: We agree that the issue of beneficiary coinsurance should be addressed and that the blended payment formula should be corrected. As part of the President's FY 1998 budget proposal, coinsurance for outpatient services would be reduced to 20 percent by 2007 as part of the implementation of a prospective payment system for these services.

M. Improving Dialysis Facility Data (Recommendation 17)

Recommendation: HCFA should regularly audit a representative sample of dialysis facility cost reports to ensure that it has accurate data to assess the adequacy of the composite rates. Further, it should systematically track quality indicators for these providers.

Response: HCFA does not audit renal facilities on a regular basis since audits do not result in recoupment of Medicare funds. This is because renal facilities are paid the composite rate, which is a set fee. Thus, there is no cost reimbursement. In recent years, Medicare funds for audits have been reduced. To manage these limited resources, HCFA has instructed contractors to audit those entities that generate the most return on audit dollars spent. With renal audits, the only payback is recoupment of unallowable bad debts, which are limited under the current payment system. Generally, audit funds in the budget are not used to review cost reports that have little or no effect on Medicare providers' payments.

We are also concerned about the quality of the data regarding dialysis facility costs in the Health Care Provider Cost Report Information System (HCRIS). Procedures and edits are in place to review data that do not appear reasonable. However, these procedures and edits cannot guarantee that renal facilities report their costs in accordance with Medicare reasonable cost principles. To accomplish this task, fiscal intermediaries perform desk reviews of cost reports for the purpose of finding errors or for identifying cost reports that should be audited. Because of limited resources, only in rare instances would a fiscal intermediary audit a renal facility's cost report. HCRIS edits are designed to ensure that data are within acceptable ranges or to identify facilities with missing data. The best way to ensure that cost reports are completed correctly is through education of individuals who are responsible for completing renal cost reports. The National Renal Administrator Association has been helpful in accomplishing this task and in improving the quality of the renal cost reporting data in HCRIS.

To address ProPAC's concern, we will review the current procedures and edits in HCRIS for renal facilities to address cost reporting data elements that appear out of line. We also will revise instructions to clarify problem areas in renal facility cost reporting. In addition, if and when our contractors' funding levels permit, we will conduct a limited set of audits on independent renal facilities. However, based on our prior experience, we do not believe it is necessary to audit hospital-based renal facilities, since these audits resulted in only minor changes to reported costs. Since independent facilities furnish about 75 percent of all dialysis treatments, we believe audit activity should focus on those facilities. As in prior years, we would provide ProPAC with the results of any audits and the percentage adjustment between reported and audited costs.

To improve the quality of care renal patients are receiving, we are in the process of developing revised ESRD conditions for coverage. The proposed regulations are patient-centered and outcome-oriented. The proposed conditions for coverage will focus on facilities achieving an optimal level of health and well-being for all dialysis patients. When published, these regulations should address ProPAC's recommendation that HCFA monitor treatment patterns and patient outcomes. After publication of a notice of proposed rulemaking, we plan to meet with the renal community to develop complete clinical data sets to monitor patient outcomes and medical conditions. These data will then be used to evaluate the quality of dialysis services furnished by renal facilities. In the short term, we are planning to require renal facilities to report values for Kt/V (which indicates whether the patient has too much urea in the blood after dialysis) or urea rate reduction to assess the adequacy of patient dialysis treatments furnished by facilities.

N. Update to the Composite Rate for Dialysis Services (Recommendation 18)

Recommendation: For FY 1998, the composite rate for dialysis services should be increased by 2.8 percent to ensure that beneficiaries receive quality care. This level reflects the projected increase in the market basket index for dialysis services and the Commission's judgment about the likely effects of scientific and technological advances and productivity gains on facilities' costs.

Response: We share ProPAC's concerns about the relationship among patient outcomes, adequacy of dialysis, and payment. As we acknowledged in last year's response to a similar recommendation, we recognize that an increase in the composite payment rate may be appropriate in the future. However, we do not believe an across-the-board rate increase is warranted. It may be appropriate to recommend payment increases based on the number of treatments that a renal facility furnishes, since dialysis facilities exhibit economies of scale. In proposing a future increase, we would want to examine the need to adjust payment increases for volume and the effects a new wage index would have on payments. The results of the National Kidney Foundation Dialysis Outcomes Quality Initiatives should provide us with information on the relationship between patient outcomes and costs and thus provide us with a basis for recommending an appropriate payment rate increase. However, our position is that any payment increase should be linked to implementation of the revised conditions for coverage for ESRD facilities. Until these conditions are published in final, we will continue to monitor facilities' costs and other factors to determine if it is appropriate to recommend a payment rate increase. Moreover, any dialysis rate increase must be considered within the context of the Medicare budgetary concerns.

O. Prospective Payment System for Skilled Nursing Facilities (SNFs) (Recommendation 19)

Recommendation: A case-mix adjusted prospective payment system for skilled nursing facilities should be implemented as soon as possible.

Response: We concur with the recommendation to implement a prospective payment system for SNFs as soon as possible. The President's FY 1998 budget includes a provision for a prospective payment system for SNFs to be implemented on July 1, 1998. This system will include payment for all costs (routine, ancillary, and capital) related to the services furnished to beneficiaries under Medicare Part A. By including all costs of services in the payment rates, spending growth per day of care can be contained. In addition, the provision includes authority to adjust payments to providers where inappropriate utilization (that is, excessive lengths of stay) of SNF services is found. Finally, the proposed prospective payment system would include case-mix adjustments using a resident classification system based on resource utilization groups. These resource utilization groups are tied to elements contained on the Minimum Data Set (MDS) 2.0 resident assessment instrument for nursing homes.

P. Controlling Payments for Skilled Nursing Facility Ancillary Services (Recommendation 20)

Recommendation: Until a prospective payment system is developed, the Secretary should take steps to control SNF expenditures by limiting payments for ancillary services.

Response: We agree that the rapid growth in payments for SNF ancillary services must be curbed. As indicated in the previous response, the President's FY 1998 budget includes a provision for an SNF prospective payment system, to be implemented on July 1, 1998, that will include payment for all the costs of services furnished to Medicare beneficiaries in a single prospective rate. Under this system, spending growth for ancillary and other services will be appropriately contained.

In addition, on March 28, 1997, we issued proposed revised salary equivalency guidelines for physical and respiratory therapy and new guidelines for occupational and speech therapy (62 FR 14851). We hope to finalize these guidelines prior to implementation of a SNF prospective payment system. The guidelines will have a significant impact on cost containment per hour of service billed for therapies provided in SNFs and other providers. However, it is unlikely that we will be able to implement other limits on ancillary services in the limited time available before implementation of the SNF prospective payment system. The suggestion that prospective payment rates for ancillary services could be adopted is obviated by the absence of any implementing authority in the current statute. Cost limits could be adopted but would take time to develop and implement. For example, using the resource based relative value scale (RBRVS) to set payment limits on ancillary services would require SNFs (as well as HCFA and fiscal intermediary claims processing systems) to begin using the HCFA Common Procedure Coding System (HCPCS) on Part A SNF bills in order to match a service with the appropriate fee schedule amount. With the planned implementation of the SNF prospective payment system in only a year, it would not seem practical to invest resources in the development and implementation of a RBRVS-based limit system that would not have any impact on the volume of services provided.

Q. Consolidated Billing for Skilled Nursing Facility Services (Recommendation 21)

Recommendation: The Secretary should require consolidated billing for all services furnished to beneficiaries during a Part A-covered SNF stay. Further, SNFs should use consistent, procedure-level codes for these services.

Response: We concur with ProPAC's observations regarding the need for and potential benefits of establishing such requirements, and we note that the President's FY 1998 budget proposal includes provisions that adopt this recommendation by requiring consolidated billing for Medicare services provided to SNF residents beginning in FY 1998, as well as the use of HCPCS codes on SNF bills.

We would like to comment in greater detail on ProPAC's suggestion that the consolidated billing proposal should specifically define the ancillary services to be included. We note that a similar comprehensive Medicare billing requirement for hospitals (section 1862(a)(14) of the Act), which has been in effect for well over a decade, defines the hospital's billing responsibility in terms of a blanket inclusion of all services that a hospital patient receives, with specific exemptions for the services of certain types of medical practitioners (for example, physicians, certified nurse-midwives, qualified psychologists, and certified registered nurse anesthetists) that are not regarded as falling within the scope of the hospital benefit. Existing law in the material following section 1861(h)(7) of the Act, defines the scope of the SNF benefit, in part, as excluding those types of services that would not be coverable under the inpatient hospital benefit when furnished to a hospital inpatient. Accordingly, our SNF consolidated billing proposal would similarly provide for a blanket inclusion of all services that the SNF's resident receives (with specific exceptions for certain types of medical practitioner services), in order to maintain consistency with the longstanding hospital provision.

R. Eliminating the Cost Limit Exemption for New Skilled Nursing Facilities (Recommendation 22)

Recommendation: The exemption from Medicare's routine cost limits for new providers should be eliminated. All SNFs should be subject to these limits.

Response: We concur with the recommendation to eliminate the exemption to the Medicare routine cost limits for new skilled nursing facilities. The rapid rise in the number of SNF beds and significant growth in payments both generally and specifically to SNFs with exemptions have demonstrated the diminished value of the exemption to the Medicare program and necessitated its elimination.

Under the SNF prospective payment system proposed in the President's FY 1998 budget, exemptions, as an artifact of reasonable cost-based payment, will be eliminated with the implementation of the system on July 1, 1998. Even so, we are moving to eliminate the new provider exemption through issuance of regulations in the near future. The issue of how the new policy will be applied relative to providers currently operating under the exemption is being addressed as part of the development of this regulation.

S. Defining the Home Health Care Benefit (Recommendation 23)

Recommendation: Congress should more specifically define the scope of Medicare's home health care benefit. The absence of clear coverage constraints limits the program's ability to control home health utilization.

Response: We agree with ProPAC's recommendation that clearer eligibility and coverage guidelines would aid the program's ability to control improper and abusive home health care utilization. The President's FY 1998 budget contains provisions regarding the definition of homebound and intermittent skilled nursing care, as well as the statutory authority for HCFA to develop and apply normative standards.

T. Prospective Payment System for Home Health Care Agencies (Recommendation 24)

Recommendation: A case-mix adjusted prospective payment system for home health care agencies should be implemented as soon as possible.

Response: We concur with ProPAC's recommendations. We agree that research to develop a robust case-mix measure is necessary and we have taken all available actions to expedite such research. In August 1996, a contract was awarded to develop a case-mix measurement for a home health prospective payment system. Under the terms of this contract, extensive information about the characteristics of patients and resource utilization will be collected. Agencies participating in this project will collect patient information using the Outcome and Assessment Information Set (OASIS) for home health, supplemented by additional items that may be predictive of resource utilization. Information will also be collected about visit lengths and procedures performed during all home health visits during an episode of care. We hope to recruit 90 agencies from 8 States for this project. Recruitment began in April 1997. We expect to have recommendations for a case-mix measurement for home health services by January 1999.

U. Interim Home Health Payment Method (Recommendation 25)

Recommendation: Congress should implement an interim home health payment method to control Medicare outlays until a fully prospective payment system is in place.

Response: The President's FY 1998 budget proposal includes an interim system, which would be effective on October 1, 1997. We are prepared to begin implementation of this system as soon as we are granted the necessary statutory authority.

V. Home Health Visit Coding (Recommendation 26)

Recommendation: Medicare should require consistent home health visit coding. Such information is essential for monitoring and evaluating the home health benefit and developing an effective case-mix adjustment system.

Response: Currently, there is no standard definition of what comprises a visit and there is variation in the type of service and length of time for providing those services. We agree such information is critical to developing an effective case-mix measure for a home health prospective payment system. In the case-mix research we are beginning, we will collect information on the length of time and procedures performed during a visit. This information will feed into the development of a prospective payment system and related coding system. We cannot proceed with specific coding refinements until the findings are available and a prospective payment system is designed. We are researching aspects of that approach rather than imposing reporting burdens on all home health agencies.

W. Home Health Copayments (Recommendation 27)

Recommendation: Modest beneficiary copayments, subject to an annual limit, should be introduced for home health care services.

Response: We are concerned about the impact that higher beneficiary out-of-pocket expenses would have on poorer Medicare beneficiaries who are not covered by Medicaid and cannot afford supplemental insurance. Poorer beneficiaries spend a greater proportion of their income on out-of-pocket costs. Our proposed interim system of limits should help control the growth in service use.

X. Controlling Long-Term Home Health Use (Recommendation 28)

Recommendation: The Secretary should analyze the growing number of beneficiaries who are receiving home health care for prolonged periods. Additional policies may be needed to address the spending associated with these beneficiaries.

Response: This is one of the many areas that are under evaluation in several payment-related research projects that are currently underway. We agree with ProPAC that there may need to be special provisions under the payment system we develop to address the needs of this type of patient. As the findings from the research become available, we are sure that this issue will be more clearly identified and we will propose whatever changes appear to best address these patient's needs.

Y. Prospective Payment System for Rehabilitation Hospitals and Distinct-Part Units (Recommendation 29)

Recommendation: A case-mix adjusted prospective payment system for rehabilitation hospitals and distinct-part units should be implemented as soon as possible.

Response: We have sponsored research on possible patient classification systems for rehabilitation care. In particular, a study by the RAND Corporation evaluated the prospects for a prospective payment system based on the rehabilitation coding system known as Functional Independence Measure (FIM) and the patient classification system known as Function-Related Groups (FRGs). The final report on this research will soon be complete. However, the preliminary results indicate much work would be necessary before a prospective payment system based on FRGs could be implemented. There are at least two important implementation issues: The reliability of the patient status measures and the

recognition of patient complications and comorbidities. In addition, implementation of a case-mix payment system for rehabilitation hospitals and units would require significant program resources and impose data reporting and collection requirements on providers. As a result, fewer resources would be available for research into developing an integrated payment approach for payment of rehabilitation care across all settings (excluded hospitals, SNFs, HHAs, comprehensive outpatient rehabilitation facilities, etc.) Thus, we prefer to focus our efforts on developing a coordinated payment system for post acute care that relies on a core assessment tool.

Z. Prospective Payment System for Long-Term Care Hospitals (Recommendation 30)

Recommendation: A case-mix adjusted prospective payment system for long-term care hospitals should be developed and implemented as soon as possible.

Response: We continually examine data and analyze proposals to simplify payment mechanisms and ensure that Medicare payments reflect efficient and high quality health care. We will be interested in evaluating the results of independent studies on case-mix measurement for long-stay hospital patients. At the same time, it is evident that many long-term care hospitals furnish extensive rehabilitation care that overlaps with care furnished in rehabilitation hospitals. Thus, a prospective payment system for post-acute care providers which includes SNFs and rehabilitation hospitals and units could conceivably be used for patients in long-term care hospitals. As a result, we have concerns that the development and implementation of a separate prospective payment system for fewer than 200 Medicare-certified, long-term care hospitals may not be an efficient use of program resources and may result in overlapping complexity and manipulation of payment.

AA. Elimination of the New Provider Exemption Period (Recommendation 32)

Recommendation: The initial exemption period for new PPS-excluded providers should be eliminated. Medicare payments for new providers should be based on an average target amount for facilities serving comparable types of patients.

Response: New hospitals that are excluded from the prospective payment system are exempt from the rate-of-increase ceiling during their first 2 years of operation. The purpose of this exemption is to recognize certain cost distortions that may be present as a hospital begins operation and tries to establish its presence in the market. However, the growth of new excluded hospitals increasingly includes a large number of hospitals that are reconfigurations of existing structures. These new hospitals do not require the same length of time to establish market presence and increase patient load. As a result, there is evidence that the new hospital exemption does not always serve its original purpose and might create incentives to increase its costs in the exempt years when it is not subject to cost limitation. The President's budget proposal would limit payment during the exempt years to reasonable costs not to exceed 150 percent of the national mean cost per case for each type of excluded hospital. This modification should eliminate the incentive to increase costs in the first years of a new excluded hospital's operation.

BB. Coordinating Post-Acute Care Provider Payment Methods (Recommendation 33)

Recommendation: The Commission urges the Congress and the Secretary to consider the overlap in services and beneficiaries across post-acute care providers as they modify Medicare payment policies. Changes to one provider's payment method could shift utilization to other sites and thus fail to curb overall spending. To this end, ProPAC commends HCFA's efforts to identify elements common to the various facility-specific patient classification systems to use in comparing beneficiaries across settings.

Response: We concur with the recommendation to coordinate payment methods for post-acute providers. Our long-term strategy for Medicare post-acute services centers on the development of a fully integrated payment and delivery system for post-acute care that is as neutral as possible regarding physicians' and patients' decisions about the use of particular services. This system should provide payments sufficient to ensure that beneficiaries receive quality care in the appropriate settings and that transfers between settings occur when medically necessary and not to generate higher or duplicate revenues for comparable services. In addition, we believe that care should be beneficiary-specific, relying on a standardized assessment of each patient's care needs while offering them choices in the care that they will receive. This system must have long-term financial integrity through controlling both payment per service and the volume of services offered.

Essential to achieving this long-term goal is the near-term coordination of the separate payment methods for post-acute providers. Through the development and implementation of prospective payment systems that complement each other, Medicare can impose greater coordination in the financing and delivery of post-acute services. This will minimize quality and payment problems associated with site/service substitution and allow for an easier transition to a fully integrated system in the future. The key to the function of these prospective payment systems, as well as any future integrated system for post-acute services, is the adoption of principles for identifying patient resource needs that have common elements from system to system so that ultimately there can be a broader classification system and more standardized methods for grouping patients and payments. Basic to this process is the development of a core screening and assessment tool. An assessment methodology is critical to addressing systematic issues related to quality, payment, and utilization.

The President's FY 1998 budget contains proposed language giving the Secretary authority to implement an integrated payment system for Medicare post-acute services after FY 2001. This language also provides authority to collect the data necessary to develop and implement such a system prior to that date. We are in the early stages of designing the post-acute core screening and assessment tool that will provide much of the necessary data.

CC. Linking Payments for an Episode of Care (Recommendation 34)

Recommendation: The Secretary should begin a demonstration project that links payments for the acute and post-acute portions of an episode of care. It should be designed to test whether this approach can reduce expenditures and improve continuity of care.

Response: As discussed in our previous response to recommendation 33, our long-term strategy for Medicare post-acute services centers on the development of a fully integrated payment and delivery system. Within the framework of this strategy and the basic concepts we have outlined, there are a variety of different options for structuring a payment and delivery system for Medicare post-acute services. These include various case management approaches, integrated delivery/payment systems, and more traditional resource based prospective payment models. Certainly a system that links payment for the acute and post-acute

portions of an episode would fall within the scope of this framework.

Conceptually, the idea of linking (or ''bundling'') payment for the acute and post-acute portions of an episode makes sense and has great potential for effective cost containment under the Medicare model. As a practical matter, this approach is extremely complex, involving a range of difficult technical and policy issues related to rate setting, patient classification, quality, outcomes, accountability, and payment arrangements (that is, which entity should receive the payment). HCFA has funded several studies in this area. These studies have discussed the complexity of this approach and concluded by citing the need for additional research before going forward with a demonstration. In addition, two other provisions in the President's FY 1998 budget proposal give HCFA the authority to try this approach in certain circumstances. The Centers of Excellence proposal expands the set of conditions for which we could pay a single flat rate for all diagnostic and physician services to include other heart procedures, knee surgery and hip replacement. This might allow us to experiment with including some postacute services in the bundled package of services. We are also seeking legislative authority that would allow us to selectively contract with providers for a package of services for a specific condition, which would be another opportunity to experiment with arrangements including postacute care.

DD. Improving the Risk Adjustment Method (Recommendation 35)

Recommendation: A combination of techniques should be used to adjust Medicare's capitation payments so that they better reflect enrollees' likely use of services. The Secretary should adopt risk adjusters based on diagnosis, health status, or both as well as an outlier policy for costly cases. Partial capitation arrangements should be tested. Plans should provide data to Medicare to support improved risk adjustment. The new risk adjustment system should be phased in.

Response: ProPAC recommends using risk adjustment methods that would explain more of the variances in health care spending. Currently, we are testing risk adjusters as part of the Medicare Choices demonstration. The Administration is developing a new payments methodology that incorporates more refined health status adjusters. A proposal could be ready for Congressional consideration as early as 1999, with implementation beginning as early as 2001. HCFA would want to apply risk adjusters as soon as technically feasible.

Also, ProPAC has suggested, as a part of risk adjustment, a partial capitation method of payment, using an outlier approach to capitation payment. We are trying to establish an outlier demonstration in the Seattle area. One of the problems we have encountered is finding a sufficient number of plans able to supply encounter data. We wanted at least three plans included in the demonstration. To date, two of the three plans have not demonstrated an ability to produce the data required. The President's budget proposal includes a partial risk method that we prefer to the outlier approach recommended by ProPAC. Under the President's budget proposal, the partial risk method would replace cost based payments. This method would allow organizations to share with HCFA in either savings or losses if the payment mechanism requires amounts to be paid either below or above the risk capitation rate.

EE. Excluding Teaching and Disproportionate Share Payments From the Capitation Rates (Recommendation 36)

Recommendation: The fee-for-service spending estimates Medicare uses to calculate capitation rates should exclude special payments to hospitals with graduate medical education (GME) programs and to those serving a disproportionate share of low-income patients.

Response: We agree with ProPAC's recommendation to remove GME and DSH components from the capitation rates. The President's budget proposal removes these components from the capitation payments over a 2-year period. The funds removed from the capitation rates will be paid directly to teaching and DSH hospitals when they care for managed care enrollees. Managed care plans with approved teaching programs would also be eligible for direct payment for graduate medical education expenses.

FF. Increasing Capitation Rates to Reflect Use of Services Covered by Other Government Programs (Recommendation 37)

Recommendation: Medicare should increase the capitation rates to include estimated spending for covered services that program beneficiaries receive in facilities operated by the Departments of Veterans Affairs and Defense.

Response: Under the Administration's proposal to revise the payment methodology, the current link between local fee-for-service payments and managed care payments rates is not retained. By 2002, 30 percent of the county rate will be based on national average payment levels. In addition, rates will be updated based on the national average per capita rate of growth in the Medicare program. In view of the reduced weight of local fee-for-service payment levels and the anticipated transition to a new methodology, we believe the need to further examine the impact of spending for services provided to Medicare beneficiaries in Veterans Affairs and Defense facilities is significantly reduced. Additionally, when we undertook such an examination a few years ago, we had problems with the data submitted and could not establish an appropriate adjustment to the capitation payments.

GG. Reducing the Variation in Payment Rates (Recommendation 38)

Recommendation: The variation in capitation rates across counties should be narrowed. The lowest rates should be raised to a minimum amount, without increasing aggregate program spending. Medicare should evaluate the adequacy and appropriateness of its payment rates, however they are determined.

Response: The Administration supports narrowing the variation in capitation rates across counties and creating a minimum payment amount. The FY 1998 budget proposal to revise the payment methodology includes both of these elements. By 2002, the difference between the highest and the lowest county rates is reduced from the current difference of about 250 percent to about 100 percent. The Administration's proposal also addresses the appropriateness of the rates by making an adjustment for favorable selection into managed care plans, beginning in 2000. This adjustment is consistent with the judgement of the General Accounting Office, the Physician Payment Review Commission, as well as ProPAC, that managed care plans are currently significantly overpaid because of favorable selection. Also, as noted above, the Administration is developing a new payment methodology that incorporates more refined health status adjusters. A proposal could be ready for Congressional consideration as early as 1999, with phase-in beginning as early as 2001.

HH. Updating Capitation Rates (Recommendation 39)

Recommendation: Medicare should use a national update framework rather than fee-for-service spending increases to determine the annual changes in risk plan payment rates.

Response: Under the current methodology, rates are updated based on local fee-for-service spending patterns. Under the Administration's proposal to revise the payment methodology, rates would be updated based on the national average per capita rate of growth in the Medicare program, which incorporates changes at the national level in both price and utilization of services. In developing the revised methodology noted above, which we expect to have ready for Congressional consideration as early as 1999, we will examine appropriate update mechanisms.

II. Evaluating Alternative Methods for Determining Capitation Rates (Recommendation 40)

Recommendation: The Medicare program should continue to evaluate other methods for determining payment rates, including competitive bidding and negotiation between the program and risk plans.

Response: We are in the process of developing several demonstration projects for evaluation purposes. One project concentrates on competitive bids, including the use of a third party enroller. In this project, HMOs could be paid an amount based on bids they submit. In addition, the Choices project will have participants receiving payments that start with 95 percent of the Adjusted Average per Capita Cost (AAPCC) (HCFA's normal payment method). Later in the project, these payments will be modified using risk adjusters. This project will also include contracting with organizations that may not qualify as HMOs. Finally, we are trying to establish an outlier project in Seattle, as mentioned above. However, we have not yet been able to acquire sufficient data to begin this project.

JJ. Data to Improve Plan Payments (Recommendation 41)

Recommendation: The Secretary should require risk plans to provide information on the costs of furnishing services to Medicare enrollees. These data are necessary to determine the appropriateness of payment rates and improve Medicare payment methods.

Response: We are in the process of revising the adjusted community rate (ACR) proposal and process. Some of the concepts included in this review include requiring the ACR to contain and use certain cost data to establish the plan's charge structure. In addition, we are considering incorporating into the approval process a comparison of ACR data to other required financial reports.

KK. Evaluating Plan Quality of Care (Recommendation 42)

Recommendation: The Commission supports the Secretary's efforts to evaluate Medicare risk plans through the use of the Health Plan Employer Data and Information Set (HEDIS) and satisfaction surveys. The Secretary should, in cooperation with the appropriate organizations, continue to adapt and improve measurement tools to evaluate plan performance.

Response: In addition to our use of HEDIS to evaluate Medicare risk plans, we will survey all of the enrollees of HMO and CMP contractors (both risk and cost) on their satisfaction with various aspects of their plan. This effort is in cooperation with the Agency for Health Care Policy and Research.

LL. Improving Information for Beneficiary Choice (Recommendation 43)

Recommendation: The Commission supports the Secretary's efforts to improve beneficiary information about managed care options. All beneficiaries should receive quality and satisfaction data for risk plans and the fee-for-service option to help them decide about enrolling in a risk plan. Cost and benefit definitions should be standardized so that beneficiaries can better compare plans. Additionally, the Secretary should periodically assess whether such information could be improved.

Response: We are continually trying to improve the information given to the Medicare beneficiary. We are in the process of developing a comparison chart comparing benefits and charges among HMOs within a specified service area. Later this year, HEDIS data and consumer survey results will be released. In addition, HCFA is in the process of releasing national marketing guidelines that require HMOs to produce marketing materials that fully disclose, in a clear and understandable manner, information to be used by the Medicare beneficiary.

The Administration's FY 1998 budget also includes proposals addressing the provision of information to beneficiaries. It would require the Secretary to develop and provide comparative information to beneficiaries on all managed care plans and Medigap plans in their area, and it would require Medigap and managed care plans to finance the associated costs. It would also require the Secretary to establish standardized packages for certain additional benefits offered by Medicare managed care plans. For example, if the Secretary established a standardized package for outpatient prescription drugs, plans could only offer enrollees this benefit according to the benefit structure established by the Secretary.

IX. Other Required Information

A. Requests for Data From the Public

In order to respond promptly to public requests for data related to the prospective payment system, we have set up a process under which commenters can gain access to the raw data on an expedited basis. Generally, the data are available in computer tape format or cartridges; however, some files are available on diskette, and on the Internet at HTTP://WWW.HCFA.GOV/STATS/PUBFILES.HTML. Data files are listed below with the cost of each. Anyone wishing to purchase data tapes, cartridges, or diskettes should submit a written request along with a company check or money order (payable to HCFA–PUF) to cover the cost, to the following address: Health Care Financing Administration, Public Use Files, Accounting Division, P.O. Box 7520, Baltimore, Maryland 21207–0520, (410) 786–3691. Files on the Internet may be downloaded without charge.

1. Expanded Modified MEDPAR-Hospital (National)

The Medicare Provider Analysis and Review (MEDPAR) file contains records for 100 percent of Medicare beneficiaries using hospital inpatient services in the United States. (The file is a Federal fiscal year file which means discharges occurring October 1 through September 30.) The records are stripped of most data elements that will permit identification of beneficiaries. The hospital is identified by the 6-position Medicare billing number. The file is available to persons qualifying under the terms of the Notice of Proposed New Routine Uses for an Existing System of Records published in the **Federal Register** on December 24, 1984 (49 FR 49941), and amended by the July 2, 1985 notice (50 FR 27361). The national file consists of approximately 11 million records. Under the requirements of these notices, a data release agreement must be signed by the purchaser before release of these data. For all files requiring a signed data release agreement, please write or call to obtain a blank agreement form before placing an order. Two versions of this file are created each year. They support the following:

- Notice of Proposed Rulemaking (NPRM) published in the **Federal Register**, usually available by the end of May. This file is derived from the MedPAR file with a cutoff of 3 months

after the end of the fiscal year (December file).

• Final Rule published in the **Federal Register**, usually available by the first week of September. This file is derived from the MedPAR file with a cutoff of 9 months after the end of the fiscal year (June file).

Media: Tape/Cartridge
File Cost: $3,415.00 per fiscal year
Periods Available: FY 1988 through FY 1996

2. Expanded Modified MedPAR-Hospital (State)

The State MedPAR file contains records for 100 percent of Medicare beneficiaries using hospital inpatient services in a particular State. The records are stripped of most data elements that will permit identification of beneficiaries. The hospital is identified by the 6-position Medicare billing number. The file is available to persons qualifying under the terms of the Notice of Proposed New Routine Uses for an Existing System of Records published in the December 24, 1984 **Federal Register** notice, and amended by the July 2, 1985 notice. This file is a subset of the Expanded Modified MedPAR-Hospital (National) as described above. Under the requirements of these notices, a data release must be signed by the purchaser before release of these data. Two versions of this file are created each year. They support the following:

• NPRM published in the **Federal Register**, usually available by the end of May. This file is derived from the MedPAR file with a cutoff of 3 months after the end of the fiscal year (December file).

• Final Rule published in the **Federal Register**, usually available by the first week of September. This file is derived from the MedPAR file with a cutoff of 9 months after the end of the fiscal year (June file).

Media: Tape/Cartridge
File Cost: $1,050.00 per State per year
Periods Available: FY 1988 through FY 1996

3. HCFA Hospital Wage Index Data File

This file is composed of four separate diskettes. Included are: (1) The hospital hours and salaries for FY 1994 used to create the proposed FY 1998 prospective payment system wage index; (2) a history of all wage indexes used since October 1, 1983; (3) a list of State and county codes used by SSA and FIPS (Federal Information Processing Standards), county name, and Metropolitan Statistical Area (MSA); and (4) a file of hospitals that were reclassified for the purpose of the proposed FY 1998 wage index. Two versions of these files are created each year. They support the following:

• NPRM published in the **Federal Register**, usually by the end of May.

• Final Rule published in the **Federal Register**, usually by the first week of September.

Media: Diskette/Internet
File Cost: $500.00
Periods Available: FY 1998 PPS Update

We note that the files also are available individually as indicated below.

(1) HCFA Hospital Wage Index Survey Only (usually available by the end of March for the NPRM and the middle of August for the final rule).

(2) Urban and Rural Wage Indices Only.

(3) PPS SSA/FIPS MSA State and County Crosswalk Only (usually available by the end of March).

(4) Reclassified Hospitals by Provider Only.

Media: Diskette/Internet
File cost: $145.00 per file

4. PPS–IV to PPS–XIII Minimum Data Sets

The Minimum Data Set contains cost, statistical, financial, and other information from Medicare hospital cost reports. The data set includes only the most current cost report (as submitted, final settled, or reopened) submitted for a Medicare participating hospital by the Medicare Fiscal Intermediary to HCFA. This data set is updated at the end of each calendar quarter and is available on the last day of the following month.

MEDIA: TAPE/CARTRIDGE

	Periods beginning on or after	And before
PPS IV	10/01/86	10/01/87
PPS V	10/01/87	10/01/88
PPS VI	10/01/88	10/01/89
PPS VII	10/01/89	10/01/90
PPS VIII	10/01/90	10/01/91
PPS IX	10/01/91	10/01/92
PPS X	10/01/92	10/01/93
PPS XI	10/01/93	10/01/94
PPS XII	10/01/94	10/01/95
PPS XIII	10/01/95	10/01/96

(**Note:** The PPS XIII Minimum Data Set covering FY 1996 will not be available until July 31, 1997.)

File Cost: $715.00 per year

5. PPS–IX to PPS–XIII Capital Data Set

The Capital Data Set contains selected data for capital-related costs, interest expense and related information and complete balance sheet data from the Medicare hospital cost report. The data set includes only the most current cost report (as submitted, final settled or reopened) submitted for a Medicare certified hospital by the Medicare fiscal intermediary to HCFA. This data set is updated at the end of each calendar quarter and is available on the last day of the following month.

MEDIA: TAPE/CARTRIDGE

	Periods beginning on or after	And before
PPS IX	10/01/91	10/01/92
PPS X	10/01/92	10/01/93
PPS XI	10/01/93	10/01/94
PPS XII	10/01/94	10/01/95
PPS XIII	10/01/95	10/01/96

(**Note:** The PPS XIII Capital Data Set covering FY 1996 will not be available until July 31, 1997.)

File Cost: $715.00 per year

6. Provider-Specific File

This file is a component of the PRICER program used in the fiscal intermediary's system to compute DRG payments for individual bills. The file contains records for all prospective payment system eligible hospitals, including hospitals in waiver States, and data elements used in the prospective payment system recalibration processes and related activities. Beginning with December 1988, the individual records were enlarged to include pass-through per diems and other elements.

Media: Tape/Cartridge
File Cost: $500.00 per file
Periods Available: FY 1987 through FY 1997 (December updates)

Media: Diskette/Internet
File Cost: $265.00
Periods Available: FY 1997 PPS Update

7. HCFA Medicare Case-Mix Index File

This file contains the Medicare case-mix index by provider number as published in each year's update of the Medicare hospital inpatient prospective payment system. The case-mix index is a measure of the costliness of cases treated by a hospital relative to the cost of the national average of all Medicare hospital cases, using DRG weights as a measure of relative costliness of cases. Two versions of this file are created each year. They support the following:

• NPRM published in the **Federal Register**, usually by the end of May.

• Final rule published in the **Federal Register**, usually by the first week of September.

Media: Diskette/Internet

Price: $145.00 per year
Periods Available: FY 1985 through FY 1996 (Internet—FY 1996)

8. Table 5 DRG File

This file contains a listing of DRGs, DRG narrative description, relative weight, and geometric and arithmetic mean lengths of stay as published in the **Federal Register**. The hardcopy image has been copied to diskette. There are two versions of this file as published in the **Federal Register**: a. NPRM, usually published by the end of May. b. Final rule, usually published by the first week of September.

Media: Diskette/Internet
File Cost: $145.00
Periods Available: FY 1998 PPS Update

9. PPS Payment Impact File

This file contains data used to estimate payments under Medicare's hospital inpatient prospective payment systems for operating and capital-related costs. The data are taken from various sources, including the Provider-Specific File, Minimum Data Sets, and prior impact files. The data set is abstracted from an internal file used for the impact analysis of the changes to the prospective payment systems published in the **Federal Register**. This file is available for release 1 month after the proposed and final rules are published in the **Federal Register**.

Media: Diskette/Internet
File Cost: $145.00
Periods Available: FY 1998 PPS Update

10. AOR/BOR Tables

This file contains data used to develop the DRG relative weights. It contains mean, maximum, minimum, standard deviation, and coefficient of variation statistics by DRG for length of stay and standardized charges. The BOR tables are ''Before Outliers Removed'' and the AOR is ''After Outliers Removed.'' (Outliers refers to statistical outliers, not payment outliers.) Two versions of this file are created each year. They support the following:

- NPRM published in the **Federal Register**, usually by the end of May.
- Final rule published in the **Federal Register**, usually by the first week of September.

Media: Diskette/Internet
File Cost: $145.00
Periods Available: FY 1998 PPS Update

11. HCFA FY 1992 Capital-Related Tax File

This file contains data used to develop a proposed FY 1996 special property tax adjustment to the capital prospective payment system for capital-related costs. This proposed adjustment was not implemented. The data set includes a preliminary hospital-specific add-on amount for all PPS hospitals. The data set also contains the information used to propose an adjustment to the Federal rate so that the tax add-on is budget neutral. The proposed property tax adjustment provides special treatment to qualified hospitals who pay capital-related property taxes. The add-on was determined using base year tax costs per discharge attributable to Medicare. The data are taken from the FY 1992 Medicare hospital cost report and a special request for validation by the fiscal intermediaries.

Media: Diskette

File cost: $145.00

Period available: FY 1992

For further information concerning these data tapes, contact Mary R. White at (410) 786–0168.

Commenters interested in obtaining or discussing any other data used in constructing this rule should contact Stephen Phillips at (410) 786–4548.

B. Public Comments

Because of the large number of items of correspondence we normally receive on a proposed rule, we are not able to acknowledge or respond to them individually. However, in preparing the final rule, we will consider all comments concerning the provisions of this proposed rule that we receive by the date and time specified in the ''Dates'' section of this preamble and respond to those comments in the preamble to that rule. We emphasize that, given the statutory requirement under section 1886(e)(5) of the Act that our final rule for FY 1998 be published by September 1, 1997, we will consider only those comments that deal specifically with the matters discussed in this proposed rule. Subject to the provisions of the Contract With America Advancement Act of 1996, (Pub. L. 104–121), these changes would be applicable to discharges occurring on or after October 1, 1997.

List of Subjects

42 CFR Part 412

Administrative practice and procedure, Health facilities, Medicare, Puerto Rico, Reporting and recordkeeping requirements.

42 CFR Part 413

Health facilities, Kidney diseases, Medicare, Puerto Rico, Reporting and recordkeeping requirements.

42 CFR Part 489

Health facilities, Medicare, Reporting and recordkeeping requirements.

42 CFR chapter IV would be amended as set forth below:

A. Part 412 is amended as follows:

PART 412—PROSPECTIVE PAYMENT SYSTEMS FOR INPATIENT HOSPITAL SERVICES

1. The authority citation for part 412 continues to read as follows:

Authority: Secs. 1102 and 1871 of the Social Security Act (42 U.S.C. 1302 and 1395hh).

2. Section 412.22 is amended by adding new paragraphs (e), (f), (g), and (h) to read as follows:

§ 412.22 Excluded hospitals and hospital units: General rules.

* * * * *

(e) *Hospitals within hospitals.* Except as provided in paragraph (f) of this section, for cost reporting periods beginning on or after October 1, 1994, a hospital that occupies space in a building also used by another hospital, or in one or more entire buildings located on the same campus as buildings used by another hospital, must meet the following criteria:

(1) *Separate governing body.* The hospital has a governing body that is separate from the governing body of the hospital occupying space in the same building or on the same campus. The hospital's governing body is not under the control of the hospital occupying space in the same building or on the same campus, or of any third entity that controls both hospitals.

(2) *Separate chief medical officer.* The hospital has a single chief medical officer who reports directly to the governing body and who is responsible for all medical staff activities of the hospital. The chief medical officer of the hospital is not employed by or under contract with either the hospital occupying space in the same building or on the same campus or any third entity that controls both hospitals.

(3) *Separate medical staff.* The hospital has a medical staff that is separate from the medical staff of the hospital occupying space in the same building or on the same campus. The hospital's medical staff is directly accountable to the governing body for the quality of medical care provided in the hospital, and adopts and enforces bylaws governing medical staff activities, including criteria and procedures for recommending to the governing body the privileges to be granted to individual practitioners.

(4) *Chief executive officer.* The hospital has a single chief executive officer through whom all administrative authority flows, and who exercises control and surveillance over all administrative activities of the hospital. The chief executive office is not employed by, or under contract with, either the hospital occupying space in the same building or on the same campus or any third entity that controls both hospitals.

(5) *Performance of basic hospital functions.* The hospital meets one of the following criteria:

(i) The hospital performs the basic functions specified in §§ 482.21 through 482.27, 482.30, and 482.42 of this chapter through the use of employees or under contracts or other agreements with entities other than the hospital occupying space in the same building or on the same campus, or a third entity that controls both hospitals. Food and dietetic services and housekeeping, maintenance, and other services necessary to maintain a clean and safe physical environment could be obtained under contracts or other agreements with the hospital occupying space in the same building or on the same campus, or with a third entity that controls both hospitals.

(ii) For the same period of at least 6 months used to determine compliance with the length-of-stay criterion in § 412.23(e)(2), the cost of the services that the hospital obtained under contracts or other agreements with the hospital occupying space in the same building or on the same campus, or with a third entity that controls both hospitals, is no more than 15 percent of the hospital's total inpatient operating costs, as defined in § 412.2(c). For purposes of this paragraph (e)(5)(ii), however, the costs of preadmission services are those specified under § 413.40(c)(2) rather than those specified under § 412.2(b)(5).

(iii) For the same period of at least 6 months used to determine compliance with the length-of-stay criterion in § 412.23(e)(2), the hospital has an inpatient population of whom at least 75 percent were referred to the hospital from a source other than another hospital occupying space in the same building or on the same campus.

(f) *Special provision for certain hospitals.* If a hospital cannot meet the criteria in paragraph (e)(1) or (e)(3) of this section solely because its governing body or medical staff is under the control of a third entity that also controls the hospital with which it shares a building or campus, or cannot meet the criteria in paragraph (e)(2) or (e)(4) of this section solely because its chief medical officer or chief executive officer is employed by or under contract with such a third entity, the hospital can nevertheless qualify for an exclusion if it meets other applicable criteria and—

(1) Is owned and operated by a State university, and has been continuously owned and operated by that university since October 1, 1994;

(2) Is required by State law to be subject to the ultimate authority of the university's governing body; and

(3) Was excluded from the prospective payment systems under this section for any cost reporting period beginning on or after October 1, 1993, but before October 1, 1994.

(g) *Effective date for certain hospitals.* If a hospital has been excluded from the prospective payment systems under this section for any cost reporting period beginning on or after October 1, 1993, but before October 1, 1994, the criteria in paragraph (e) of this section do not apply to the hospital until the hospital's first cost reporting period beginning on or after October 1, 1995.

(h) *Definition of control.* For purposes of this section, control exists if an individual or an organization has the power, directly or indirectly, significantly to influence or direct the actions or policies of an organization or institution.

§ 412.23 [Amended]

3. Section 412.23 is amended by removing paragraphs (e)(3) through (e)(5).

4. Section 412.30 is amended by redesignating paragraphs (a) through (d) as paragraphs (b) through (e), respectively, and adding a new paragraph (a). Redesignated paragraph (b) is further amended by redesignating paragraph (b)(4) as paragraph (b)(5), and adding a new paragraph (b)(4) to read as follows:

§ 412.30 Exclusion of new rehabilitation units and expansion of units already excluded.

(a) *Bed capacity in units.* A decrease in bed capacity must remain in effect for at least a full 12-month cost reporting period before an equal or lesser number of beds can be added to the hospital's licensure and certification and considered ''new'' under paragraph (b) of this section. Thus, when a hospital seeks to establish a new unit under the criteria under paragraph (b) of this section, or to enlarge an existing unit under the criteria under paragraph (d) of this section, the regional office will review its records on the facility to determine whether any beds have been delicensed and decertified during the 12-month cost reporting period before the period for which the hospital seeks to add the beds. To the extent bed capacity was removed from the hospital's licensure and certification during that period, that amount of bed capacity may not be considered ''new'' under paragraph (b) of this section.

(b) *New units.*

(5) * * *

* * * * *

(4) If a hospital that has not previously participated in the Medicare program seeks exclusion of a rehabilitation unit, it may designate certain beds as a new rehabilitation unit for the first full 12-month cost reporting period that occurs after it becomes a Medicare-participating hospital. The written certification described in paragraph (b)(2) of this section also is effective for any cost reporting period of not less than 1 month and not more than 11 months occurring between the date the hospital began participating in Medicare and the start of the hospital's regular 12-month cost reporting period.

* * * * *

5. Section 412.80 is revised to read as follows:

§ 412.80 General provisions.

(a) *Basic rule*—(1) *Discharges occurring on or after October 1, 1994 and before October 1, 1997.* For discharges occurring on or after October 1, 1994, and before October 1, 1997, except as provided in paragraph (b) of this section concerning transferring hospitals, HCFA provides for additional payment, beyond standard DRG payments, to a hospital for covered inpatient hospital services furnished to a Medicare beneficiary if either of the following conditions is met:

(i) The beneficiary's length of stay (including days at the SNF level of care if a SNF bed is not available in the area) exceeds the mean length-of-stay for the applicable DRG by the lesser of the following:

(A) A fixed number of days, as specified by HCFA; or

(B) A fixed number of standard deviations, as specified by HCFA.

(ii) The beneficiary's length of stay does not exceed criteria established under paragraph (a)(1)(i) of this section, but the hospital's charges for covered services furnished to the beneficiary, adjusted to operating costs and capital costs by applying cost-to-charge ratios as described in § 412.84(h), exceed the DRG payment for the case plus a fixed dollar amount (adjusted for geographic variation in costs) as specified by HCFA.

(2) *Discharges occurring on or after October 1, 1997.* For discharges occurring on or after October 1, 1997,

except as provided in paragraph (b) of this section concerning transfers, HCFA provides for additional payment, beyond standard DRG payments, to a hospital for covered inpatient hospital services furnished to a Medicare beneficiary if the hospital's charges for covered services, adjusted to operating costs and capital costs by applying cost-to-charge ratios as described in § 412.84(h), exceed the DRG payment for the case plus a fixed dollar amount (adjusted for geographic variation in costs) as specified by HCFA.

(b) *Outlier cases in transferring hospitals.* HCFA provides cost outlier payments to a transferring hospital that does not receive payment under § 412.2(b) for discharges specified in § 412.4(d)(2), if the hospital's charges for covered services furnished to the beneficiary, adjusted to cost by applying a national cost/charge ratio, exceed the DRG payment for the case plus a fixed dollar amount (adjusted for geographic variation in costs) as specified by HCFA, divided by the geometric mean length of stay for the DRG and multiplied by the beneficiary's length of stay plus 1 day.

(c) *Publication and revision of outlier criteria.* HCFA will issue threshold criteria for determining outlier payment in the annual notice of the prospective payment rates published in accordance with § 412.8(b).

(d) *Relation to hospitals that incur indirect costs for graduate medical education programs and that serve as disproportionate share of low-income patients.* The outlier payment amounts are included in total DRG revenue for purposes of determining payments to hospitals that incur indirect costs for graduate medical education programs under § 412.105 and to hospitals that serve a disproportionate share of low-income patients under § 412.106.

§ 412.82 [Amended]

6. In § 412.82(a), in the first sentence, the word ''If'' is removed and the phrase ''For discharges occurring before October 1, 1997, if'' is added in its place.

§ 412.84 [Amended]

7. In § 412.84 in the first sentence of paragraph (a), the reference ''§ 412.80(a)(1)(ii)'' is revised to read ''§ 412.80(a)''.

§ 412.86 [Amended]

8. In the introductory text to § 412.86, the word ''If'' is removed and the phrase ''For discharges occurring before October 1, 1997, if'' is added in its place.

9. In § 412.96, the introductory text of paragraph (c)(1) is revised to read as follows:

§ 412.96 Special treatment: Referral centers.

* * * * *

(c) * * *

(1) *Case mix index.* HCFA sets forth national and regional case-mix index values in each year's annual notice of prospective payment rates published under § 412.8(b). The methodology HCFA uses to calculate these criteria is described in paragraph (g) of this section. The case-mix index value to be used for an individual hospital in the determination of whether it meets the case-mix index criteria is that calculated by HCFA from the hospital's own billing records for Medicare discharges as processed by the fiscal intermediary and submitted to HCFA. The hospital's case-mix index for discharges (not including discharges from units excluded from the prospective payment system under subpart B of this part) during the most recent Federal fiscal year that ended at least one year prior to the beginning of the cost reporting period for which the hospital is seeking referral center status must be at least equal to—

* * * * *

10. In § 412.105, paragraph (g)(1)(i) is republished, paragraph (g)(1)(i)(B) is revised, and paragraph (g)(1)(iv) is removed, to read as follows:

§ 412.105 Special treatment: Hospitals that incur indirect costs for graduate medical education programs.

* * * * *

(g) *Determining the total number of full-time equivalent residents for cost reporting periods beginning on or after July 1, 1991.*

(1) For cost reporting periods beginning on or after July 1, 1991, the count of full-time equivalent residents for the purpose of determining the indirect medical education adjustment is determined as follows:

(i) The residents must be enrolled in an approved teaching program. An approved teaching program is one that meets one of the following requirements:

* * * * *

(B) May count towards certification of the participant in a specialty or subspecialty listed in the current edition of either of the following publications:

(*1*) The Directory of Graduate Medical Education Programs published by the American Medical Association.

(*2*) The Annual Report and Reference Handbook published by the American Board of Medical Specialties.

* * * * *

B. Part 413 is amended as set forth below:

PART 413—PRINCIPLES OF REASONABLE COST REIMBURSEMENT; PAYMENT FOR END-STAGE RENAL DISEASE SERVICES; OPTIONAL PROSPECTIVELY DETERMINED PAYMENT RATES FOR SKILLED NURSING FACILITIES

1. The authority citation for Part 413 continues to read as follows:

Authority: Secs. 1102, 1861(v)(1)(A), and 1871 of the Social Security Act (42 U.S.C. 1302, 1395x(v)(1)(A), and 1395hh).

2. In § 413.86, paragraph (e)(4)(i)(B) is revised to read as follows:

§ 413.86 Direct graduate medical education payments.

* * * * *

(e) *Determining per resident amounts for the base period.* * * *

(4) *Exceptions.*

(i) *Base period for certain hospitals.* * * *

(B) The mean value of per resident amounts of hospitals located in the same geographic wage area, as that term is used in the prospective payment system under part 412 of this chapter, for cost reporting periods beginning in the same fiscal years. If there are fewer than three amounts that can be used to calculate the mean value, the calculation of the per resident amounts includes all hospitals in the hospital's geographic wage area and in geographically contiguous wage areas. If there are still fewer than three hospitals with per resident amounts in the hospital's own wage area, plus contiguous wage areas, this calculation will include all hospitals with per resident amounts in the State. If there are fewer than three hospitals with per resident amounts in the State, this calculation will include the per resident amounts for all hospitals in the State plus hospitals in contiguous States. If there are still fewer than three hospitals in that State plus contiguous States, this calculation will be based on the national average per resident amount.

* * * * *

C. Part 489 is amended as set forth below:

PART 489—PROVIDER AGREEMENTS AND SUPPLIER APPROVAL

1. The authority citation for Part 489 continues to read as follows:

Authority: Secs. 1102, 1819, 1861, 1864(m), 1866, and 1871 of the Social Security Act (42 U.S.C. 1302, 1395i–3, 1395x, 1395aa(m), 1395cc, and 1395hh).

§ 489.27 [Amended]

2. In § 489.27, the reference ''section 1886(a)(1)(M) of the Act'' is revised to read ''section 1866(a)(1)(M) of the Act''.

(Catalog of Federal Domestic Assistance Program No. 93.773, Medicare—Hospital Insurance; and Program No. 93.774, Medicare—Supplementary Medical Insurance)

Dated: May 1, 1997.

Bruce C. Vladeck,

Administrator, Health Care Financing Administration.

Dated: May 23, 1997.

Donna E. Shalala,

Secretary.

[**Editorial Note:** The following addendum and appendixes will not appear in the Code of Federal Regulations.]

Addendum—Proposed Schedule of Standardized Amounts Effective With Discharges Occurring on or After October 1, 1997 and Update Factors and Rate-of-Increase Percentages Effective With Cost Reporting Periods Beginning on or After October 1, 1997

I. Summary and Background

In this addendum, we are setting forth the proposed amounts and factors for determining prospective payment rates for Medicare inpatient operating costs and Medicare inpatient capital-related costs. We are also setting forth proposed rate-of-increase percentages for updating the target amounts for hospitals and hospital units excluded from the prospective payment system.

For discharges occurring on or after October 1, 1997, except for sole community hospitals and hospitals located in Puerto Rico, each hospital's payment per discharge under the prospective payment system will be based on 100 percent of the Federal national rate.

Sole community hospitals are paid based on whichever of the following rates yields the greatest aggregate payment: The Federal national rate, the updated hospital-specific rate based on FY 1982 cost per discharge, or the updated hospital-specific rate based on FY 1987 cost per discharge. For hospitals in Puerto Rico, the payment per discharge is based on the sum of 75 percent of a Puerto Rico rate and 25 percent of a national rate (section 1886(d)(9)(A) of the Act).

As discussed below in section II, we are proposing to make changes in the determination of the prospective payment rates for Medicare inpatient operating costs. The changes, to be applied prospectively, would affect the calculation of the Federal rates. In section III, we discuss our proposed changes for determining the prospective payment rates for Medicare inpatient capital-related costs. Section IV sets forth our proposed changes for determining the rate-of-increase limits for hospitals excluded from the prospective payment system. The tables to which we refer in the preamble to the proposed rule are presented at the end of this addendum in section V.

II. Proposed Changes to Prospective Payment Rates for Inpatient Operating Costs for FY 1998

The basic methodology for determining prospective payment rates for inpatient operating costs is set forth at § 412.63 for hospitals located outside of Puerto Rico. The basic methodology for determining the prospective payment rates for inpatient operating costs for hospitals located in Puerto Rico is set forth at §§ 412.210 and 412.212. Below, we discuss the manner in which we are changing some of the factors used for determining the prospective payment rates. The Federal and Puerto Rico rate changes, once issued as final, would be effective with discharges occurring on or after October 1, 1997. As required by section 1886(d)(4)(C) of the Act, we must also adjust the DRG classifications and weighting factors for discharges in FY 1998.

In summary, the proposed standardized amounts set forth in Tables 1A and 1C of section V of this addendum reflect—

- Updates of 2.8 percent for all areas (that is, the market basket percentage increase);
- An adjustment to ensure budget neutrality as provided for in sections 1886 (d)(4)(C)(iii) and (d)(3)(E) of the Act by applying new budget neutrality adjustment factors to the large urban and other standardized amounts;
- An adjustment to ensure budget neutrality as provided for in section 1886(d)(8)(D) of the Act by removing the FY 1997 budget neutrality factor and applying a revised factor;
- An adjustment to apply the revised outlier offset by removing the FY 1997 outlier offsets and applying a new offset; and
- An adjustment in the Puerto Rico standardized amounts to reflect the application of a Puerto Rico-specific wage index.

A. Calculation of Adjusted Standardized Amounts

1. Standardization of Base-Year Costs or Target Amounts

Section 1886(d)(2)(A) of the Act required the establishment of base-year cost data containing allowable operating costs per discharge of inpatient hospital services for each hospital. The preamble to the September 1, 1983 interim final rule (48 FR 39763) contains a detailed explanation of how base-year cost data were established in the initial development of standardized amounts for the prospective payment system and how they are used in computing the Federal rates.

Section 1886(d)(9)(B)(i) of the Act required that Medicare target amounts be determined for each hospital located in Puerto Rico for its cost reporting period beginning in FY 1987. The September 1, 1987 final rule contains a detailed explanation of how the target amounts were determined and how they are used in computing the Puerto Rico rates (52 FR 33043, 33066).

The standardized amounts are based on per discharge averages of adjusted hospital costs from a base period or, for Puerto Rico, adjusted target amounts from a base period, updated and otherwise adjusted in accordance with the provisions of section 1886(d) of the Act. Sections 1886(d)(2) (B) and (C) of the Act required that the base-year per discharge costs be updated for FY 1984 and then standardized in order to remove from the cost data the effects of certain sources of variation in cost among hospitals. These include case mix, differences in area wage levels, cost of living adjustments for Alaska and Hawaii, indirect medical education costs, and payments to hospitals serving a disproportionate share of low-income patients.

Under sections 1886 (d)(2)(H) and (d)(3)(E) of the Act, in making payments under the prospective payment system, the Secretary estimates from time to time the proportion of costs that are wages and wage-related costs. Since October 1, 1996, when the market basket was last revised and rebased, we have considered 71.2 percent of costs to be labor-related for purposes of the prospective payment system. As discussed in section IV of the preamble, we are proposing to include data not available when the market basket was last rebased to adjust the market basket effective for FY 1998. Based on the proposed revised market basket, we are revising the labor and nonlabor proportions of the standardized amounts. Effective with discharges occurring on or after October 1, 1997, we are proposing a labor-related proportion of 71.1 percent and a nonlabor-related proportion of 28.9 percent. (We are revising the Puerto Rico standardized amounts by the average labor share in Puerto Rico of 71.3 percent. We are revising the discharged-weighted national standardized amount to reflect the proportion of discharges in large urban and other areas from the FY 1996 MedPAR file.)

2. Computing Large Urban and Other Area Averages

Sections 1886(d) (2)(D) and (3) of the Act require the Secretary to compute two average standardized amounts for discharges occurring in a fiscal year: one for hospitals located in large urban areas and one for hospitals located in other areas. In addition, under sections 1886(d)(9) (B)(iii) and (C)(i) of the Act, the average standardized amount per discharge must be determined for hospitals located in urban and other areas in Puerto Rico. Hospitals in Puerto Rico are paid a blend of 75 percent of the applicable Puerto Rico standardized amount and 25 percent of a national standardized payment amount.

Section 1886(d)(2)(D) of the Act defines ''urban area'' as those areas within a Metropolitan Statistical Area (MSA). A ''large urban area'' is defined as an urban area with a population of more than 1,000,000. In addition, section 4009(i) of Public Law 100–203 provides that a New England County Metropolitan Area (NECMA) with a population of more than 970,000 is classified as a large urban area. As required by section 1886(d)(2)(D) of the Act, population size is determined by the Secretary based on the latest population data published by the Bureau of the Census. Urban areas that do not meet the definition of a ''large urban area'' are referred to as ''other urban areas.'' Areas that are not included in MSAs are considered ''rural areas'' under section 1886(d)(2)(D) of the Act. Payment for discharges from hospitals located in large urban areas will be

based on the large urban standardized amount. Payment for discharges from hospitals located in other urban and rural areas will be based on the other standardized amount.

Based on 1995 population estimates published by the Bureau of the Census, 56 areas meet the criteria to be defined as large urban areas for FY 1998. These areas are identified by an asterisk in Table 4A.

3. Updating the Average Standardized Amounts

Under section 1886(d)(3)(A) of the Act, we update the area average standardized amounts each year. In accordance with section 1886(d)(3)(A)(iv) of the Act, we are proposing to update the large urban and the other areas average standardized amounts for FY 1998 using the applicable percentage increases specified in section 1886(b)(3)(B)(i) of the Act. Section 1886(b)(3)(B)(i)(XIII) of the Act specifies that, for hospitals in all areas, the update factor for the standardized amounts for FY 1998 is equal to the market basket percentage increase.

The percentage change in the market basket reflects the average change in the price of goods and services purchased by hospitals to furnish inpatient care. The most recent forecast of the proposed revised hospital market basket increase for FY 1998 is 2.8 percent. Thus, for FY 1998, the proposed update to the average standardized amounts equals 2.8 percent. (See section IV. of the preamble of this proposed rule for a discussion of the adjustments to the market basket.)

As in the past, we are adjusting the FY 1997 standardized amounts to remove the effects of the FY 1997 geographic reclassifications and outlier payments before applying the FY 1998 updates. That is, we are increasing the standardized amounts to restore the reductions that were made for the effects of geographic reclassification and outliers. After including offsets to the standardized amounts for outliers and geographic reclassification, we estimate that there will be an overall increase of 2.9 percent to the large urban and other area standardized amounts.

Although the update factor for FY 1998 is set by law, we are required by section 1886(e)(3)(B) of the Act to report to Congress on our initial recommendation of update factors for FY 1998 for both prospective payment hospitals and hospitals excluded from the prospective payment system. For general information purposes, we have included the report to Congress as Appendix D to this proposed rule. Our proposed recommendation on the update factors (which is required by sections 1886 (e)(4)(A) and (e)(5)(A) of the Act), as well as our responses to ProPAC's recommendation concerning the update factor, are set forth as Appendix E to this proposed rule.

4. Other Adjustments to the Average Standardized Amounts

a. Recalibration of DRG Weights and Updated Wage Index—Budget Neutrality Adjustment. Section 1886(d)(4)(C)(iii) of the Act specifies that beginning in FY 1991, the annual DRG reclassification and recalibration of the relative weights must be made in a manner that ensures that aggregate payments to hospitals are not affected. As discussed in section II of the preamble, we normalized the recalibrated DRG weights by an adjustment factor, so that the average case weight after recalibration is equal to the average case weight prior to recalibration.

Section 1886(d)(3)(E) of the Act specifies that the hospital wage index must be updated on an annual basis beginning October 1, 1993. This provision also requires that any updates or adjustments to the wage index must be made in a manner that ensures that aggregate payments to hospitals are not affected by the change in the wage index.

To comply with the requirement of section 1886(d)(4)(C)(iii) of the Act that DRG reclassification and recalibration of the relative weights be budget neutral, and the requirement in section 1886(d)(3)(E) of the Act that the updated wage index be budget neutral, we used historical discharge data to simulate payments and compared aggregate payments using the FY 1997 relative weights and wage index to aggregate payments using the proposed FY 1998 relative weights and wage index. The same methodology was used for the FY 1997 budget neutrality adjustment. (See the discussion in the September 1, 1992 final rule (57 FR 39832).) Based on this comparison, we computed a budget neutrality adjustment factor equal to 0.998400. We adjust the Puerto Rico-specific standardized amounts for the effect of DRG reclassification and recalibration. We computed a budget neutrality adjustment factor for Puerto Rico-specific standardized amounts equal to 0.999224. These budget neutrality adjustment factors are applied to the standardized amounts without removing the effects of the FY 1997 budget neutrality adjustments. We do not remove the prior budget neutrality adjustment because estimated aggregate payments after the changes in the DRG relative weights and wage index should equal estimated aggregate payments prior to the changes. If we removed the prior year adjustment, we would not satisfy this condition.

In addition, we are proposing to continue to apply the same FY 1998 adjustment factor to the hospital-specific rates that are effective for cost reporting periods beginning on or after October 1, 1997, in order to ensure that we meet the statutory requirement that aggregate payments neither increase nor decrease as a result of the implementation of the FY 1998 DRG weights and updated wage index. (See the discussion in the September 4, 1990 final rule (55 FR 36073).)

b. Reclassified Hospitals—Budget Neutrality Adjustment. Section 1886(d)(8)(B) of the Act provides that certain rural hospitals are deemed urban effective with discharges occurring on or after October 1, 1988. In addition, section 1886(d)(10) of the Act provides for the reclassification of hospitals based on determinations by the Medicare Geographic Classification Review Board (MGCRB). Under section 1886(d)(10) of the Act, a hospital may be reclassified for purposes of the standardized amount or the wage index, or both.

Under section 1886(d)(8)(D) of the Act, the Secretary is required to adjust the standardized amounts so as to ensure that total aggregate payments under the prospective payment system after implementation of the provisions of sections 1886(d)(8) (B) and (C) and 1886(d)(10) of the Act are equal to the aggregate prospective payments that would have been made absent these provisions. To calculate this budget neutrality factor, we used historical discharge data to simulate payments, and compared total prospective payments (including IME and DSH payments) prior to any reclassifications to total prospective payments after reclassifications. We are applying an adjustment factor of 0.995127 to ensure that the effects of reclassification are budget neutral.

The adjustment factor is applied to the standardized amounts after removing the effects of the FY 1997 budget neutrality adjustment factor. We note that the proposed FY 1998 adjustment reflects wage index and standardized amount reclassifications approved by the MGCRB or the Administrator as of February 27, 1997. The effects of any additional reclassification changes resulting from appeals and reviews of the MGCRB decisions for FY 1998 or from a hospital's request for the withdrawal of a reclassification request will be reflected in the final budget neutrality adjustment required under section 1886(d)(8)(D) of the Act and published in the final rule for FY 1998.

c. Outliers. Section 1886(d)(5)(A) of the Act provides for payments in addition to the basic prospective payments for ''outlier'' cases, cases involving extraordinarily high costs (cost outliers) or long lengths of stay (day outliers). Section 1886(d)(3)(B) of the Act requires the Secretary to adjust both the large urban and other area national standardized amounts by the same factor to account for the estimated proportion of total DRG payments made to outlier cases. Similarly, section 1886(d)(9)(B)(iv) of the Act requires the Secretary to adjust the large urban and other standardized amounts applicable to hospitals in Puerto Rico to account for the estimated proportion of total DRG payments made to outlier cases. Furthermore, under section 1886(d)(5)(A)(iv) of the Act, outlier payments for any year must be projected to be not less than 5 percent nor more than 6 percent of total payments based on DRG prospective payment rates.

Beginning with FY 1995, section 1886(d)(5)(A) of the Act requires the Secretary to phase out payments for day outliers (correspondingly, payments for cost outliers would increase). Under the requirements of section 1886(d)(5)(A)(v), the proportion of day outlier payments to total outlier payments is reduced from FY 1994 levels as follows: 75 percent of FY 1994 levels in FY 1995, 50 percent of FY 1994 levels in FY 1996, and 25 percent of FY 1994 levels in FY 1997. For discharges occurring after September 30, 1997, the Secretary will no longer pay for day outliers under the provisions of section 1886(d)(5)(A)(i) of the Act.

i. Proposed FY 1998 Outlier Payment Thresholds. For FY 1997, the day outlier threshold is the geometric mean length of stay for each DRG plus the lesser of 24 days

or 3.0 standard deviations. The marginal cost factor for day outliers (the percent of Medicare's average per diem payment paid for each outlier day) is 33 percent for FY 1997. The fixed loss cost outlier threshold is equal to the prospective payment for the DRG plus $9,700 ($8,850 for hospitals that have not yet entered the prospective payment system for capital-related costs). The marginal cost factor for cost outliers (the percent of costs paid after costs for the case exceed the threshold) is 80 percent. We applied an outlier adjustment to the FY 1997 standardized amounts of 0.948766 for the large urban and other areas rates and 0.9481 for the capital Federal rate.

As noted above, section 1886(d)(5)(A)(v) of the Act provides that payment will not be made for day outliers beginning with discharges occurring in FY 1998.

We are proposing a fixed loss cost outlier threshold in FY 1998 equal to the prospective payment rate for the DRG plus $7,600 ($6,950 for hospitals that have not yet entered the prospective payment system for capital-related costs). In addition, we are proposing to maintain the marginal cost factor for cost outliers at 80 percent.

In accordance with section 1886(d)(5)(A)(iv) of the Act, we calculated proposed outlier thresholds so that outlier payments are projected to equal 5.1 percent of total payments based on DRG prospective payment rates. In accordance with section 1886(d)(3)(E), we reduced the proposed FY 1998 standardized amounts by the same percentage to account for the projected proportion of payments paid to outliers.

As stated in the September 1, 1993 final rule (58 FR 46348), we establish outlier thresholds that are applicable to both inpatient operating costs and inpatient capital-related costs. When we modeled the combined operating and capital outlier payments, we found that using a common set of thresholds resulted in a higher percentage of outlier payments for capital-related costs than for operating costs. We project that the proposed thresholds for FY 1998 will result in outlier payments equal to 5.1 percent of operating DRG payments and 5.5 percent of capital payments based on the Federal rate.

The proposed outlier adjustment factors applied to the standardized amounts for FY 1998 are as follows:

	Operating standard-ized amounts
National	0.949117
Puerto Rico	0.961488

(**Note:** The proposed outlier adjustment factors applied to the capital Federal rate are found at section III.A.2. of the Addendum.)

We would apply the proposed outlier adjustment factors after removing the effects of the FY 1997 outlier adjustment factors on the standardized amounts.

ii. Other Changes Concerning Outliers. Table 8A in section V of this addendum contains the updated Statewide average operating cost-to-charge ratios for urban hospitals and for rural hospitals to be used in calculating cost outlier payments for those hospitals for which the intermediary is unable to compute a reasonable hospital-specific cost-to-charge ratio. These Statewide average ratios would replace the ratios published in the August 30, 1996 final rule (61 FR 46302), effective October 1, 1997. Table 8B contains comparable Statewide average capital cost-to-charge ratios. These average ratios would be used to calculate cost outlier payments for those hospitals for which the intermediary computes operating cost-to-charge ratios lower than 0.230118 or greater than 1.30054 and capital cost-to-charge ratios lower than 0.01289 or greater than 0.19057. This range represents 3.0 standard deviations (plus or minus) from the mean of the log distribution of cost-to-charge ratios for all hospitals. We note that the cost-to-charge ratios in Tables 8A and 8B would be used for all cost reports settled during FY 1998 (regardless of the actual cost reporting period) when hospital-specific cost-to-charge ratios are either not available or outside the three standard deviations range.

iii. FY 1996 and FY 1997 Outlier Payments. In the August 30, 1996 final rule (61 FR 46229), we stated that, based on available data, we estimated that actual FY 1996 outlier payments would be approximately 4.0 percent of actual total DRG payments. This was computed by simulating payments using actual FY 1995 bill data available at the time. That is, the estimate of actual outlier payments did not reflect actual FY 1996 bills but instead reflected the application of FY 1996 rates and policies to available FY 1995 bills. Our current estimate, using available FY 1996 bills, is that actual outlier payments for FY 1996 were approximately 4.1 percent of actual total DRG payments. We note that the MedPAR file for FY 1996 discharges continues to be updated.

We currently estimate that actual outlier payments for FY 1997 will be approximately 4.9 percent of actual total DRG payments (slightly lower than the 5.1 percent we projected in setting outlier policies for FY 1997). This estimate is based on simulations using the December 1996 update of the provider-specific file and the December 1996 update of the FY 1996 MedPAR file (discharge data for FY 1996 bills). We used these data to calculate an estimate of the actual outlier percentage for FY 1997 by applying FY 1997 rates and policies to available FY 1996 bills.

In FY 1994, we began using a cost inflation factor rather than a charge inflation factor to update billed charges for purposes of estimating outlier payments. This refinement was made to improve our estimation methodology. We believe that actual FY 1996 and FY 1997 outlier payments as a percentage of total DRG payments may be lower than expected in part because actual hospital costs may be lower than reflected in the methodology used to set outlier thresholds for those years. Our most recent data on hospital costs show that rates of increase are continuing to decline. Thus, the cost inflation factor of 0.871 percent used to set FY 1996 outlier policy (based on the best data then available) appears to have been overstated. For FY 1997, we used a cost inflation factor of minus 1.906 percent (a cost per case decrease of 1.906 percent). For FY 1998, based on more recent data, we are proposing a cost inflation factor of minus 1.969 percent to set outlier thresholds. We will reevaluate this factor when we develop the final rule for FY 1998. At that time, more recent data should be available for analysis, specifically, cost report data for cost reporting periods beginning in FY 1996.

Although we estimate that FY 1996 outlier payments will approximate 4.1 percent of total DRG payments, we note that the estimate of the market basket rate of increase used to set the FY 1996 rates was 3.5 percentage points, while the latest FY 1996 market basket rate of increase forecast is 2.7 percent. Thus, the net effect is that hospitals received higher FY 1996 payments than would have been established based on a more recent forecast of the market basket rate of increase.

5. FY 1998 Standardized Amounts

The adjusted standardized amounts are divided into labor and nonlabor portions. Table 1A contains the two national standardized amounts that we are proposing be applicable to all hospitals, except for hospitals in Puerto Rico. Under section 1886(d)(9)(A)(ii) of the Act, the Federal portion of the Puerto Rico payment rate is based on the discharge-weighted average of the national large urban standardized amount and the national other standardized amount (as set forth in Table 1A). The labor and nonlabor portions of the national average standardized amounts for Puerto Rico hospitals are set forth in Table 1C. This table also includes the Puerto Rico standardized amounts.

The Puerto Rico standardized amounts reflect application of Puerto Rico-specific wage index for FY 1998. Thus, before application of the wage index, the proposed FY 1998 Puerto Rico standardized amounts are lower than the FY 1997 standardized amounts. However, after application of the wage index, the FY 1998 Puerto Rico rate is higher than for FY 1997. This is due to the higher Puerto Rico wage index values that will be applied to these standardized amounts in calculating the FY 1998 Puerto Rico rate. Below, we use two wage areas to illustrate that the proposed FY 1998 Puerto Rico wage-adjusted standardized amounts are higher than the FY 1997 Puerto Rico wage-adjusted standardized amounts.

PUERTO RICO STANDARDIZED AMOUNTS

Area	FY 1997		Proposed FY 1998	
	Labor	Nonlabor	Labor	Nonlabor
Large Urban	$2,488.70	$518.65	$1,346.08	$541.83
Other Areas	2,449.31	510.45	1,324.77	533.25

PUERTO RICO WAGE ADJUSTED STANDARDIZED AMOUNT FOR THE SAN JUAN MSA AND RURAL PUERTO RICO

	FY 1997	Proposed FY 1998
San Juan Wage Index	0.4506	1.0273
Wage-Adjusted Standardized Amount	$1,640.06	$1,924.66
Rural Wage Index	0.4026	0.8732
Wage-Adjusted Standardized Amount	$1,496.54	$1,690.04

B. Adjustments for Area Wage Levels and Cost of Living

Tables 1A and 1C, as set forth in this addendum, contain the proposed labor-related and nonlabor-related shares that would be used to calculate the prospective payment rates for hospitals located in the 50 States, the District of Columbia, and Puerto Rico. This section addresses two types of adjustments to the standardized amounts that are made in determining the prospective payment rates as described in this addendum.

1. Adjustment for Area Wage Levels

Sections 1886(d)(3)(E) and 1886(d)(9)(C)(iv) of the Act require that an adjustment be made to the labor-related portion of the prospective payment rates to account for area differences in hospital wage levels. This adjustment is made by multiplying the labor-related portion of the adjusted standardized amounts by the appropriate wage index for the area in which the hospital is located. In section III of the preamble, we discuss certain revisions we are making to the wage index. These changes include the calculation of a Puerto Rico-specific wage index that would be applied to the Puerto Rico standardized amounts. The wage index is set forth in Tables 4A through 4F of this addendum.

2. Adjustment for Cost of Living in Alaska and Hawaii

Section 1886(d)(5)(H) of the Act authorizes an adjustment to take into account the unique circumstances of hospitals in Alaska and Hawaii. Higher labor-related costs for these two States are taken into account in the adjustment for area wages described above. For FY 1998, we propose to adjust the payments for hospitals in Alaska and Hawaii by multiplying the nonlabor portion of the standardized amounts by the appropriate adjustment factor contained in the table below. If the Office of Personnel Management releases revised cost-of-living adjustment factors before August 1, 1997, we will publish them in the final rule and use them in determining FY 1998 payments.

TABLE OF COST-OF-LIVING ADJUSTMENT FACTORS, ALASKA AND HAWAII HOSPITALS

Alaska—All areas	1.25
Hawaii:	
County of Honolulu	1.225
County of Hawaii	1.15
County of Kauai	1.225
County of Maui	1.225
County of Kalawao	1.225

(The above factors are based on data obtained from the U.S. Office of Personnel Management.)

C. DRG Relative Weights

As discussed in section II. of the preamble, we have developed a classification system for all hospital discharges, assigning them into DRGs, and have developed relative weights for each DRG that reflect the resource utilization of cases in each DRG relative to Medicare cases in other DRGs. Table 5 of section V of this addendum contains the relative weights that we propose to use for discharges occurring in FY 1998. These factors have been recalibrated as explained in section II. of the preamble.

D. Calculation of Prospective Payment Rates for FY 1998

General Formula for Calculation of Prospective Payment Rates for FY 1998

Prospective payment rate for all hospitals located outside Puerto Rico except sole community hospitals = Federal rate.

Prospective payment rate for sole community hospitals = Whichever of the following rates yields the greatest aggregate payment: 100 percent of the Federal rate, 100 percent of the updated FY 1982 hospital-specific rate, or 100 percent of the updated FY 1987 hospital-specific rate.

Prospective payment rate for Puerto Rico = 75 percent of the Puerto Rico rate + 25 percent of a discharge-weighted average of the national large urban standardized amount and the national other standardized amount.

1. Federal Rate

For discharges occurring on or after October 1, 1997 and before October 1, 1998, except for sole community hospitals and hospitals in Puerto Rico, the hospital's payment is based exclusively on the Federal national rate. Section 1866(d)(1)(A)(iii) of the Act provides that the Federal rate is comprised of 100 percent of the Federal national rate.

The payment amount is determined as follows:

Step 1—Select the appropriate national standardized amount considering the type of hospital and designation of the hospital as large urban or other (see Tables 1A, section V of this addendum).

Step 2—Multiply the labor-related portion of the standardized amount by the applicable wage index for the geographic area in which the hospital is located (see Tables 4A, 4B, and 4C of section V of this addendum).

Step 3—For hospitals in Alaska and Hawaii, multiply the nonlabor-related portion of the standardized amount by the appropriate cost-of-living adjustment factor.

Step 4—Add the amount from Step 2 and the nonlabor-related portion of the standardized amount (adjusted if appropriate under Step 3).

Step 5—Multiply the final amount from Step 4 by the relative weight corresponding to the appropriate DRG (see Table 5 of section V of this addendum).

2. Hospital-Specific Rate (Applicable Only to Sole Community Hospitals)

Sections 1886(d)(5)(D)(i) and (b)(3)(C) of the Act provide that sole community hospitals are paid based on whichever of the following rates yields the greatest aggregate payment: the Federal rate, the updated hospital-specific rate based on FY 1982 cost per discharge, or the updated hospital-specific rate based on FY 1987 cost per discharge.

Hospital-specific rates have been determined for each of these hospitals based on both the FY 1982 cost per discharge and the FY 1987 cost per discharge. For a more detailed discussion of the calculation of the FY 1982 hospital-specific rate and the FY 1987 hospital-specific rate, we refer the reader to the September 1, 1983 interim final rule (48 FR 39772); the April 20, 1990 final rule with comment (55 FR 15150); and the September 4, 1990 final rule (55 FR 35994).

a. Updating the FY 1982 and FY 1987 Hospital-Specific Rates for FY 1998. We are

proposing to increase the hospital-specific rates by 2.8 percent (the hospital market basket percentage increase) for sole community hospitals located in all areas in FY 1998. Section 1886(b)(3)(C)(ii) of the Act provides that the update factor applicable to the hospital-specific rates for sole community hospitals equals the update factor provided under section 1886(b)(3)(B)(ii) of the Act, which, for FY 1998, is the market basket rate of increase.

b. Calculation of Hospital-Specific Rate. For sole community hospitals, the applicable FY 1998 hospital-specific rate would be calculated by multiplying a hospital's hospital-specific rate for the preceding fiscal year by the applicable update factor (2.8 percent), which is the same as the update for all prospective payment hospitals. In addition, the hospital-specific rate would be adjusted by the budget neutrality adjustment factor (that is, 0.998400) as discussed in section II.A.4.a of this Addendum. This resulting rate would be used in determining under which rate a sole community hospital is paid for its discharges beginning on or after October 1, 1997, based on the formula set forth above.

3. General Formula for Calculation of Prospective Payment Rates for Hospitals Located in Puerto Rico Beginning on or After October 1, 1997 and Before October 1, 1998

a. Puerto Rico Rate. The Puerto Rico prospective payment rate is determined as follows:

Step 1—Select the appropriate adjusted average standardized amount considering the large urban or other designation of the hospital (see Table 1C of section V of the addendum).

Step 2—Multiply the labor-related portion of the standardized amount by the appropriate Puerto Rico-specific wage index (see Table 4F of section V of the addendum).

Step 3—Add the amount from Step 2 and the nonlabor-related portion of the standardized amount.

Step 4—Multiply the result in Step 3 by 75 percent.

Step 5—Multiply the amount from Step 4 by the appropriate DRG relative weight (see Table 5 of section V of the addendum).

b. National Rate. The national prospective payment rate is determined as follows:

Step 1—Multiply the labor-related portion of the national average standardized amount (see Table 1C of section V of the addendum) by the appropriate national wage index (see Tables 4A and 4B of section V of the addendum).

Step 2—Add the amount from Step 1 and the nonlabor-related portion of the national average standardized amount.

Step 3—Multiply the result in Step 2 by 25 percent.

Step 4—Multiply the amount from Step 3 by the appropriate DRG relative weight (see Table 5 of section V of the addendum).

The sum of the Puerto Rico rate and the national rate computed above equals the prospective payment for a given discharge for a hospital located in Puerto Rico.

III. Proposed Changes to Payment Rates for Inpatient Capital-Related Costs for FY 1998

The prospective payment system for hospital inpatient capital-related costs was implemented for cost reporting periods beginning on or after October 1, 1991. Effective with that cost reporting period and during a 10-year transition period extending through FY 2001, hospital inpatient capital-related costs are paid on the basis of an increasing proportion of the capital prospective payment system Federal rate and a decreasing proportion of a hospital's historical costs for capital.

The basic methodology for determining Federal capital prospective rates is set forth at §§ 412.308 through 412.352. Below we discuss the factors that we used to determine the proposed Federal rate and the hospital-specific rates for FY 1998. The rates will be effective for discharges occurring on or after October 1, 1997.

For FY 1992, we computed the standard Federal payment rate for capital-related costs under the prospective payment system by updating the FY 1989 Medicare inpatient capital cost per case by an actuarial estimate of the increase in Medicare inpatient capital costs per case. Each year after FY 1992 we update the standard Federal rate, as provided in § 412.308(c)(1), to account for capital input price increases and other factors. Also, § 412.308(c)(2) provides that the Federal rate is adjusted annually by a factor equal to the estimated proportion of outlier payments under the Federal rate to total capital payments under the Federal rate. In addition, § 412.308(c)(3) requires that the Federal rate be reduced by an adjustment factor equal to the estimated proportion of payments for exceptions under § 412.348. Furthermore, § 412.308(c)(4)(ii) requires that the Federal rate be adjusted so that the annual DRG reclassification and the recalibration of DRG weights and changes in the geographic adjustment factor are budget neutral. For FYs 1992 through 1995, § 412.352 required that the Federal rate also be adjusted by a budget neutrality factor so that aggregate payments for inpatient hospital capital costs were projected to equal 90 percent of the payments that would have been made for capital-related costs on a reasonable cost basis during the fiscal year. That provision expired in FY 1996.

For each hospital, the hospital-specific rate was calculated by dividing the hospital's Medicare inpatient capital-related costs for a specified base year by its Medicare discharges (adjusted for transfers), and dividing the result by the hospital's case mix index (also adjusted for transfers). The resulting case-mix adjusted average cost per discharge was then updated to FY 1992 based on the national average increase in Medicare's inpatient capital cost per discharge and adjusted by the exceptions payment adjustment factor and the budget neutrality adjustment factor to yield the FY 1992 hospital-specific rate. Since FY 1992, the hospital-specific rate has been updated annually for inflation and for changes in the exceptions payment adjustment factor. For FYs 1992 through 1995, the hospital-specific rate was also adjusted by a budget neutrality adjustment factor.

To determine the appropriate budget neutrality adjustment factor and the exceptions payment adjustment factor, we developed a dynamic model of Medicare inpatient capital-related costs, that is, a model that projects changes in Medicare inpatient capital-related costs over time. With the expiration of the budget neutrality provision, the model is still used to estimate the exceptions payment adjustment and other factors. The model and its application are described in greater detail in Appendix B.

In accordance with section 1886(d)(9)(A) of the Act, under the prospective payment system for inpatient operating costs, hospitals located in Puerto Rico are paid for operating costs under a special payment formula. These hospitals are paid a blended rate that is comprised of 75 percent of the applicable standardized amount specific to Puerto Rico hospitals and 25 percent of the applicable national average standardized amount. Section 412.374 provides for the use of this blended payment system for payments to Puerto Rico hospitals under the prospective payment system for inpatient capital-related costs. Accordingly, for capital-related costs we compute a separate payment rate specific to Puerto Rico hospitals using the same methodology used to compute the national Federal rate for capital. Hospitals in Puerto Rico are paid based on 75 percent of the Puerto Rico rate and 25 percent of the Federal rate.

A. Determination of Federal Inpatient Capital-Related Prospective Payment Rate Update

For FY 1997, the Federal rate is $438.92. With the changes we are proposing to the factors used to establish the Federal rate, the proposed FY 1998 Federal rate is $438.43.

In the discussion that follows, we explain the factors that were used to determine the proposed FY 1998 Federal rate. In particular, we explain why the FY 1998 Federal rate has decreased 0.11 percent compared to the FY 1997 Federal rate. Nevertheless, as explained in section VII of Appendix A, capital payments per case are estimated to increase 4.68 percent. Taking into account the effects of increases in projected discharges, we also estimate that aggregate capital payments will increase 7.19 percent.

The major factor contributing to the decrease in the proposed FY 1998 rate in comparison to the FY 1997 rate is the change in the exceptions reduction factor. We have expected the number and amount of exceptions payments generally to increase throughout the transition period.

Total payments to hospitals under the prospective payment system are relatively unaffected by changes in the capital prospective payments. Since capital payments constitute about 10 percent of hospital payments, a 1 percent change in the capital Federal rate yields only about 0.1 percent change in actual payments to hospitals. Aggregate payments under the capital prospective payment transition system are estimated to increase in FY 1998 compared to FY 1997. Specifically, we estimate that aggregate payments in FY 1998 will be 7.19 percent higher than they were in FY 1997. Changes in aggregate payments

include changes in capital payments per discharge and changes in the number of discharges. Under the prospective payment system for capital-related costs, payments per discharge (or case) are estimated to increase 4.68 percent in FY 1998 compared to FY 1997.

ProPAC recommends that the rate be adjusted to a more appropriate level (Recommendation 3). ProPAC believes that the rate is 15 to 17 percent too high and attributes this to overstatement of the 1992 base payment rates and the method used to update the rates prior to implementation of the update framework. ProPAC notes that there are several approaches for adjusting the rate. For example, they note that the base capital rates could be replaced by the actual rates used in FY 1995, which reflected the budget neutrality adjustment, updated to the current year using the update factor.

We agree with ProPAC that the capital rates are too high. The President's FY 1998 budget includes a provision to reduce the base Federal and hospital-specific rates by approximately the magnitude suggested by ProPAC. This proposal incorporates ProPAC's suggestion that the FY 1995 budget neutrality adjustment could be built permanently into the rates. As we stated in the final rule for FY 1997 (61 FR 46216), we continue to believe that it is most appropriate to make such adjustments to the capital rates in the context of a comprehensive package of Medicare program changes. We are, therefore, not proposing to implement this revision to the base capital rates by regulation at this time.

1. Standard Federal Rate Update

a. Description of the Update Framework. Section 412.308(c)(1) has provided that the standard Federal rate is updated on the basis of an analytical framework that takes into account changes in a capital input price index and other factors. The update framework consists of a capital input price index (CIPI) and several policy adjustment factors. Specifically, we have adjusted the projected CIPI rate of increase as appropriate each year for case-mix index related changes, for intensity, and for errors in previous CIPI forecasts. The proposed update factor for FY 1998 under that framework is 1.1 percent. This proposal is based on a projected 1.3 percent increase in the CIPI, and on policy adjustment factors of −0.2. We explain the basis for the FY 1998 CIPI projection in section D of this addendum. Here we describe the policy adjustments that have been applied.

The case-mix index is the measure of the average DRG weight for cases paid under the prospective payment system. Because the DRG weight determines the prospective payment for each case, any percentage increase in the case-mix index corresponds to an equal percentage increase in hospital payments.

The case-mix index can change for any of several reasons:

- The average resource use of Medicare patients changes (''real'' case-mix change);
- Changes in hospital coding of patient records result in higher weight DRG assignments (''coding effects''); and
- The annual DRG reclassification and recalibration changes may not be budget neutral (''reclassification effect'').

We define real case-mix change as actual changes in the mix (and resource requirements) of Medicare patients as opposed to changes in coding behavior that result in assignment of cases to higher-weighted DRGs but do not reflect higher resource requirements. In the update framework for the prospective payment system for operating costs, we adjust the update upwards to allow for real case-mix change, but remove the effects of coding changes on the case-mix index. We also remove the effect on total payments of prior changes to the DRG classifications and relative weights, in order to retain budget neutrality for all case-mix index-related changes other than patient severity. (For example, we adjusted for the effects of the FY 1992 DRG reclassification and recalibration as part of our FY 1994 update recommendation.) The operating adjustment consists of a reduction for total observed case-mix change, an increase for the portion of case-mix change that we determine is due to real case-mix change rather than coding modifications, and an adjustment for the effect of prior DRG reclassification and recalibration changes. We have adopted this case-mix index adjustment in the capital update framework as well.

For FY 1998, we are projecting a 1.0 percent increase in the case-mix index. We estimate that real case-mix increase will equal 0.8 percent in FY 1998. Therefore, the proposed net adjustment for case-mix change in FY 1998 is −0.2 percentage points.

We estimate that DRG reclassification and recalibration resulted in a 0.0 percent change in the case mix when compared with the case-mix index that would have resulted if we had not made the reclassification and recalibration changes to the DRGs.

The current operating update framework contains an adjustment for forecast error. The input price index forecast is based on historical trends and relationships ascertainable at the time the update factor is established for the upcoming year. In any given year there may be unanticipated price fluctuations that may result in differences between the actual increase in prices faced by hospitals and the forecast used in calculating the update factors. In setting a prospective payment rate under the proposed framework, we make an adjustment for forecast error only if our estimate of the capital input price index rate of increase for any year is off by 0.25 percentage points or more. There is a 2-year lag between the forecast and the measurement of the forecast error. Thus, for example, we would adjust for a forecast error made in FY 1996 through an adjustment to the FY 1998 update. Because we only introduced this analytical framework in FY 1996, FY 1998 is the first year in which a forecast error adjustment could be required. We estimate that the FY 1996 CIPI was .20 percentage points higher than our current data show, which means that we estimate a forecast error of .20 percentage points for FY 1996. Therefore no adjustment for forecast error will be made in FY 1998.

Under the capital prospective payment system framework, we also make an adjustment for changes in intensity. We calculate this adjustment using the same methodology and data as in the framework for the operating prospective payment system. The intensity factor for the operating update framework reflects how hospital services are utilized to produce the final product, that is, the discharge. This component accounts for changes in the use of quality-enhancing services, changes in within-DRG severity, and expected modification of practice patterns to remove cost-ineffective services.

We calculate case-mix constant intensity as the change in total charges per admission, adjusted for price level changes (the CPI hospital component), and changes in real case mix. The use of total charges in the calculation of the proposed intensity factor makes it a total intensity factor, that is, charges for capital services are already built into the calculation of the factor. We have, therefore, incorporated the intensity adjustment from the operating update framework into the capital update framework. Without reliable estimates of the proportions of the overall annual intensity increases that are due, respectively, to ineffective practice patterns and to the combination of quality-enhancing new technologies and within-DRG complexity, we assume, as in the revised operating update framework, that one-half of the annual increase is due to each of these factors. The capital update framework thus provides an add-on to the input price index rate of increase of one-half of the estimated annual increase in intensity to allow for within-DRG severity increases and the adoption of quality-enhancing technology.

For FY 1998, we have developed a Medicare-specific intensity measure based on a 5-year average using FY 1991–1995. In determining case-mix constant intensity, we found that observed case-mix increase was 2.8 percent in FY 1991, 1.8 percent in FY 1992, 0.9 percent in FY 1993, 0.8 percent in FY 1994, 1.7 percent in FY 1995, and 1.6 percent in FY 1996. For FY 1992, FY 1995, and FY 1996, we estimate that real case-mix increase was 1.0 to 1.4 percent each year. The estimate for those years is supported by past studies of case-mix change by the RAND Corporation. The most recent study was ''Has DRG Creep Crept Up? Decomposing the Case Mix Index Change Between 1987 and 1988'' by G. M. Carter, J. P. Newhouse, and D. A. Relles, R–4098-HCFA/ProPAC(1991). The study suggested that real case-mix change was not dependent on total change, but was rather a fairly steady 1.0 to 1.5 percent per year. We use 1.4 percent as the upper bound because the RAND study did not take into account that hospitals may have induced doctors to document medical records more completely in order to improve payment. Following that study, we consider up to 1.4 percent of observed case-mix change as real for FY 1991 through FY 1995. Based on this analysis, we believe that all of the observed case-mix increase for FY 1993 and FY 1994 is real.

We calculate case-mix constant intensity as the change in total charges per admission, adjusted for price level changes (the CPI hospital component), and changes in real

case-mix. Given estimates of real case-mix increase of 1.0 percent for FY 1992, 0.9 percent for FY 1993, 0.8 percent for FY 1994, 1.0 percent for FY 1995, and 1.0 percent for FY 1996, we estimate that case-mix constant intensity declined by an average 1.4 percent during FYs 1992 through 1996, for a cumulative decrease of 7.0 percent. If we assume that real case-mix increase was 1.4 percent for FY 1992, 0.9 percent for FY 1993, 0.8 percent for FY 1994, 1.4 percent for FY 1995, and 1.4 percent for FY 1996, we estimate that case-mix constant intensity declined by an average 1.6 percent during FYs 1992 through 1996, for a cumulative decrease of 7.5 percent. Since we estimate that intensity has declined during that period, we are recommending a 0.0 percent intensity adjustment for FY 1998.

b. Comparison of HCFA and ProPAC Update Recommendations. ProPAC recommends (Recommendation 4) a zero update to the standard Federal rate and we have recommended a 1.1 percent update. There are some significant differences between the HCFA and ProPAC update frameworks, which account for the difference in the respective update recommendations. A major difference is the input price index which each framework uses as a beginning point to estimate the change in input prices since the previous year. The HCFA input price index (the CIPI) includes price measures for interest expense, which are an indicator of the interest rates facing hospitals during their capital purchasing decisions. The ProPAC capital market basket does not include interest expense; instead the ProPAC update framework includes an adjustment when necessary to account for the prolonged changes in interest rates. HCFA's CIPI is vintage-weighted, meaning that it takes into account price changes from past purchases of capital when determining the current period update. ProPAC's capital market basket is not vintage-weighted, accounting only for the current year price changes. This year, due to the difference between HCFA's and ProPAC's input price index, the percentage change in HCFA's CIPI is 1.3 percent, and the percentage change in ProPAC's market basket is 2.4 percent.

ProPAC and HCFA also differ in the adjustments they make to their price indices. (See Table 1 for a comparison of HCFA and ProPAC's update recommendations.) ProPAC makes an adjustment for productivity, while HCFA has not adopted an adjustment for capital productivity or efficiency. ProPAC employs the same productivity adjustment in its operating and capital framework. We have identified a total intensity factor but have not identified an adequate total productivity measure. We discuss the differences related to the intensity adjustment in section III of Appendix E of this proposed rule in our discussion of the operating update framework. For FY 1998 ProPAC recommends a −3.0 to a −1.0 productivity adjustment. We recommend a 0.0 intensity adjustment.

We recommend a −0.2 total case mix adjustment since we are projecting a 1.0 percent increase in the case mix index and we estimate that real case-mix increase will equal 0.8 percent in FY 1998. ProPAC recommends no case mix adjustment. We also discuss the differences in these recommendations in section III of Appendix E.

The net result of these adjustments is that ProPAC's capital update framework suggests a −0.2 to a 1.8 percent update. ProPAC has recommended a zero update to the rate for FY 1998 because they believe that a zero update applied to revised base rates would permit hospitals to maintain quality of care while meeting Medicare's responsibility to act as a prudent purchaser. We describe the basis for our proposed 1.1 percent total update in the preceding section.

The two update recommendations are quite close, with ProPAC recommending no update and HCFA recommending a modest one. As stated previously, the President's FY 1998 budget contains a provision to reduce the rate by 15.7 percent in order to extend the expired budget neutrality provision. We believe that legislation is the appropriate mechanism for dealing with cutting the rate.

TABLE 1.—HCFA'S FY 1998 UPDATE FACTOR AND PROPAC'S RECOMMENDATION

	HCFA's update factor	ProPAC's recommendation
Capital Input Price Index	1.3	2.4
Policy Adjustment Factors:		
Productivity	.....	−3.0 to −1.0
Intensity	0.0	.....
Science and Technology	.....	0.4
Intensity	.....	(1)
Real within DRG Change	.....	(2)
Subtotal	0.0	–2.6 to −0.6
Case-Mix Adjustment Factors:		
Projected Case-Mix Change	−1.0	.....
Real across DRG Change	0.8	.....
Real within DRG Change	(3)	0.0
Subtotal	−0.2	0.0
Effect of FY 1996 Reclassification and Recalibration	0.0	.....
Forecast Error Correction	0.0	0.0
Total Update	1.1	–0.2 to 1.8

[1] Included in ProPAC's productivity measure.
[2] Included in ProPAC's case-mix adjustment.
[3] Included in HCFA's intensity factor.

2. Outlier Payment Adjustment Factor

Section 412.312(c) establishes a unified outlier methodology for inpatient operating and inpatient capital-related costs. A single set of thresholds is used to identify outlier cases for both inpatient operating and inpatient capital-related payments. Outlier payments are made only on the portion of the Federal rate that is used to calculate the hospital's inpatient capital-related payments (for example, 70 percent for cost reporting periods beginning in FY 1998 for hospitals paid under the fully prospective methodology). Section 412.308(c)(2) provides that the standard Federal rate for inpatient capital-related costs be reduced by an adjustment factor equal to the estimated proportion of outlier payments under the Federal rate to total inpatient capital-related payments under the Federal rate. The outlier thresholds are set so that operating outlier payments are projected to be 5.1 percent of total operating DRG payments. The inpatient capital-related outlier reduction factor reflects the inpatient capital-related outlier payments that would be made if all hospitals were paid according to 100 percent of the Federal rate. For purposes of calculating the outlier thresholds and the outlier reduction factor, we model all hospitals as if they were paid 100 percent of the Federal rate because, as explained above, outlier payments are made only on the portion of the Federal rate that is included in the hospital's inpatient capital-related payments.

In the August 30, 1996 final rule, we estimated that outlier payments for capital in FY 1997 would equal 5.19 percent of inpatient capital-related payments based on

the Federal rate. Accordingly, we applied an outlier adjustment factor of 0.9481 to the Federal rate. Based on the thresholds as set forth in section II.A.4.d of this Addendum, we estimate that outlier payments for capital will equal 5.51 percent of inpatient capital-related payments based on the Federal rate in FY 1998. We are, therefore, proposing an outlier adjustment factor of 0.9449 to the Federal rate. Thus, estimated capital outlier payments for FY 1998 represent a higher percentage of total capital standard payments than in FY 1997.

The outlier reduction factors are not built permanently into the rates; that is, they are not applied cumulatively in determining the Federal rate. Therefore, the proposed net change in the outlier adjustment to the Federal rate for FY 1998 is 0.9966 (0.9449/0.9481). Thus, the outlier adjustment decreases the FY 1998 Federal rate by 0.34 percent (0.9966—1) compared with the FY 1997 outlier adjustment.

3. Budget Neutrality Adjustment Factor for Changes in DRG Classifications and Weights and the Geographic Adjustment Factor

Section 412.308(c)(4)(ii) requires that the Federal rate be adjusted so that aggregate payments for the fiscal year based on the Federal rate after any changes resulting from the annual DRG reclassification and recalibration and changes in the GAF are projected to equal aggregate payments that would have been made on the basis of the Federal rate without such changes. We use the actuarial model described in Appendix B to estimate the aggregate payments that would have been made on the basis of the Federal rate without changes in the DRG classifications and weights and in the GAF. We also use the model to estimate aggregate payments that would be made on the basis of the Federal rate as a result of those changes. We then use these figures to compute the adjustment required to maintain budget neutrality for changes in DRG weights and in the GAF.

For FY 1997, we calculated a GAF/DRG budget neutrality factor of 0.9987. For FY 1998, we are proposing a GAF/DRG budget neutrality factor of 1.0001. The GAF/DRG budget neutrality factors are built permanently into the rates; that is, they are applied cumulatively in determining the Federal rate. This follows from the requirement that estimated aggregate payments each year be no more than they would have been in the absence of the annual DRG reclassification and recalibration and changes in the GAF. The proposed incremental change in the adjustment from FY 1997 to FY 1998 is 1.0001. The proposed cumulative change in the rate due to this adjustment is 1.0013 (the product of the incremental factors for FY 1993, FY 1994, FY 1995, FY 1996, FY 1997 and the proposed incremental factor for FY 1998: 0.9980 x 1.0053 x 0.9998 x 0.9994 x 0.9987 x 1.0001 = 1.0014).

This factor accounts for DRG reclassifications and recalibration and for changes in the GAF. It also incorporates the effects on the GAF of FY 1998 geographic reclassification decisions made by the MGCRB compared to FY 1997 decisions. However, it does not account for changes in payments due to changes in the disproportionate share and indirect medical education adjustment factors or in the large urban add-on.

4. Exceptions Payment Adjustment Factor

Section 412.308(c)(3) requires that the standard Federal rate for inpatient capital-related costs be reduced by an adjustment factor equal to the estimated proportion of additional payments for exceptions under § 412.348 relative to total payments under the hospital-specific rate and Federal rate. We use the model originally developed for determining the budget neutrality adjustment factor to determine the exceptions payment adjustment factor. We describe that model in Appendix B to this proposed rule.

For FY 1997, we estimated that exceptions payments would equal 6.42 percent of aggregate payments based on the Federal rate and the hospital-specific rate. Therefore, we applied an exceptions reduction factor of 0.9358 (1—0.0642) in determining the Federal rate. For this proposed rule, we estimate that exceptions payments for FY 1998 will equal 7.24 percent of aggregate payments based on the Federal rate and the hospital-specific rate. We are, therefore, proposing an exceptions payment reduction factor of 0.9276 to the Federal rate for FY 1998.

The proposed exceptions reduction factor for FY 1998 is thus 0.88 percent lower than the factor for FY 1997. We have expected the number and amount of exceptions payments generally to increase throughout the transition period.

The exceptions reduction factors are not built permanently into the rates; that is, the factors are not applied cumulatively in determining the Federal rate. Therefore, the proposed net adjustment to the FY 1998 Federal rate is 0.9276/0.9358, or 0.9912.

5. Standard Capital Federal Rate for FY 1998

For FY 1997, the capital Federal rate was $438.92. With the changes we are proposing to the factors used to establish the Federal rate, the FY 1998 Federal rate would be $438.43. The proposed Federal rate for FY 1998 was calculated as follows:

- The proposed FY 1998 update factor is 1.0110, that is, the proposed update is 1.10 percent.
- The proposed FY 1998 budget neutrality adjustment factor that is applied to the standard Federal payment rate for changes in the DRG relative weights and in the GAF is 1.0001.
- The proposed FY 1998 outlier adjustment factor is 0.9449.
- The proposed FY 1998 exceptions payments adjustment factor is 0.9276.

Since the Federal rate has already been adjusted for differences in case mix, wages, cost of living, indirect medical education costs, and payments to hospitals serving a disproportionate share of low-income patients, we propose to make no additional adjustments in the standard Federal rate for these factors other than the budget neutrality factor for changes in the DRG relative weights and the GAF.

We are providing a chart that shows how each of the factors and adjustments for FY 1998 affected the computation of the proposed FY 1998 Federal rate in comparison to the FY 1997 Federal rate. The proposed FY 1998 update factor has the effect of increasing the Federal rate by 1.10 percent compared to the rate in FY 1997, while the proposed geographic and DRG budget neutrality factor has the effect of increasing the Federal rate by 0.01 percent. The proposed FY 1998 outlier adjustment factor has the effect of decreasing the Federal rate by 0.34 percent compared to FY 1997. The proposed FY 1998 exceptions reduction factor has the effect of decreasing the Federal rate by 0.88 percent compared to the exceptions reduction for FY 1997. The combined effect of all the proposed changes is to decrease the proposed Federal rate by 0.11 percent compared to the Federal rate for FY 1997.

COMPARISON OF FACTORS AND ADJUSTMENTS: FY 1997 FEDERAL RATE AND PROPOSED FY 1998 FEDERAL RATE

	FY 97	Proposed FY 98	Change	Percent change
Update factor [1]	1.0070	1.0110	1.0110	1.10
GAF/DRG Adjustment Factor [1]	0.9987	1.0001	1.0001	0.01
Outlier Adjustment Factor [2]	0.9481	0.9449	0.9966	−0.34
Exceptions Adjustment Factor [2]	0.9358	0.9276	0.9912	−0.88
Federal Rate	$438.92	$438.43	0.9988	−0.11

[1] The update factor and the GAF/DRG budget neutrality factors are built permanently into the rates. Thus, for example, the incremental change from FY 1997 to FY 1998 resulting from the application of the 1.0001 GAF/DRG budget neutrality factor for FY 1998 is 1.0001.

[2] The outlier reduction factor and the exceptions reduction factor are not built permanently into the rates; that is, these factors are not applied cumulatively in determining the rates. Thus, for example, the net change resulting from the application of the FY 1998 outlier reduction factor is 0.9449/0.9481, or 0.9966.

6. Special Rate for Puerto Rico Hospitals

As explained at the beginning of this section, hospitals in Puerto Rico are paid based on 75 percent of the Puerto Rico rate and 25 percent of the Federal rate. The Puerto Rico rate is derived from the costs of Puerto Rico hospitals only, while the Federal rate is derived from the costs of all acute care hospitals participating in the prospective payment system (including Puerto Rico). To adjust hospitals' capital payments for geographic variations in capital costs, we apply a geographic adjustment factor (GAF) to both portions of the blended rate. The GAF is calculated using the operating PPS wage index and varies depending on the MSA or rural area in which the hospital is located. Since the GAF is based on the wage index, we plan to revise the method of accounting for geographical variation in Puerto Rico, to parallel the change that is being proposed on the operating rate, where a Puerto Rico-specific wage index is being calculated (section III.B.). Specifically, we propose to use the new Puerto Rico wage index to determine the GAF for the Puerto Rico part of the capital blended rate and retain the use of the national wage index to determine the GAF for the national part of the blended rate. Hospitals in Puerto Rico would still be paid based on 75 percent of the Puerto Rico rate and 25 percent of the Federal rate. This means that, in computing the payment for a particular Puerto Rico hospital, the Puerto Rico portion of the rate will be multiplied by the Puerto Rico-specific GAF for the MSA in which the hospital is located, and the national portion of the rate will be multiplied by the national GAF for the MSA in which the hospital is located (which is computed from national data for all hospitals in the United States and Puerto Rico).

We have adjusted the Puerto Rico rate to account for the application of Puerto Rico-specific GAFs. We did this in order to be consistent with the method by which we originally determined the national and Puerto Rico rates. This resulting standard Puerto Rico rate does not translate into a reduction in payments to Puerto Rico hospitals. The Puerto Rico-specific GAFs are higher than the national GAFs because they use the Puerto Rico mean only rather than the national mean. As a result, application of Puerto Rico-specific GAFs means Puerto Rico hospitals receive more money.

For FY 1997, before application of the GAF, the special rate for Puerto Rico hospitals was $337.63. With the changes we are proposing to the factors used to determine the rate, the proposed FY 1998 special rate for Puerto Rico is $204.46. After application of the GAF, the proposed FY 1998 capital rates for Puerto Rico hospitals are higher than the FY 1997 rates.

The example below is based on the proposed FY 1998 San Juan-Bayamon GAF and Puerto Rico capital rate in comparison to the final FY 1997 San Juan-Bayamon GAF and Puerto Rico capital rate. (For purposes of simplicity we have not included all elements involved in computing a payment to a particular hospital. For a more complete description of calculating the payment for a specific discharge see Section C. below. In addition the Puerto Rico rate and GAF would be used to compute 75 percent of a Puerto Rico hospital's payment. The remaining 25 percent would be based on the national rate and GAF.)

SAN JUAN-BAYAMON MSA

	FY 1997 final	Proposed FY 1998
Rate	$337.63	$204.46
GAF	.5793	1.0186
Rate X GAF =	$195.59	$208.26

The example illustrates that based on the changes we are proposing to the FY 1998 Puerto Rico GAF and capital rate, all other factors being equal, a hospital in the San Juan-Bayamon MSA would receive a larger payment with the proposed FY 1998 capital rate and GAF compared with the final FY 1997 capital rate and GAF.

B. Determination of Hospital-Specific Rate Update

Section 412.328(e) of the regulations provides that the hospital-specific rate for FY 1998 be determined by adjusting the FY 1997 hospital-specific rate by the following factors:

1. Hospital-Specific Rate Update Factor

The hospital-specific rate is updated in accordance with the update factor for the standard Federal rate determined under § 412.308(c)(1). For FY 1998, we are proposing that the hospital-specific rate be updated by a factor of 1.0110.

2. Exceptions Payment Adjustment Factor

For FYs 1992 through FY 2001, the updated hospital-specific rate is multiplied by an adjustment factor to account for estimated exceptions payments for capital-related costs under § 412.348, determined as a proportion of the total amount of payments under the hospital-specific rate and the Federal rate. For FY 1998, we estimate that exceptions payments will be 7.24 percent of aggregate payments based on the Federal rate and the hospital-specific rate. We therefore propose that the updated hospital-specific rate be reduced by a factor of 0.9276. The exceptions reduction factors are not built permanently into the rates; that is, the factors are not applied cumulatively in determining the hospital-specific rate. Therefore, the proposed net adjustment to the FY 1998 hospital-specific rate is 0.9276/0.9358, or 0.9912.

3. Net Change to Hospital-Specific Rate

We are providing a chart to show the net change to the hospital-specific rate. The chart shows the factors for FY 1997 and FY 1998 and the net adjustment for each factor. It also shows that the proposed cumulative net adjustment from FY 1997 to FY 1998 is 1.0021, which represents a proposed increase of 0.21 percent to the hospital-specific rate. For each hospital, the proposed FY 1998 hospital-specific rate is determined by multiplying the FY 1997 hospital-specific rate by the cumulative net adjustment of 1.0021.

PROPOSED FY 1998 UPDATE AND ADJUSTMENTS TO HOSPITAL-SPECIFIC RATES

	FY 97	Proposed FY 98	Net adjustment	Percent change
Update Factor	1.0070	1.0110	1.0110	1.10
Exceptions Payment Adjustment Factor	0.9358	0.9276	0.9912	−0.88
Cumulative Adjustments	0.9424	0.9444	1.0021	0.21

Note: The update factor for the hospital-specific rate is applied cumulatively in determining the rates. Thus, the incremental increase in the update factor from FY 1997 to FY 1998 is 1.0110. In contrast, the exceptions payment adjustment factor is not applied cumulatively. Thus, for example, the incremental increase in the exceptions reduction factor from FY 1997 to FY 1998 is 0.9276/0.9358, or 0.9912.

C. Calculation of Inpatient Capital-Related Prospective Payments for FY 1998

During the capital prospective payment system transition period, a hospital is paid for the inpatient capital-related costs under one of two alternative payment methodologies; the fully prospective payment methodology or the hold-harmless methodology. The payment methodology applicable to a particular hospital is determined when a hospital comes under the prospective payment system for capital-related costs by comparing its hospital-specific rate to the Federal rate applicable to the hospital's first cost reporting period under the prospective payment system.

The applicable Federal rate was determined by making adjustments as follows:

- For outliers by dividing the standard Federal rate by the outlier reduction factor for that fiscal year; and,
- For the payment adjustment factors applicable to the hospital (that is, the hospital's GAF, the disproportionate share adjustment factor, and the indirect medical

education adjustment factor, when appropriate).

If the hospital-specific rate is above the applicable Federal rate, the hospital is paid under the hold-harmless methodology. If the hospital-specific rate is below the applicable Federal rate, the hospital is paid under the fully prospective methodology.

For purposes of calculating payments for each discharge under both the hold-harmless payment methodology and the fully prospective payment methodology, the standard Federal rate is adjusted as follows:

(Standard Federal Rate)×(DRG weight) × (GAF) × (Large Urban Add-on, if applicable)×(COLA adjustment for hospitals located in Alaska and Hawaii)×(1+Disproportionate Share Adjustment Factor+IME Adjustment Factor, if applicable).

The result is termed the adjusted Federal rate.

Payments under the hold-harmless methodology are determined under one of two formulas. A hold-harmless hospital is paid the higher of:

- 100 percent of the adjusted Federal rate for each discharge; or
- An old capital payment equal to 85 percent (100 percent for sole community hospitals) of the hospital's allowable Medicare inpatient old capital costs per discharge for the cost reporting period plus a new capital payment based on a percentage of the adjusted Federal rate for each discharge. The percentage of the adjusted Federal rate equals the ratio of the hospital's allowable Medicare new capital costs to its total Medicare inpatient capital-related costs in the cost reporting period.

Once a hospital receives payment based on 100 percent of the adjusted Federal rate in a cost reporting period beginning on or after October 1, 1994 (or the first cost reporting period after obligated capital that is recognized as old capital under § 412.302(c) is put in use for patient care, if later), the hospital continues to receive capital prospective payment system payments on that basis for the remainder of the transition period.

Payment for each discharge under the fully prospective methodology is the sum of:

- The hospital-specific rate multiplied by the DRG relative weight for the discharge and by the applicable hospital-specific transition blend percentage for the cost reporting period; and
- The adjusted Federal rate multiplied by the Federal transition blend percentage.

The blend percentages for cost reporting periods beginning in FY 1998 are 70 percent of the adjusted Federal rate and 30 percent of the hospital-specific rate.

Hospitals may also receive outlier payments for those cases that qualify under the thresholds established for each fiscal year. Section 412.312(c) provides for a single set of thresholds to identify outlier cases for both inpatient operating and inpatient capital-related payments. Outlier payments are made only on that portion of the Federal rate that is used to calculate the hospital's inpatient capital-related payments. For fully prospective hospitals, that portion is 70 percent of the Federal rate for discharges occurring in cost reporting periods beginning during FY 1998. Thus, a fully prospective hospital will receive 70 percent of the capital-related outlier payment calculated for the case for discharges occurring in cost reporting periods beginning in FY 1998. For hold-harmless hospitals paid 85 percent of their reasonable costs for old inpatient capital, the portion of the Federal rate that is included in the hospital's outlier payments is based on the hospital's ratio of Medicare inpatient costs for new capital to total Medicare inpatient capital costs. For hold-harmless hospitals that are paid 100 percent of the Federal rate, 100 percent of the Federal rate is included in the hospital's outlier payments.

The proposed outlier thresholds for FY 1998 are published in section II.A.4.c of this Addendum. For FY 1998, a case qualifies as a cost outlier if the cost for the case (after standardization for the indirect teaching adjustment and disproportionate share adjustment) is greater than the prospective payment rate for the DRG plus $7,600.

During the capital prospective payment system transition period, a hospital may also receive an additional payment under an exceptions process if its total inpatient capital-related payments are less than a minimum percentage of its allowable Medicare inpatient capital-related costs. The minimum payment level is established by class of hospital under § 412.348. The proposed minimum payment levels for portions of cost reporting periods occurring in FY 1998 are:

- Sole community hospitals (located in either an urban or rural area), 90 percent;
- Urban hospitals with at least 100 beds and a disproportionate share patient percentage of at least 20.2 percent; and
- Urban hospitals with at least 100 beds that qualify for disproportionate share payments under § 412.106(c)(2), 80 percent; and
- All other hospitals, 70 percent.

Under § 412.348(d), the amount of the exceptions payment is determined by comparing the cumulative payments made to the hospital under the capital prospective payment system to the cumulative minimum payment levels applicable to the hospital for each cost reporting period subject to that system. Any amount by which the hospital's cumulative payments exceed its cumulative minimum payment is deducted from the additional payment that would otherwise be payable for a cost reporting period.

New hospitals are exempted from the capital prospective payment system for their first 2 years of operation and are paid 85 percent of their reasonable costs during that period. A new hospital's old capital costs are its allowable costs for capital assets that were put in use for patient care on or before the later of December 31, 1990 or the last day of the hospital's base year cost reporting period, and are subject to the rules pertaining to old capital and obligated capital as of the applicable date. Effective with the third year of operation, we will pay the hospital under either the fully prospective methodology, using the appropriate transition blend in that Federal fiscal year, or the hold-harmless methodology. If the hold-harmless methodology is applicable, the hold-harmless payment for assets in use during the base period would extend for 8 years, even if the hold-harmless payments extend beyond the normal transition period.

D. Capital Input Price Index

1. Background

In the following section we explain why we are not proposing to revise the Capital Input Price Index (CIPI) as we are the operating input price index to incorporate more recent data from Bureau of the Census. (This change to the operating price index is described in section IV. of the preamble.)

Like the prospective payment hospital operating input price index, the Capital Input Price Index (CIPI) is a fixed-weight price index. A fixed-weight price index measures how much it would cost at a later date to purchase the same mix of goods and services purchased in the base period. For the prospective payment hospital operating and capital input price indices, the base period is selected and cost category weights are determined using available data on hospitals. Next, appropriate price proxy indices are chosen for each cost category. Then a price proxy index level for each expenditure category is multiplied by the comparable cost category weight. The sum of these products (that is, weights multiplied by price proxy index levels) for all cost categories yields the composite index level of the market basket for a given year. Repeating the step for other years produces a time series of composite market basket index levels. Dividing an index level by a later index level produces a rate of growth in the input price index. Since the percent change is computed for the fixed mix of total capital inputs with a 1992 base, the index is fixed-weight.

Like the operating input price index, the CIPI measures the price changes associated with costs during a given year. In order to do so, the CIPI must differ from the operating input price index in one important aspect. The CIPI must reflect the vintage nature of capital, which is the acquisition and use of capital over time. Capital expenses in any given year are determined by the stock of capital in that year (that is, capital that remains on hand from all current and prior capital acquisitions). An index measuring capital price changes needs to reflect this vintage nature of capital. Therefore, the CIPI was developed to capture the vintage nature of capital by using a weighted-average of past capital purchase prices up to and including the current year.

Using Medicare cost reports, AHA data, and Securities Data Corporation data, a vintage-weighted price index was developed to measure price increases associated with capital expenses. We periodically update the base year for the operating and capital input prices to reflect the changing composition of inputs for operating and capital expenses. Currently, both the operating input price index and the CIPI are based on FY 1992. They were rebased in FY 1997. The process for updating the CIPI was explained in the May 31, 1996 **Federal Register** (61 FR 27466) and the August 30, 1996 **Federal Register** (61 FR 46196). The following **Federal Register** documents also describe development and

revisions of the methodology involved with the construction of the CIPI: September 1, 1992 (57 FR 40016), May 26, 1993 (58 FR 30448), September 1, 1993 (58 FR 46490), May 27, 1994 (59 FR 27876), September 1, 1994 (59 FR 45517), June 2, 1995 (60 FR 29229), and September 1, 1995 (60 FR 45815)

2. Research on Reweighting the CIPI

After analyzing various data sources and methodologies for determining capital weights for the HCFA PPS CIPI, we propose to continue using the weights published in the August 30, 1996 **Federal Register**. In developing the rebased CIPI for the FY 1997 proposed and final rules, we stated that we had planned to use the 1992 Department of Commerce data for developing capital cost category weights but the data was not available in time. The data has since become available, and although we are planning to use it to revise the operating market basket, we are not planning to do so for the capital input price index.

The weights for the 1992 rebased CIPI were developed from the 1992 Medicare Cost Reports and the 1992 AHA Annual Survey. We analyzed the newly available 1992 Census of Service Industries Asset and Expenditures Survey from the Bureau of the Census, Department of Commerce. There are three major reasons we are proposing to continue using the current 1992 HCFA PPS CIPI without modifying the weights using the 1992 Asset and Expenditures Survey.

First, HCFA's preference in determining index weights is to continue to use the Medicare Cost Reports for the Medicare subset of hospitals (PPS only). Beginning in 1992, detailed capital cost data for PPS hospitals was available from the Medicare Cost Reports. This data includes depreciation, interest, and other capital-related expenses. We used the 1992 AHA Annual Survey as the source for interest expenses because of its strength in measuring interest compared to the Medicare Cost Reports. All of the other cost category weights in the HCFA PPS CIPI were developed from the 1992 Medicare Cost Reports. Using these two data sources we were able to produce weights for PPS hospitals only, as opposed to all nonfederal hospitals as reported in the Asset and Expenditures Survey. Because this detailed capital data will be available in Medicare Cost Reports in future years, we believe the Medicare Cost Reports are the most appropriate source for determining the weights in the HCFA PPS CIPI.

The second major reason we are proposing to continue using the current HCFA PPS CIPI is that the capital cost shares are similar to those provided by the 1992 Asset and Expenditures Survey. The 1992 Asset and Expenditures Survey reports capital cost shares for buildings, structures, and related facilities depreciation (fixed) and machinery, equipment, and other depreciation (movable), as well as total depreciation as a percentage of total hospital ''operating'' expenses (operating and capital expenses). Hospital expenses in the 1992 Asset and Expenditures Survey are based on information collected from a probability sample of both PPS and non-PPS hospitals. The CIPI weights from the 1992 Medicare Cost Reports and the 1992 AHA Annual Survey are based on a universal count of PPS hospitals only. Despite these methodological differences, capital cost shares as measured by these data sources are similar. Specifically, the 1992 Medicare Cost Reports show building and fixed equipment depreciation was 46.4 percent of total depreciation and movable equipment depreciation was 53.6 percent. The distribution for the 1992 Asset and Expenditures Survey was 44.4 percent for buildings, structures, and related facilities depreciation and 55.6 percent for machinery, equipment, and other depreciation. These differences are acceptable given the differences in universe and methodologies of the two data sources. A simulation of the CIPI using each set of weights showed a less than 0.1 percentage point impact on the percent change of the CIPI for each year between 1980–2007.

Another comparison between cost shares in the Medicare Cost Reports and the Asset and Expenditures Survey produced minor differences as well. The 1992 Asset and Expenditures Survey shows depreciation as a percentage of total ''operating'' expenses (operating and capital expenses) of 5.0 percent. A similar calculation of PPS hospitals from the 1992 Medicare Cost Reports shows depreciation as 5.3 percent of total ''operating'' expenses. Given the differences in universe and methodologies between the Asset and Expenditure Survey and the Medicare Cost Reports we consider this 0.3 percentage point difference to be within the range of reasonableness.

The last major reason for continuing to use the 1992 Medicare Cost Reports in determining capital weights for the HCFA PPS CIPI is that the detail needed for future rebasing of the index will be available from this data source. The 1997 Asset and Expenditures Survey, which is being renamed the Business Expenditures survey, will not include data on fixed assets, interest expense, and capital leases. Also, detail on capital expenditures and depreciation, including the breakout of structures and movable equipment, will not be part of the 1997 survey. The lack of this detailed capital data would create an obstacle to rebasing in the future.

This survey data is appropriate for use in the operating PPS index because it provides operating expense information not available from the Medicare cost reports and which will be available in the 1997 survey. The Bureau of Census now considers the principal source of data on fixed assets and capital expenditures for health industries to be the Annual Capital Expenditures Survey, which began in 1993. The Annual Capital Expenditures Survey will not include the detail needed for determining weights for the CIPI, such as depreciation at the hospital level. However, we will continue to consider and monitor the Annual Capital Expenditures Survey as a possible data source for future rebasing.

For the three major reasons explained above we are proposing to stay with the current HCFA PPS CIPI and to not modify the index using the newly available 1992 Asset and Expenditures Survey.

3. Forecast of the CIPI for Federal Fiscal Year 1998

DRI forecasts a 1.3 percent increase in the CIPI for FY 1998. This is the outcome of a projected 2.3 percent increase in vintage-weighted depreciation prices (building and fixed equipment, and movable equipment) and a 3.0 percent increase in other capital expense prices in FY 1998, partially offset by a 1.6 percent decline in vintage-weighted interest rates in FY 1998. The weighted average of these three factors produces the 1.3 percent increase for the CIPI as a whole.

IV. Proposed Changes to Payment Rates for Excluded Hospitals and Hospital Units: Rate-of-Increase Percentages

The inpatient operating costs of hospitals and hospital units excluded from the prospective payment system are subject to rate-of-increase limits established under the authority of section 1886(b) of the Act, which is implemented in § 413.40 of the regulations. Under these limits, an annual target amount (expressed in terms of the inpatient operating cost per discharge) is set for each hospital, based on the hospital's own historical cost experience trended forward by the applicable rate-of-increase percentages (update factors). The target amount is multiplied by the number of Medicare discharges in a hospital's cost reporting period, yielding the ceiling on aggregate Medicare inpatient operating costs for the cost reporting period.

Effective with cost reporting periods beginning on or after October 1, 1991, a hospital that has Medicare inpatient operating costs in excess of its ceiling is paid its ceiling plus 50 percent of its costs in excess of the ceiling. Total payment may not exceed 110 percent of the ceiling. A hospital that has inpatient operating costs less than its ceiling is paid its costs plus the lower of—

- Fifty percent of the difference between the allowable inpatient operating costs and the ceiling; or
- Five percent of the ceiling.

Each hospital's target amount is adjusted annually, at the beginning of its cost reporting period, by an applicable rate-of-increase percentage. Section 1886(b)(3)(B) of the Act provides that for cost reporting periods beginning on or after October 1, 1997 and before October 1, 1998, the applicable rate-of-increase percentage is the market basket percentage. In order to determine a hospital's target amount for its cost reporting period beginning in FY 1998, the hospital's target amount for its cost reporting period that began in FY 1997 is increased by the market basket percentage increase for FY 1998. The most recent forecast of the market basket increase for FY 1998 for hospitals and hospital units excluded from the prospective payment system is 2.8 percent.

V. Tables

This section contains the tables referred to throughout the preamble to this proposed rule and in this Addendum. For purposes of this proposed rule, and to avoid confusion, we have retained the designations of Tables 1 through 5 that were first used in the September 1, 1983 initial prospective payment final rule (48 FR 39844). Tables 1A, 1C, 1D, 3C, 4A, 4B, 4C, 4D, 4E, 4F, 5, 6A, 6B, 6C, 6D, 6E, 6F, 7A, 7B, 8A, and 8B are presented below. The tables presented below are as follows:

Table 1A—National Adjusted Operating Standardized Amounts, Labor/Nonlabor
Table 1C—Adjusted Operating Standardized Amounts for Puerto Rico, Labor/Nonlabor
Table 1D—Capital Standard Federal Payment Rate
Table 3C—Hospital Case Mix Indexes for Discharges Occurring in Federal Fiscal Year 1996 and Hospital Average Hourly Wage for Federal Fiscal Year 1998 Wage Index
Table 4A—Wage Index and Capital Geographic Adjustment Factor (GAF) for Urban Areas
Table 4B—Wage Index and Capital Geographic Adjustment Factor (GAF) for Rural Areas
Table 4C—Wage Index and Capital Geographic Adjustment Factor (GAF) for Hospitals That Are Reclassified
Table 4D—Average Hourly Wage for Urban Areas
Table 4E—Average Hourly Wage for Rural Areas
Table 4F—Puerto Rico Wage Index and Captial Geographic Adjustment Factor (GAF)
Table 5—List of Diagnosis Related Groups (DRGs), Relative Weighting Factors, Geometric and Arithmetic Mean Length of Stay.
Table 6A—New Diagnosis Codes
Table 6B—New Procedure Codes
Table 6C—Invalid Diagnosis Codes
Table 6D—Revised Diagnosis Code Titles
Table 6E—Additions to the CC Exclusions List
Table 6F—Deletions to the CC Exclusions List
Table 7A—Medicare Prospective Payment System; Selected Percentile Lengths of Stay (FY 96 MEDPAR Update 12/96 GROUPER V14.0)
Table 7B—Medicare Prospective Payment System; Selected Percentile Lengths of Stay (FY 96 MEDPAR Update 12/96 GROUPER V15.0)
Table 8A—Statewide Average Operating Cost-to-Charge Ratios [for Urban and Rural Hospitals] (Case Weighted) April 1997
Table 8B—Statewide Average Capital Cost-to-Charge Ratios for Urban and Rural Hospitals (Case Weighted) April 1997

TABLE 1A.—NATIONAL ADJUSTED OPERATING STANDARDIZED AMOUNTS, LABOR/NONLABOR

Large urban areas		Other areas	
Labor-related	Nonlabor-related	Labor-related	Nonlabor-related
$2,857.85	$1,161.63	$2,812.62	$1,143.24

TABLE 1C.—ADJUSTED OPERATING STANDARDIZED AMOUNTS FOR PUERTO RICO, LABOR/NONLABOR

	Large urban areas		Other areas	
	Labor	Nonlabor	Labor	Nonlabor
National	$2,833.30	$1,151.64	$2,833.30	$1,151.64
Puerto Rico	1,346.08	541.83	1,324.77	533.25

TABLE 1D.—CAPITAL STANDARD FEDERAL PAYMENT RATE

	Rate
National	$438.43
Puerto Rico	204.46

TABLE 3C.—HOSPITAL CASE MIX INDEXES FOR DISCHARGES OCCURRING IN FEDERAL FISCAL YEAR 1996; HOSPITAL AVERAGE HOURLY WAGE FOR FEDERAL FISCAL YEAR 1998 WAGE INDEX

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
010001	01.4816	15.78	010095	00.9851	12.06	030004	01.0965	13.75	040002	01.1972	12.84	040107	01.2002	15.29
010004	00.9673	11.63	010097	00.9083	14.47	030006	01.5609	18.02	040003	01.0142	12.72	040109	01.1817	13.56
010005	01.2080	15.57	010098	01.2511	11.65	030007	01.3217	16.96	040004	01.6321	15.84	040114	01.8843	17.60
010006	01.4488	15.81	010099	01.1678	14.38	030008	02.3039	19.75	040005	01.0108	12.83	040116	01.3793	19.05
010007	01.0717	13.52	010100	01.2630	15.26	030009	01.3451	16.25	040007	01.8418	17.91	040118	01.2192	14.54
010008	01.1631	12.11	010101	01.0605	14.05	030010	01.4365	17.79	040008	01.0326	11.22	040119	01.1562	14.58
010009	01.1280	15.17	010102	01.0060	13.60	030011	01.5199	18.32	040010	01.3163	15.80	040124	01.1377	13.82
010010	01.0749	14.78	010103	01.8573	18.70	030012	01.2362	16.41	040011	00.9931	10.85	040126	00.9510	11.98
010011	01.6404	19.62	010104	01.7047	18.20	030013	01.2703	19.56	040014	01.1907	16.40	040132	00.5050	11.69
010012	01.3067	16.65	010108	01.2350	14.48	030014	01.4912	18.50	040015	01.2905	13.52	050002	01.5782	35.29
010015	01.0958	13.70	010109	01.1090	13.36	030016	01.2444	17.47	040016	01.6623	16.02	050006	01.4562	19.54
010016	01.2774	16.88	010110	01.0535	14.12	030017	01.5058	18.11	040017	01.3308	11.89	050007	01.6175	27.21
010018	00.9336	16.77	010112	01.1875	15.28	030018	01.8046	19.31	040018	01.2282	18.03	050008	01.5162	26.68
010019	01.3220	14.52	010113	01.6944	15.80	030019	01.2816	19.75	040019	01.1372	13.94	050009	01.7341	29.57
010021	01.2458	15.75	010114	01.3221	16.45	030022	01.4807	15.25	040020	01.6074	15.06	050013	01.8298	21.70
010022	01.0181	17.25	010115	00.8522	12.02	030023	01.3285	18.26	040021	01.2537	14.96	050014	01.1688	22.16
010023	01.6504	15.43	010117	00.8712	13.59	030024	01.7123	20.56	040022	01.6764	14.96	050015	01.3865	23.94
010024	01.4635	15.95	010118	01.3322	18.41	030025	01.1326	14.24	040024	01.0654	14.26	050016	01.1635	17.87
010025	01.4620	13.24	010119	00.9593	18.53	030027	01.0596	15.39	040025	00.9155	12.38	050017	02.0494	25.36
010027	00.8288	14.12	010120	00.9722	15.39	030030	01.7325	18.21	040026	01.6071	16.65	050018	01.3046	20.37
010029	01.5715	15.54	010121	01.3081	15.80	030033	01.2195	15.72	040027	01.2929	12.96	050021	01.5263	25.59
010031	01.2306	15.57	010123	01.3122	15.81	030034	01.0042	15.05	040028	01.0932	11.93	050022	01.5026	23.58
010032	00.9618	12.86	010124	01.3739	13.53	030035	01.2767	18.82	040029	01.2899	15.78	050024	01.2995	21.10
010033	01.9459	17.26	010125	01.0064	15.83	030036	01.1913	18.51	040030	00.9480	11.36	050025	01.6853	21.84
010034	01.0864	12.64	010126	01.1851	14.11	030037	02.0991	19.86	040032	00.9572	10.60	050026	01.4624	28.03
010035	01.2549	15.94	010127	01.3443	16.36	030038	01.6421	18.39	040035	00.9651	10.26	050028	01.3776	15.43
010036	01.1249	16.08	010128	01.0020	12.39	030040	01.1481	16.07	040036	01.5225	17.87	050029	01.4317	22.42
010038	01.3209	17.78	010129	01.0948	14.62	030041	00.9799	13.77	040037	01.1133	11.92	050030	01.3242	20.23
010039	01.6825	17.26	010130	01.0351	14.47	030043	01.2510	17.86	040039	01.2290	13.00	050032	01.2355	26.01
010040	01.5937	18.14	010131	01.3336	18.57	030044	01.0839	16.15	040040	00.9725	14.02	050033	01.4509	26.08
010043	01.1350	10.75	010134	00.8545	09.70	030046	00.9632	18.53	040041	01.3625	15.91	050036	01.6816	19.57
010044	01.1641	14.54	010137	01.2902	16.93	030047	00.9383	20.45	040042	01.2370	14.76	050038	01.4549	28.87
010045	01.1886	13.05	010138	00.9275	10.96	030049	00.9881	14.67	040044	01.0305	11.22	050039	01.6191	21.51
010046	01.5217	16.79	010139	01.6895	19.60	030054	00.8543	12.51	040045	01.0233	15.07	050040	01.2696	22.01
010047	00.9803	10.30	010143	01.2914	16.04	030055	01.2187	16.56	040047	01.1375	15.13	050042	01.3519	20.78
010049	01.1619	14.77	010144	01.3019	16.49	030059	01.3916	18.88	040048	01.1836	14.02	050043	01.6119	30.35
010050	01.1203	13.88	010145	01.3030	15.59	030060	01.1395	16.21	040050	01.1609	12.27	050045	01.2819	18.28
010051	00.8551	09.93	010146	01.1732	15.81	030061	01.6802	17.13	040051	01.1004	13.76	050046	01.2703	21.20
010052	01.0499	09.88	010148	01.0017	12.52	030062	01.2660	15.94	040053	01.1198	13.04	050047	01.5698	31.60
010053	01.0792	13.31	010149	01.3645	16.73	030064	01.7579	18.53	040054	01.0614	12.44	050051	01.0469	17.04
010054	01.2098	17.02	010150	01.1036	16.28	030065	01.7255	19.65	040055	01.4708	15.29	050054	01.2054	20.60
010055	01.4421	16.99	010152	01.4914	17.56	030067	01.0541	15.78	040058	01.0292	13.64	050055	01.4035	27.81
010056	01.4314	18.78	010155	01.0479	06.99	030068	01.0721	15.77	040060	00.9858	10.20	050056	01.3667	29.73
010058	01.0865	12.93	020001	01.5659	26.31	030069	01.3277	20.13	040062	01.6837	15.85	050057	01.5598	19.64
010059	01.1118	14.92	020002	01.2468	23.88	030071	00.9685	.....	040064	01.0588	11.19	050058	01.4525	21.47
010061	01.1872	15.20	020004	01.1123	25.46	030072	00.8385	.....	040066	01.2238	15.86	050060	01.5314	20.46
010062	01.0345	14.36	020005	00.8208	25.53	030073	01.0067	.....	040067	01.0916	12.18	050061	01.4666	21.87
010064	01.7943	18.52	020006	01.2547	25.07	030074	00.8781	.....	040069	01.1556	14.87	050063	01.3998	21.02
010065	01.3457	15.39	020007	01.0349	22.76	030075	00.8559	.....	040070	00.9325	13.68	050065	01.6382	22.84
010066	00.9485	10.41	020008	01.1378	29.10	030076	01.1098	.....	040071	01.6792	15.73	050066	01.2676	20.99
010068	01.3084	16.70	020009	00.9842	21.88	030077	00.8398	.....	040072	01.0978	13.94	050067	01.3721	21.53
010069	01.1900	13.10	020010	01.0900	26.44	030078	01.1353	.....	040074	01.3194	14.39	050068	01.0664	18.92
010072	01.2155	13.45	020011	00.9844	22.61	030079	00.8800	.....	040075	01.1179	11.73	050069	01.6450	24.14
010073	01.0213	10.31	020012	01.2438	24.23	030080	01.5975	21.05	040076	01.0526	16.33	050070	01.2820	33.06
010078	01.2760	16.51	020013	01.0503	24.21	030083	01.3152	21.06	040077	00.9257	11.30	050071	01.3290	32.76
010079	01.2562	15.43	020014	01.1749	22.13	030084	01.0320	.....	040078	01.5605	17.77	050072	01.3209	32.63
010080	01.0102	11.89	020017	01.6705	24.50	030085	01.5592	23.63	040080	01.1210	14.65	050073	01.3310	32.63
010081	01.8549	14.84	020018	00.7773	.....	030086	01.3315	18.01	040081	00.9561	10.75	050074	01.3610	38.56
010083	01.0100	15.43	020019	00.7868	.....	030087	01.6332	18.93	040082	01.1568	14.31	050075	01.3928	32.75
010084	01.4845	17.66	020020	00.7727	.....	030088	01.4131	19.07	040084	01.1207	14.18	050076	01.8220	32.11
010085	01.2689	17.11	020021	00.9217	.....	030089	01.5795	19.68	040085	01.1916	14.81	050077	01.5826	22.86
010086	01.0829	13.70	020024	01.0856	23.72	030092	01.6107	20.36	040088	01.4006	14.36	050078	01.2964	24.76
010087	01.8442	18.51	020025	00.9808	24.32	030093	01.4071	17.81	040090	00.9231	13.54	050079	01.5662	29.34
010089	01.2639	15.60	020026	01.3114	.....	030094	01.3476	18.46	040091	01.2636	19.81	050080	01.3940	20.59
010090	01.5840	17.57	020027	01.0992	.....	030095	01.1396	18.24	040093	01.0221	10.11	050081	01.7055	22.17
010091	01.0096	14.57	030001	01.3338	20.07	030098	00.9581	.....	040100	01.3213	13.29	050082	01.5543	21.60
010092	01.4078	16.49	030002	01.8051	21.04	030099	00.9322	.....	040105	01.0263	13.29	050084	01.6775	23.55
010094	01.2357	15.11	030003	01.9788	20.23	040001	01.1189	12.95	040106	01.2177	14.08	050088	01.0368	23.02

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
050089	01.4270	20.50	050188	01.3814	26.59	050298	01.2566	21.05	050421	01.3715	24.84	050546	00.7841	22.14
050090	01.2899	23.06	050189	01.0628	21.87	050299	01.3557	22.62	050423	01.0305	19.52	050547	00.8692	21.94
050091	01.1899	22.02	050191	01.4973	20.99	050300	01.3977	22.60	050424	01.8000	22.86	050549	01.7307	25.79
050092	00.9919	15.98	050192	01.1874	18.17	050301	01.3383	22.43	050425	01.3230	33.00	050550	01.5796	23.60
050093	01.5661	23.33	050193	01.3126	23.13	050302	01.3709	27.57	050426	01.3336	15.00	050551	01.3057	24.63
050095	00.7794	29.00	050194	01.2784	28.01	050305	01.5728	30.80	050427	00.8401	17.79	050552	01.2447	21.99
050096	01.3114	19.75	050195	01.6021	32.79	050307	01.3612	21.59	050430	00.8449	17.06	050557	01.5644	21.58
050097	01.4624	18.53	050196	01.4108	17.33	050308	01.5171	28.30	050431	01.0903	19.94	050559	01.4051	24.92
050099	01.4748	23.23	050197	01.8369	28.44	050309	01.3657	24.67	050432	01.6711	24.04	050560	01.4220	.....
050100	01.7332	28.66	050204	01.4986	24.18	050310	01.2224	19.66	050433	01.1020	17.37	050561	01.1900	32.17
050101	01.4316	28.42	050205	01.3796	17.74	050312	01.9978	24.02	050434	01.2094	20.09	050564	01.1456	17.84
050102	01.4300	18.79	050207	01.2951	20.37	050313	01.2181	21.97	050435	01.2977	23.02	050565	01.1278	21.68
050103	01.6336	26.99	050208	00.9009	28.83	050315	01.2135	19.97	050436	00.9672	14.81	050566	00.9102	23.47
050104	01.5240	22.61	050211	01.3135	30.44	050317	01.3276	18.92	050438	01.7527	25.46	050567	01.6176	24.19
050107	01.4804	20.75	050213	01.5230	21.12	050320	01.2950	27.83	050440	01.3228	21.46	050568	01.3603	19.64
050108	01.7167	21.54	050214	01.4986	20.90	050324	01.9039	25.52	050441	01.9990	28.23	050569	01.3434	23.05
050109	02.4142	24.01	050215	01.5369	28.12	050325	01.2371	21.42	050443	00.9281	16.07	050570	01.7731	23.41
050110	01.3001	19.33	050217	01.3369	20.45	050327	01.5881	22.32	050444	01.3847	23.82	050571	01.4455	22.36
050111	01.3067	19.39	050219	01.1287	20.76	050328	01.5403	30.01	050446	00.9652	21.02	050573	01.6557	23.85
050112	01.5378	24.56	050222	01.5800	32.40	050329	01.3530	22.38	050447	01.1539	19.37	050575	01.2038	.....
050113	01.3294	29.69	050224	01.6083	22.29	050331	01.4116	26.07	050448	01.2603	20.75	050577	01.4073	19.70
050114	01.4974	20.53	050225	01.4961	20.34	050333	01.1134	19.36	050449	01.3295	20.38	050578	01.2091	24.65
050115	01.5820	20.21	050226	01.3728	23.58	050334	01.7827	31.52	050454	01.8485	27.56	050579	01.5011	27.75
050116	01.4915	23.17	050228	01.3595	27.09	050335	01.4150	21.78	050455	01.8798	21.07	050580	01.3781	26.95
050117	01.3267	20.76	050230	01.2951	25.94	050336	01.4130	20.42	050456	01.1970	20.18	050581	01.3780	24.80
050118	01.2333	23.37	050231	01.6985	24.69	050337	01.1495	.....	050457	01.9703	28.16	050583	01.6354	23.49
050121	01.3937	19.17	050232	01.7553	25.52	050342	01.3623	18.03	050459	01.2277	28.95	050584	01.3226	19.70
050122	01.6961	25.77	050233	01.2032	27.97	050343	01.0670	16.57	050464	01.8576	23.28	050585	01.3155	25.79
050124	01.2423	19.10	050234	01.3174	22.79	050348	01.6714	23.57	050468	01.4960	16.95	050586	01.3724	21.47
050125	01.3763	27.26	050235	01.6109	27.60	050349	00.9553	14.75	050469	01.1143	18.34	050588	01.3158	27.41
050126	01.4878	23.86	050236	01.4932	23.47	050350	01.3648	23.74	050470	01.1174	18.14	050589	01.3257	24.78
050127	01.3437	23.71	050238	01.5338	22.98	050351	01.4728	25.95	050471	01.8590	22.75	050590	01.4087	23.26
050128	01.6436	23.71	050239	01.5382	23.40	050352	01.3239	24.08	050476	01.3723	21.89	050591	01.3400	24.97
050129	01.6051	21.10	050240	01.4190	25.28	050353	01.6095	24.23	050477	01.5035	30.71	050592	01.3555	10.96
050131	01.2869	30.45	050241	01.1960	25.59	050355	00.9765	14.97	050478	00.9902	20.58	050593	01.2968	29.77
050132	01.3955	24.69	050242	01.4397	28.77	050357	01.6573	22.99	050481	01.4393	25.47	050594	01.7813	24.64
050133	01.3425	21.73	050243	01.5606	20.95	050359	01.3035	19.88	050482	00.9919	17.87	050597	01.2725	22.40
050135	01.4336	26.20	050245	01.4468	22.03	050360	01.4611	31.81	050483	01.2206	22.32	050598	01.3740	28.26
050136	01.3719	29.32	050248	01.2339	24.55	050366	01.4397	20.59	050485	01.6234	22.39	050599	01.6928	23.22
050137	01.4283	33.54	050251	01.0786	18.41	050367	01.2671	27.02	050486	01.4114	24.19	050601	01.5776	28.97
050138	01.8936	33.14	050253	00.4249	18.80	050369	01.3266	23.77	050488	01.3891	29.71	050603	01.4318	20.95
050139	01.3165	32.31	050254	01.1859	20.57	050373	01.4503	23.73	050491	01.2715	24.39	050604	01.5600	32.65
050140	01.3987	31.70	050256	01.7909	19.46	050376	01.5219	29.05	050492	01.3803	21.96	050607	01.1803	21.26
050144	01.6121	25.92	050257	01.1417	21.76	050377	01.0124	16.26	050494	01.3433	24.67	050608	01.3295	18.75
050145	01.3641	30.22	050260	00.9856	19.43	050378	01.1789	21.42	050496	01.7109	32.54	050609	01.4415	33.78
050146	01.3641	.....	050261	01.2236	18.54	050379	01.2054	16.93	050497	00.7910	.....	050613	01.1557	19.90
050147	00.7180	22.54	050262	01.9911	26.95	050380	01.6584	29.85	050498	01.2855	22.93	050615	01.6609	25.67
050148	01.0787	19.07	050264	01.4171	28.04	050382	01.4257	22.15	050502	01.6392	21.94	050616	01.3575	21.21
050149	01.4959	22.14	050267	01.6375	27.72	050385	01.3302	23.94	050503	01.3527	23.35	050618	01.1704	20.05
050150	01.2339	22.69	050270	01.3328	22.02	050388	00.9225	18.08	050506	01.3768	24.66	050623	01.1288	23.78
050152	01.4212	25.51	050272	01.3318	20.79	050390	01.2320	22.09	050510	01.3484	32.12	050624	01.3772	22.51
050153	01.6647	27.98	050274	00.9872	19.47	050391	01.3468	23.34	050512	01.5363	33.56	050625	01.6035	25.18
050155	01.1114	25.69	050276	01.1317	26.93	050392	01.0001	18.23	050515	01.3442	31.82	050630	01.4327	21.18
050158	01.3645	25.37	050277	01.5093	19.57	050393	01.4457	23.72	050516	01.5803	24.92	050633	01.2943	21.92
050159	01.3879	21.88	050278	01.6159	22.89	050394	01.6193	20.12	050517	01.3033	20.14	050635	01.3173	32.77
050167	01.2549	22.00	050279	01.2261	21.00	050396	01.6130	22.02	050522	01.3420	31.46	050636	01.4701	22.13
050168	01.5423	23.71	050280	01.6858	24.62	050397	01.0483	18.22	050523	01.3228	29.32	050638	01.0334	19.35
050169	01.5157	21.82	050281	01.4700	15.36	050401	01.1322	19.06	050526	01.3239	24.45	050641	01.1904	18.27
050170	01.5731	21.33	050282	01.3631	23.18	050404	01.1013	16.60	050528	01.3543	21.06	050643	00.7614	.....
050172	01.2439	18.44	050283	01.1133	26.91	050406	01.0326	15.92	050531	01.1911	20.24	050644	00.8962	22.79
050173	01.3510	20.24	050286	00.9424	17.82	050407	01.3244	28.37	050534	01.4107	24.32	050660	01.3534	.....
050174	01.6347	29.60	050289	01.8865	26.67	050410	01.0841	16.71	050535	01.4621	22.87	050661	00.8437	20.15
050175	01.3595	27.08	050290	01.6523	20.42	050411	01.3695	31.16	050537	01.2746	21.53	050662	00.8828	22.31
050177	01.2512	20.35	050291	01.2337	25.51	050414	01.3022	24.60	050539	01.2842	22.25	050663	01.1210	25.63
050179	01.3096	19.55	050292	01.0680	21.76	050417	01.3212	21.54	050541	01.5481	32.88	050666	00.8825	20.95
050180	01.6205	30.28	050293	01.1601	18.95	050418	01.3206	22.71	050542	01.2260	14.92	050667	00.9872	24.80
050183	01.1407	20.36	050295	01.4637	21.39	050419	01.3491	20.46	050543	00.9027	21.76	050668	01.1151	28.90
050186	01.3286	23.83	050296	01.2014	22.43	050420	01.5295	23.03	050545	00.7731	21.20	050670	00.8073	.....

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
050674	01.2954	30.71	060047	01.1034	11.84	080004	01.3341	18.52	100071	01.3325	16.21	100167	01.4623	19.21
050675	01.8399	17.60	060049	01.4757	17.92	080005	01.3296	18.53	100072	01.3143	16.55	100168	01.3935	20.23
050676	00.9699	14.37	060050	01.2723	14.36	080006	01.3738	19.73	100073	01.7698	21.99	100169	01.8560	16.01
050677	01.4370	34.53	060052	01.1001	13.04	080007	01.4058	17.29	100075	01.5932	18.14	100170	01.4614	16.86
050678	01.1080	24.44	060053	01.0018	14.81	090001	01.5364	21.36	100076	01.3528	16.80	100172	01.3770	13.93
050680	01.2311	26.19	060054	01.3927	17.69	090002	01.3037	19.74	100077	01.4090	15.42	100173	01.6803	16.87
050682	00.8934	15.55	060056	00.9289	14.05	090003	01.3498	23.25	100078	01.1911	16.86	100174	01.5814	20.80
050684	01.2017	21.85	060057	01.0787	21.47	090004	01.8148	23.95	100079	01.6046	20.49	100175	01.2544	16.65
050685	01.2131	28.69	060058	00.9425	13.87	090005	01.3491	17.58	100080	01.6282	23.98	100176	02.1176	22.94
050686	01.3182	32.30	060060	00.8513	12.53	090006	01.3510	19.70	100081	01.0520	17.93	100177	01.3700	18.76
050688	01.2694	27.87	060062	00.9321	14.11	090007	01.2584	20.10	100082	01.4548	17.52	100179	01.6364	19.38
050689	01.3900	29.96	060063	00.9561	11.82	090008	01.5315	23.59	100083	01.3327	17.98	100180	01.3695	19.01
050690	01.5039	32.26	060064	01.4618	20.71	090010	01.1727	22.39	100084	01.4579	18.10	100181	01.2703	19.10
050693	01.6237	28.58	060065	01.3182	14.86	090011	01.9773	24.55	100085	01.4195	18.83	100183	01.3921	19.62
050694	01.5207	22.78	060066	00.9712	12.79	090015	01.1274	.....	100086	01.3141	22.05	100187	01.4035	18.31
050695	01.1018	25.42	060068	01.1354	13.46	100001	01.5673	18.08	100087	01.8739	21.91	100189	01.4259	20.87
050696	02.1043	28.17	060070	01.0209	16.03	100002	01.4874	19.11	100088	01.7311	17.43	100191	01.3112	18.63
050697	01.2505	18.05	060071	01.2358	14.39	100004	01.0671	13.13	100090	01.4104	16.46	100199	01.4317	18.30
050698	00.8012	.....	060073	00.9705	15.25	100006	01.6470	19.01	100092	01.4498	16.27	100200	01.3445	22.72
050699	00.6001	23.01	060075	01.3273	21.20	100007	01.8747	19.21	100093	01.5386	15.36	100203	01.3411	19.70
050700	01.4896	32.32	060076	01.4849	13.62	100008	01.7746	20.00	100098	01.1597	18.36	100204	01.6738	20.97
050701	01.3527	29.00	060085	00.9510	10.30	100009	01.5014	19.22	100099	01.2979	13.12	100206	01.4404	19.98
050702	00.9243	19.02	060087	01.7036	21.04	100010	01.5354	22.50	100102	01.0888	17.62	100207	01.0774	20.37
050704	01.0827	20.41	060088	01.0237	13.86	100012	01.6869	15.28	100103	01.0707	15.41	100208	01.5797	16.92
050707	01.0506	25.90	060090	00.8707	14.19	100014	01.4598	18.79	100105	01.4627	18.87	100209	01.6114	18.40
050708	00.9840	27.17	060096	01.0806	21.65	100015	01.3417	18.06	100106	01.1273	16.92	100210	01.6360	19.34
050709	01.3181	20.44	060100	01.4796	21.75	100017	01.5577	16.86	100107	01.4057	18.26	100211	01.3500	18.47
050710	01.3371	.....	060103	01.3605	22.66	100018	01.3518	20.31	100108	01.0616	13.74	100212	01.6492	18.75
050711	02.0879	.....	060104	01.2898	21.84	100019	01.5364	18.40	100109	01.3631	18.44	100213	01.5701	18.46
050712	01.5251	.....	060107	01.0436	.....	100020	01.3436	20.82	100110	01.4229	16.99	100217	01.2964	.....
050713	00.8063	.....	070001	01.7262	26.42	100022	01.8721	23.14	100112	01.0127	12.61	100220	01.9442	18.82
050714	01.3703	.....	070002	01.7806	26.03	100023	01.3697	16.89	100113	02.1202	19.34	100221	01.6958	19.65
050715	02.2781	.....	070003	01.1168	25.30	100024	01.4016	19.26	100114	01.4427	19.70	100222	01.4041	18.63
060001	01.5984	20.29	070004	01.2524	23.33	100025	01.8800	16.92	100117	01.3105	18.77	100223	01.4932	16.45
060003	01.2655	18.34	070005	01.4032	25.79	100026	01.7148	16.88	100118	01.2401	17.18	100224	01.4284	21.35
060004	01.3542	20.06	070006	01.3358	28.36	100027	00.9139	14.31	100121	01.3113	15.75	100225	01.4062	20.63
060006	01.1546	16.89	070007	01.4037	23.69	100028	01.2619	17.30	100122	01.3634	16.54	100226	01.4159	18.07
060007	01.2449	14.98	070008	01.2639	23.02	100029	01.3393	19.04	100124	01.3671	18.33	100228	01.3737	20.28
060008	01.0674	14.75	070009	01.3504	23.68	100030	01.4017	18.54	100125	01.3002	16.50	100229	01.3309	16.98
060009	01.4335	19.81	070010	01.6217	23.63	100032	01.9242	18.08	100126	01.4880	19.41	100230	01.4372	15.90
060010	01.5793	21.74	070011	01.3434	25.98	100034	01.7166	18.88	100127	01.6988	18.39	100231	01.6893	16.90
060011	01.2307	20.17	070012	01.2220	23.53	100035	01.6482	17.26	100128	02.1378	21.19	100232	01.2861	18.29
060012	01.4715	17.66	070013	01.3776	26.05	100038	01.5648	21.34	100129	01.2621	17.91	100234	01.5404	19.22
060013	01.3133	19.42	070015	01.4373	24.61	100039	01.5732	21.69	100130	01.2312	19.48	100235	01.4464	18.19
060014	01.7955	22.41	070016	01.3392	24.32	100040	01.6729	17.79	100131	01.3970	19.68	100236	01.4010	18.22
060015	01.5779	20.04	070017	01.3520	24.82	100043	01.4528	15.07	100132	01.3756	15.46	100237	02.1842	21.32
060016	01.1926	13.66	070018	01.4167	27.48	100044	01.4332	19.66	100134	01.0399	14.63	100238	01.5887	16.14
060018	01.2616	16.68	070019	01.1970	25.50	100045	01.4239	16.32	100135	01.6195	16.63	100239	01.4591	19.01
060020	01.6409	14.96	070020	01.3560	25.82	100046	01.4950	18.40	100137	01.3807	21.08	100240	00.9283	19.10
060022	01.6775	18.46	070021	01.2941	25.42	100047	01.8196	18.47	100138	00.9561	12.12	100241	00.9737	13.68
060023	01.6634	15.59	070022	01.8463	24.06	100048	00.9771	12.80	100139	01.0680	14.97	100242	01.4962	16.47
060024	01.7967	23.68	070024	01.3761	24.79	100049	01.3198	18.49	100140	01.1669	17.64	100243	01.4282	17.93
060027	01.6756	20.38	070025	01.8566	25.92	100050	01.2296	15.21	100142	01.3324	18.12	100244	01.4739	18.36
060028	01.5305	20.69	070026	01.1905	25.91	100051	01.1793	17.96	100144	01.2104	15.29	100246	01.4073	20.33
060029	00.9064	11.90	070027	01.2373	25.65	100052	01.3796	15.15	100145	01.3341	19.01	100248	01.7055	17.76
060030	01.2935	18.79	070028	01.5062	24.91	100053	01.3598	17.17	100146	01.0783	16.01	100249	01.3764	19.46
060031	01.6877	18.97	070029	01.4135	22.06	100054	01.2986	18.00	100147	01.0937	13.18	100252	01.2389	19.72
060032	01.5162	17.36	070030	01.3100	26.51	100055	01.4205	17.02	100150	01.4297	19.30	100253	01.4813	19.73
060033	01.1006	12.53	070031	01.2796	22.20	100056	01.5140	18.89	100151	01.7801	19.37	100254	01.6127	17.99
060034	01.4657	22.34	070033	01.3636	26.22	100057	01.3902	16.01	100154	01.6729	19.96	100255	01.2334	19.80
060036	01.0976	14.70	070034	01.3693	27.52	100060	01.8124	16.57	100156	01.1557	19.34	100256	01.9105	18.54
060037	01.0476	13.16	070035	01.4415	23.11	100061	01.4729	20.71	100157	01.6173	20.46	100258	01.6459	21.27
060038	01.0356	12.96	070036	01.6087	27.46	100062	01.7513	17.75	100159	00.9174	12.79	100259	01.4894	17.21
060041	00.9054	14.99	070038	00.6569	.....	100063	01.3311	16.56	100160	01.2252	18.48	100260	01.4652	18.18
060042	01.1308	16.83	070039	00.9118	.....	100067	01.4572	16.77	100161	01.7302	20.07	100262	01.4437	18.87
060043	00.9450	13.31	080001	01.6693	24.79	100068	01.3737	16.37	100162	01.4419	17.78	100263	01.4108	17.42
060044	01.2748	16.98	080002	01.2468	17.15	100069	01.3912	17.95	100165	01.1801	17.55	100264	01.3963	17.27
060046	01.0985	16.64	080003	01.3453	20.79	100070	01.4493	18.13	100166	01.5356	20.44	100265	01.3893	14.57

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
100266	01.3543	16.53	110066	01.5373	18.78	110163	01.4677	18.54	130010	00.9218	15.97	140045	01.0701	13.11
100267	01.3514	15.67	110069	01.2620	17.45	110164	01.4743	19.38	130011	01.3019	17.11	140046	01.3156	14.84
100268	01.2084	23.23	110070	01.0204	12.19	110165	01.3629	18.35	130012	01.0249	20.53	140047	01.1477	14.21
100269	01.4373	19.39	110071	01.1790	10.43	110166	01.5340	17.45	130013	01.2660	17.73	140048	01.4300	22.08
100270	00.8331	14.31	110072	01.0020	12.37	110168	01.7276	21.92	130014	01.3861	16.50	140049	01.5619	20.48
100271	01.7336	20.00	110073	01.2235	13.04	110169	01.1751	21.80	130015	00.8553	13.50	140051	01.5442	19.42
100275	01.4056	21.30	110074	01.4581	18.47	110171	01.4776	23.10	130016	00.9448	17.37	140052	01.3719	18.11
100276	01.3013	22.26	110075	01.3606	15.50	110172	01.4150	19.98	130017	01.1906	12.16	140053	01.9805	18.04
100277	01.0705	13.03	110076	01.4330	18.51	110174	00.9635	13.19	130018	01.7039	17.05	140054	01.3509	24.77
100279	01.3599	18.73	110078	01.7041	20.66	110176	01.4679	20.47	130019	01.1199	14.30	140055	01.0282	12.61
100280	01.3737	16.76	110079	01.3878	19.53	110177	01.5641	26.95	130021	01.0063	11.89	140058	01.2459	15.74
100281	01.2632	20.52	110080	01.2776	18.15	110178	01.4847	17.04	130022	01.2181	16.88	140059	01.1721	13.96
100282	01.1209	14.86	110082	02.0374	20.53	110179	01.2260	21.81	130024	01.1046	16.52	140061	01.0962	14.14
110001	01.3058	17.26	110083	01.7844	20.63	110181	00.9761	12.32	130025	01.0914	14.90	140062	01.2671	25.30
110002	01.3046	15.75	110086	01.2415	16.50	110183	01.4246	19.97	130026	01.1239	17.95	140063	01.4646	24.56
110003	01.3363	12.66	110087	01.3388	19.53	110184	01.2673	18.82	130027	00.9775	17.34	140064	01.3532	17.02
110004	01.3702	14.62	110088	00.9425	12.52	110185	01.1239	12.44	130028	01.2678	18.86	140065	01.5856	23.89
110005	01.1514	19.77	110089	01.2376	16.07	110186	01.3833	16.69	130029	01.0342	15.77	140066	01.3043	14.92
110006	01.3756	17.90	110091	01.3391	20.01	110187	01.3434	18.27	130030	00.9961	17.62	140067	01.7847	18.79
110007	01.5428	15.29	110092	01.1754	12.84	110188	01.4308	18.16	130031	01.0830	12.21	140068	01.2187	18.58
110008	01.3479	16.25	110093	00.9511	12.42	110189	01.1175	18.39	130034	00.9851	17.80	140069	01.0051	14.69
110009	00.9912	13.65	110094	01.0069	11.90	110190	01.1013	14.95	130035	01.0837	19.75	140070	01.2390	17.12
110010	02.1120	21.49	110095	01.3192	14.45	110191	01.3753	18.34	130036	01.3057	13.11	140074	00.9695	14.23
110011	01.2439	16.73	110096	01.1454	13.95	110192	01.4536	18.88	130037	01.1830	16.09	140075	01.4767	18.16
110013	01.1025	14.97	110097	01.0230	13.43	110193	01.2409	17.43	130043	01.0042	15.45	140077	01.1605	16.68
110014	01.0251	14.25	110098	01.0549	12.75	110194	01.0103	13.81	130044	01.1615	12.49	140079	01.2434	19.72
110015	01.2373	16.42	110100	01.0948	12.76	110195	01.0547	11.35	130045	01.0107	12.07	140080	01.6408	21.22
110016	01.3073	14.79	110101	01.1688	11.58	110198	01.3706	24.04	130048	01.0862	13.31	140081	01.0883	13.46
110017	00.8645	13.54	110103	00.9623	10.15	110200	01.8308	17.05	130049	01.2816	18.00	140082	01.4304	19.59
110018	01.1509	17.79	110104	01.0884	14.01	110201	01.5058	17.52	130054	00.8937	17.61	140083	01.2423	17.22
110020	01.3489	16.21	110105	01.1793	14.60	110203	00.9981	16.30	130056	00.8623	11.05	140084	01.2287	18.60
110023	01.3467	18.43	110107	01.8204	18.50	110204	00.8066	14.34	130058	00.7980	14.21	140086	01.0844	14.36
110024	01.4873	15.86	110108	00.9459	11.26	110205	01.1262	17.06	130060	01.3289	19.41	140087	01.3932	16.15
110025	01.4274	17.54	110109	01.0965	13.22	110207	01.0879	14.02	130061	00.9433	.....	140088	01.6631	24.52
110026	01.2118	14.59	110111	01.0973	16.55	110208	00.9425	16.97	140001	01.2830	14.89	140089	01.2551	16.59
110027	01.0878	13.41	110112	01.0848	19.36	110209	00.7485	16.39	140002	01.3158	18.78	140090	01.5315	27.83
110028	01.6494	19.36	110113	01.0936	12.40	110211	00.8833	.....	140003	01.0172	14.52	140091	01.8017	17.27
110029	01.4094	18.29	110114	01.0742	14.35	110212	01.1701	.....	140004	01.1085	16.34	140093	01.2049	17.01
110030	01.3314	17.58	110115	01.6026	18.83	110213	00.5511	.....	140005	00.9613	09.56	140094	01.3951	19.46
110031	01.3083	19.99	110118	00.9744	13.49	120001	01.8187	25.27	140007	01.4808	21.10	140095	01.3952	20.09
110032	01.2678	12.68	110120	01.0246	12.28	120002	01.1919	21.80	140008	01.5798	19.43	140097	00.9670	12.49
110033	01.4341	19.79	110121	01.2022	12.83	120003	00.9988	22.69	140010	01.3776	22.90	140100	01.2499	18.78
110034	01.6158	17.89	110122	01.3880	15.07	120004	01.2650	21.72	140011	01.1965	16.24	140101	01.2224	18.49
110035	01.4328	20.02	110124	01.0850	15.63	120005	01.2505	18.94	140012	01.2713	18.60	140102	01.1118	14.37
110036	01.6901	18.85	110125	01.2330	15.97	120006	01.3095	24.62	140013	01.5804	15.59	140103	01.3585	16.25
110037	01.1697	11.02	110127	00.9362	18.26	120007	01.6730	20.90	140014	01.1703	16.36	140105	01.3031	20.28
110038	01.4654	15.98	110128	01.1824	19.01	120009	01.0345	20.40	140015	01.2864	14.20	140107	01.0708	11.82
110039	01.3778	18.62	110129	01.7854	15.69	120010	01.8705	22.71	140016	00.9579	11.89	140108	01.3575	21.81
110040	01.1216	15.52	110130	01.1667	11.11	120011	01.2427	31.56	140018	01.4000	19.38	140109	01.1766	13.08
110041	01.2723	15.82	110132	01.1264	12.99	120012	00.9018	20.20	140019	01.1706	12.65	140110	01.1931	17.31
110042	01.2740	14.90	110134	00.8904	12.19	120014	01.4446	22.59	140024	01.0067	13.99	140112	01.2240	13.42
110043	01.7886	16.83	110135	01.2960	14.04	120015	00.9683	22.77	140025	01.0618	16.65	140113	01.5112	17.90
110044	01.1491	14.51	110136	01.1904	17.74	120016	00.8833	24.58	140026	01.2848	15.90	140114	01.3527	19.55
110045	01.3219	21.18	110140	01.0308	16.75	120018	00.9540	20.92	140027	01.3401	16.37	140115	01.3235	19.66
110046	01.3498	17.14	110141	00.9566	12.29	120019	01.2393	19.16	140029	01.3537	21.43	140116	01.3021	20.98
110048	01.3678	13.59	110142	00.9492	11.78	120021	00.9401	18.74	140030	01.8105	21.56	140117	01.5387	20.42
110049	01.1275	14.58	110143	01.4530	20.77	120022	01.7012	20.74	140031	01.2692	13.76	140118	01.6525	23.74
110050	01.2031	13.35	110144	01.1556	17.41	120026	01.2605	24.26	140032	01.2649	16.71	140119	01.7173	23.27
110051	01.0351	16.68	110146	01.1397	15.09	120027	01.5865	23.43	140033	01.2696	19.82	140120	01.4595	15.45
110052	01.1211	10.83	110149	01.1585	17.31	120028	01.0161	.....	140034	01.1737	17.31	140121	01.5411	11.54
110054	01.3426	16.74	110150	01.3211	17.62	130001	01.0074	15.75	140035	00.9195	11.22	140122	01.6593	21.47
110056	01.1733	14.40	110152	01.1023	14.44	130002	01.4327	15.30	140036	01.2057	16.60	140124	01.2337	23.81
110059	01.3170	13.38	110153	01.0180	17.19	130003	01.3671	19.28	140037	01.1044	12.49	140125	01.3616	15.71
110061	01.0750	12.61	110154	00.8218	13.98	130005	01.5290	19.49	140038	01.1781	16.23	140127	01.3910	17.45
110062	00.8945	10.97	110155	01.0541	13.62	130006	01.8432	17.59	140040	01.2866	14.72	140128	01.1137	14.92
110063	01.1481	12.76	110156	01.0382	12.34	130007	01.6299	18.20	140041	01.3305	16.02	140129	01.2232	14.94
110064	01.3361	17.46	110161	01.3274	21.00	130008	01.0035	11.00	140042	01.0146	14.16	140130	01.3672	21.74
110065	01.0387	13.40	110162	00.7936	.....	130009	00.9623	10.74	140043	01.2329	17.04	140132	01.4410	19.03

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
140133	01.3400	21.21	140231	01.5870	20.80	150044	01.2616	18.32	150128	01.2192	19.14	160074	01.0986	14.30
140135	01.3070	14.91	140233	01.7833	18.47	150045	01.1013	15.68	150129	01.2359	22.47	160075	01.1442	13.73
140137	01.0581	14.58	140234	01.2879	16.47	150046	01.5287	15.90	150130	01.3560	16.61	160076	01.0721	15.50
140138	00.9783	12.15	140236	00.9655	13.24	150047	01.5605	22.77	150132	01.4103	19.24	160077	01.1832	10.60
140139	01.1368	14.70	140239	01.6835	18.73	150048	01.2059	16.52	150133	01.2128	14.12	160079	01.4062	16.28
140140	01.1377	13.06	140240	01.4846	20.44	150049	01.1576	13.29	150134	01.1751	17.17	160080	01.2016	16.06
140141	01.2472	13.84	140242	01.6315	21.68	150050	01.2017	14.73	150136	01.0663	18.42	160081	01.0645	14.77
140143	01.1457	16.54	140245	01.1638	14.66	150051	01.4787	18.34	150138	01.2073	17.33	160082	01.8251	16.81
140144	01.0257	17.83	140246	01.0831	12.05	150052	01.1501	14.14	150139	01.4731	14.62	160083	01.6764	18.37
140145	01.1812	15.14	140250	01.3778	21.98	150053	01.0493	18.10	160001	01.2878	17.61	160085	01.0834	11.50
140146	01.0443	16.38	140251	01.3828	19.16	150054	01.1551	12.55	160002	01.1687	13.74	160086	00.9998	13.93
140147	01.2805	16.29	140252	01.4489	23.41	150056	01.7685	22.38	160003	01.0196	12.61	160088	01.1633	12.63
140148	01.8467	17.11	140253	01.4151	17.49	150057	02.3203	18.94	160005	01.1311	13.80	160089	01.1878	14.80
140150	01.6206	25.55	140258	01.5776	20.93	150058	01.7210	19.57	160007	01.0312	12.37	160090	00.9814	15.58
140151	01.1093	16.64	140271	01.0919	13.06	150059	01.4075	19.81	160008	01.1302	13.78	160091	01.0794	10.80
140152	01.1163	22.91	140275	01.2383	16.50	150060	01.1786	14.93	160009	01.2377	13.73	160092	01.0801	13.23
140155	01.2995	16.96	140276	01.9625	21.37	150061	01.2371	15.73	160012	01.0291	13.15	160093	01.1951	13.86
140158	01.3072	21.36	140280	01.3139	17.16	150062	01.1015	16.55	160013	01.2292	15.35	160094	01.1253	14.17
140160	01.2239	15.93	140281	01.6445	20.89	150063	01.0944	17.57	160014	01.0153	12.59	160095	01.0906	12.79
140161	01.2177	17.76	140285	01.2804	15.37	150064	01.2152	15.84	160016	01.2509	16.32	160097	01.1359	13.00
140162	01.7534	17.96	140286	01.1234	17.93	150065	01.1597	18.49	160018	00.9242	13.27	160098	00.9679	14.70
140164	01.3867	17.44	140288	01.8467	23.17	150066	00.9997	15.93	160020	01.0709	12.38	160099	00.9646	11.69
140165	01.1387	12.90	140289	01.3203	15.75	150067	01.1300	15.48	160021	01.0687	13.57	160101	01.1660	18.64
140166	01.3636	17.21	140290	01.4618	20.95	150069	01.2618	16.90	160023	01.0402	12.35	160102	01.3899	17.51
140167	01.1291	14.97	140291	01.4050	22.95	150070	01.0287	18.09	160024	01.5249	16.77	160103	01.0446	13.57
140168	01.1873	15.57	140292	01.1495	20.63	150071	01.1161	13.86	160026	01.0600	14.43	160104	01.3168	17.37
140170	01.1138	12.53	140294	01.1852	16.20	150072	01.2073	15.48	160027	01.1589	13.19	160106	01.0593	14.03
140171	00.9150	13.87	140297	01.5631	27.06	150073	01.0115	19.47	160028	01.3379	17.39	160107	01.1798	14.12
140172	01.6113	18.71	140300	01.4454	18.71	150074	01.5934	18.80	160029	01.5125	18.14	160108	01.2054	14.95
140173	00.9277	13.77	150001	01.1133	17.36	150075	01.1691	14.49	160030	01.3826	17.37	160109	01.0404	12.35
140174	01.5699	18.33	150002	01.5414	18.35	150076	01.2161	20.39	160031	01.1167	13.37	160110	01.5247	17.97
140176	01.3078	21.33	150003	01.7125	19.57	150077	01.1793	16.58	160032	01.0998	15.56	160111	01.0180	11.04
140177	01.1662	16.52	150004	01.4341	19.97	150078	01.0763	15.66	160033	01.7830	16.80	160112	01.4226	15.00
140179	01.3202	20.12	150005	01.1919	18.43	150079	01.1320	13.96	160034	01.2076	14.53	160113	01.0012	12.03
140180	01.5077	21.03	150006	01.2247	17.31	150082	01.5096	17.44	160035	01.0372	12.57	160114	01.0662	14.21
140181	01.3839	19.20	150007	01.2098	17.98	150084	01.8769	22.28	160036	00.9736	14.66	160115	01.0262	14.32
140182	01.3671	20.67	150008	01.3547	20.70	150086	01.3257	16.45	160037	01.1645	15.14	160116	01.1796	15.68
140184	01.2548	14.26	150009	01.3733	17.26	150088	01.3481	17.20	160039	01.0816	15.84	160117	01.4541	15.96
140185	01.4162	16.78	150010	01.1830	15.87	150089	01.4270	18.39	160040	01.3227	16.30	160118	01.0209	13.15
140186	01.3504	17.74	150011	01.2275	17.83	150090	01.2518	18.72	160041	01.0845	13.45	160120	01.0221	10.62
140187	01.4914	16.54	150012	01.6921	21.01	150091	01.1366	15.75	160043	01.0364	13.44	160122	01.1309	16.24
140188	01.0421	10.77	150013	01.1237	13.90	150092	01.0316	15.04	160044	01.3189	13.86	160123	01.0588	13.19
140189	01.1944	16.64	150014	01.5046	19.79	150094	01.0077	16.85	160045	01.7635	17.72	160124	01.2795	15.87
140190	01.1407	15.99	150015	01.2149	18.14	150095	01.1046	17.97	160046	01.0030	12.75	160126	01.0158	13.59
140191	01.4516	21.87	150017	01.8590	17.20	150096	01.1653	17.34	160047	01.3670	15.37	160129	01.0246	13.75
140193	01.0427	13.31	150018	01.2907	18.23	150097	01.1390	17.09	160048	01.0373	11.54	160130	01.1767	13.02
140197	01.2638	16.96	150019	01.1001	15.47	150098	01.1528	13.03	160049	00.9469	12.21	160131	01.0519	13.55
140199	01.1019	15.72	150020	01.1480	12.96	150099	01.2917	17.79	160050	01.0771	14.64	160134	01.0526	11.84
140200	01.4726	21.79	150021	01.6365	18.34	150100	01.7156	17.65	160051	00.9637	13.54	160135	01.0985	13.67
140202	01.3552	19.71	150022	01.0915	16.65	150101	01.1103	14.50	160052	01.0883	14.79	160138	01.1359	14.36
140203	01.1613	19.32	150023	01.5060	18.19	150102	01.0408	14.93	160054	01.0719	12.37	160140	01.1723	14.75
140205	00.8789	13.64	150024	01.4332	15.82	150103	01.0084	15.02	160055	00.9789	12.37	160142	01.0866	13.98
140206	01.0990	20.81	150025	01.3792	17.57	150104	01.0962	15.63	160056	01.0863	13.11	160143	01.0288	14.24
140207	01.3958	19.86	150026	01.1848	18.29	150105	01.3476	16.20	160057	01.3468	15.91	160145	01.1210	14.16
140208	01.6902	24.07	150027	01.0464	15.55	150106	01.0814	16.06	160058	01.7356	19.00	160146	01.4325	14.59
140209	01.6613	15.85	150029	01.3153	20.17	150109	01.4622	16.85	160060	01.0454	13.44	160147	01.3032	16.09
140210	01.1163	14.00	150030	01.2106	16.69	150110	00.9996	17.16	160061	01.0424	14.27	160151	01.0503	13.74
140211	01.1915	20.84	150031	01.0708	15.56	150111	01.1600	14.02	160062	00.9471	12.22	160152	00.9953	13.78
140212	01.2953	22.47	150032	01.8803	19.50	150112	01.3072	17.78	160063	01.1653	15.88	160153	01.7411	17.48
140213	01.2786	22.67	150033	01.6072	21.09	150113	01.2223	17.88	160064	01.7118	17.38	170001	01.1836	16.35
140215	01.1334	13.49	150034	01.3818	21.18	150114	01.0013	14.58	160065	01.0236	14.73	170004	01.0749	13.28
140217	01.3176	21.67	150035	01.5327	18.97	150115	01.3813	17.55	160066	01.1729	14.74	170006	01.1484	15.02
140218	00.9967	13.65	150036	01.0338	17.43	150122	01.1229	17.11	160067	01.4129	17.13	170008	01.0274	14.53
140220	01.0930	15.16	150037	01.2700	18.20	150123	01.2055	12.98	160068	01.0648	13.52	170009	01.1970	16.31
140223	01.6460	28.23	150038	01.4024	17.22	150124	01.1018	15.97	160069	01.4530	16.42	170010	01.2510	15.77
140224	01.3861	22.97	150039	00.9659	16.33	150125	01.3901	18.69	160070	01.0492	14.47	170011	01.2378	15.40
140228	01.6912	18.22	150042	01.2935	16.00	150126	01.5100	20.17	160072	01.0731	11.60	170012	01.4736	16.07
140230	00.9252	10.84	150043	01.0842	21.96	150127	01.0222	13.90	160073	00.9698	12.18	170013	01.3223	15.33

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
170014	01.0370	16.40	170099	01.2690	11.34	180024	01.3887	17.24	180123	01.4782	20.98	190089	01.0797	11.47
170015	01.0654	14.36	170100	00.9894	14.47	180025	01.2127	17.17	180124	01.4883	16.52	190090	01.1658	16.84
170016	01.6878	19.52	170101	00.9489	13.26	180026	01.2402	12.39	180125	00.9989	16.46	190092	01.3924	.....
170017	01.2514	15.34	170102	00.9926	13.11	180027	01.2872	15.58	180126	01.2403	12.22	190095	01.0682	14.66
170018	01.1580	13.13	170103	01.2089	15.62	180028	00.9956	16.39	180127	01.4064	17.22	190098	01.5365	18.91
170019	01.2248	15.65	170104	01.4523	19.81	180029	01.2726	15.97	180128	01.1777	16.64	190099	01.1522	17.98
170020	01.2902	14.98	170105	01.0963	15.91	180030	01.2394	13.31	180129	01.0122	14.45	190102	01.5599	17.77
170022	01.1764	14.80	170106	00.8931	12.18	180031	01.2156	12.60	180130	01.4719	17.90	190103	00.8797	09.75
170023	01.4631	16.42	170109	01.0364	14.50	180032	00.9268	15.83	180132	01.2955	15.20	190106	01.1725	17.69
170024	01.1492	12.84	170110	00.9602	13.67	180033	01.1365	12.86	180133	01.3516	24.67	190109	01.2172	13.50
170025	01.2269	15.81	170112	00.9859	13.90	180034	01.2666	14.14	180134	01.0388	13.87	190110	00.9373	12.43
170026	01.0364	12.83	170113	01.1485	14.95	180035	01.5519	18.73	180136	01.6117	16.47	190111	01.5969	18.33
170027	01.3447	15.50	170114	01.0128	13.80	180036	01.2054	17.01	180137	01.8051	18.38	190112	01.5890	19.46
170030	01.0153	13.99	170115	01.0256	11.34	180037	01.3404	19.24	180138	01.2089	17.99	190113	01.3609	18.49
170031	00.9092	12.62	170116	01.0473	15.74	180038	01.4099	15.04	180139	01.1534	18.64	190114	01.0160	12.20
170032	01.1650	14.89	170117	00.9415	13.50	180040	02.0155	19.20	180140	00.8781	.....	190115	01.2261	18.33
170033	01.3716	14.59	170119	00.9812	12.09	180041	01.1039	13.42	180141	01.7722	.....	190116	01.1859	.....
170034	00.9986	14.61	170120	01.2988	16.06	180042	01.1997	13.59	190001	00.8676	17.98	190118	01.0970	12.38
170035	00.8593	14.82	170122	01.7448	19.93	180043	01.0024	15.90	190002	01.6866	18.15	190120	00.9968	13.75
170036	00.9019	13.19	170123	01.7674	18.76	180044	01.1640	16.29	190003	01.3870	17.41	190122	01.2395	15.70
170037	01.2455	16.31	170124	01.0109	14.25	180045	01.2625	16.79	190004	01.4157	15.24	190124	01.6469	20.23
170038	00.9237	11.46	170126	00.9450	11.50	180046	01.2350	16.65	190005	01.6124	17.60	190125	01.5554	17.99
170039	01.1505	13.62	170128	00.9794	14.42	180047	01.0274	13.80	190006	01.3045	14.32	190128	01.0863	18.56
170040	01.6034	18.83	170131	01.2140	09.38	180048	01.2862	16.16	190007	01.0078	13.52	190130	01.0375	12.09
170041	00.9985	11.29	170133	01.1290	14.20	180049	01.3311	15.45	190008	01.6673	17.72	190131	01.2029	17.84
170043	01.0095	13.49	170134	00.9481	12.48	180050	01.2534	16.12	190009	01.1641	13.79	190133	00.9749	12.08
170044	01.1071	14.42	170137	01.1889	17.30	180051	01.4337	14.78	190010	01.0476	16.62	190134	01.0178	14.79
170045	01.0563	10.72	170139	01.0392	11.82	180053	01.0870	14.30	190011	01.1711	14.41	190135	01.4595	22.58
170049	01.2895	18.28	170142	01.3506	16.49	180054	01.1032	13.92	190013	01.3959	15.95	190136	01.2005	11.22
170051	00.9202	13.66	170143	01.1130	13.82	180055	01.1664	14.00	190014	01.1136	15.35	190138	00.8846	17.51
170052	01.0579	12.60	170144	01.6118	14.73	180056	01.0755	16.38	190015	01.2530	17.78	190140	01.0159	12.16
170053	00.9493	15.39	170145	01.1398	14.83	180058	00.9913	12.63	190017	01.4476	16.02	190142	00.9058	12.39
170054	01.0865	13.19	170146	01.5215	19.54	180059	00.9162	12.59	190018	01.1915	15.92	190144	01.3106	15.22
170055	01.0974	14.55	170147	01.2724	20.70	180060	01.0317	10.17	190019	01.6064	18.39	190145	00.9991	13.66
170056	00.9193	13.72	170148	01.4116	17.64	180063	00.9932	10.79	190020	01.1832	15.85	190146	01.6309	19.61
170057	01.0322	13.90	170150	01.0943	13.41	180064	01.3330	14.03	190025	01.3568	13.62	190147	01.0221	13.69
170058	01.1684	15.80	170151	01.0380	11.66	180065	01.0489	10.82	190026	01.4936	16.17	190148	00.9041	12.77
170060	01.0552	13.41	170152	00.9840	12.99	180066	01.1569	18.09	190027	01.5788	16.49	190149	01.0591	11.47
170061	01.1327	12.90	170160	00.9803	11.17	180067	01.8083	16.40	190029	01.1538	15.40	190151	01.2260	11.73
170063	00.8933	10.92	170164	00.9859	14.42	180069	01.0091	15.33	190033	00.9378	09.66	190152	01.5214	21.27
170064	01.0420	12.09	170166	01.1972	13.65	180070	01.1191	14.66	190034	01.2430	.....	190155	01.0392	12.29
170066	00.9793	12.58	170168	00.9222	09.33	180072	01.0659	13.91	190035	01.4118	.....	190156	00.8732	11.99
170067	01.1330	11.76	170171	01.0743	11.22	180075	00.9983	14.13	190036	01.6967	19.09	190158	01.1908	21.59
170068	01.3072	15.24	170175	01.3540	17.53	180078	01.1598	17.57	190037	00.8920	10.84	190160	01.3271	17.03
170069	00.8338	14.01	170176	01.6202	19.83	180079	01.3369	13.03	190039	01.4018	17.21	190161	01.1264	12.65
170070	01.0108	12.56	170182	01.2299	19.43	180080	01.0551	15.57	190040	01.4401	19.32	190162	01.0457	18.47
170073	01.0686	14.67	170183	02.0352	.....	180085	02.3962	17.70	190041	01.5646	19.72	190164	01.2250	16.05
170074	01.2471	14.34	170184	01.1905	.....	180087	01.1701	13.74	190043	01.0428	10.34	190166	00.9327	14.04
170075	00.9439	10.67	180001	01.2316	17.03	180088	01.5598	19.99	190044	01.1694	17.11	190167	01.2322	18.49
170076	01.0567	11.60	180002	01.0603	16.78	180092	01.2643	15.25	190045	01.4023	20.17	190170	00.9471	13.08
170077	00.9418	12.07	180004	01.1035	14.42	180093	01.3779	16.05	190046	01.4623	17.58	190173	01.4783	20.12
170079	01.0260	12.66	180005	01.1740	18.54	180094	01.0364	11.51	190048	01.2789	13.72	190175	01.3210	20.26
170080	00.9810	10.65	180006	00.9885	08.94	180095	01.2462	12.94	190049	00.9967	15.70	190176	01.7349	19.11
170081	01.0204	10.44	180007	01.5360	16.29	180099	01.3197	12.31	190050	01.0290	14.58	190177	01.6625	22.84
170082	01.0284	10.80	180009	01.4054	19.11	180101	01.3214	18.01	190053	01.0739	12.11	190178	00.9580	10.87
170084	00.9523	10.93	180010	01.8420	18.19	180102	01.4763	16.35	190054	01.3377	14.09	190182	00.9720	20.02
170085	00.9654	12.69	180011	01.2795	15.29	180103	02.1547	17.93	190059	00.9194	13.44	190183	01.1242	14.79
170086	01.7214	18.21	180012	01.4058	17.50	180104	01.5746	18.07	190060	01.4488	15.43	190184	01.0785	13.09
170087	16.1090	18.78	180013	01.4535	16.63	180105	01.0040	12.82	190064	01.5938	18.33	190185	01.3607	18.53
170088	00.9760	10.80	180014	01.7162	19.99	180106	00.8943	12.27	190065	01.4991	14.71	190186	00.9454	13.16
170089	00.9506	15.53	180015	01.3127	15.02	180108	00.8581	13.54	190071	00.9010	12.15	190189	01.0752	13.17
170090	01.0355	09.80	180016	01.3250	14.50	180115	01.0279	14.65	190077	00.9526	13.65	190190	00.9250	12.66
170092	00.8276	11.80	180017	01.3434	13.87	180116	01.4586	15.66	190078	01.1684	11.60	190191	01.3301	17.54
170093	01.0000	11.76	180018	01.2521	15.27	180117	01.1156	17.03	190079	01.2501	16.98	190196	00.8663	16.29
170094	00.9536	15.42	180019	01.3262	16.70	180118	01.0381	12.03	190081	00.9078	10.23	190197	01.2379	18.98
170095	01.1355	13.69	180020	01.0743	15.86	180120	01.0578	13.12	190083	01.0626	15.02	190199	01.1913	16.26
170097	01.0695	13.17	180021	01.1152	13.69	180121	01.2250	13.68	190086	01.4134	15.47	190200	01.5587	21.70
170098	01.0500	17.00	180023	00.8814	13.12	180122	01.0903	15.01	190088	01.3480	.....	190201	01.2833	18.93

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
190202	01.4766	17.85	210016	01.7183	23.30	220052	01.3219	23.88	230020	01.7229	22.21	230119	01.2933	22.31
190203	01.5123	20.83	210017	01.2282	14.51	220053	01.2587	19.48	230021	01.6139	17.90	230120	01.1815	17.47
190204	01.5847	20.85	210018	01.2505	21.26	220055	01.3458	23.52	230022	01.3630	18.27	230121	01.2515	19.69
190205	01.9222	17.90	210019	01.4996	18.17	220057	01.4090	21.39	230024	01.4377	23.71	230122	01.4048	19.20
190206	01.5538	21.53	210022	01.4510	20.79	220058	01.0836	16.26	230027	01.1378	15.73	230124	01.1675	16.89
190207	01.2984	16.42	210023	01.3643	20.78	220060	01.3023	25.32	230029	01.5813	20.36	230125	01.2969	14.51
190208	00.8122	11.17	210024	01.5608	19.73	220062	00.5837	18.78	230030	01.2185	16.47	230128	01.3868	21.24
190218	01.2002	15.33	210025	01.4079	18.21	220063	01.2284	19.40	230031	01.4399	19.72	230129	01.7831	19.91
190223	00.4249	16.58	210026	01.3745	19.52	220064	01.2327	20.51	230032	01.7422	19.08	230130	01.6706	23.74
190227	00.8285	.....	210027	01.3025	18.58	220065	01.2262	19.58	230034	01.2308	17.99	230132	01.4109	23.25
190231	01.3101	16.00	210028	01.2213	17.19	220066	01.3308	20.73	230035	01.1162	16.17	230133	01.2205	15.07
190233	02.1157	.....	210029	01.3148	17.99	220067	01.2855	22.58	230036	01.2797	19.20	230134	01.1074	17.91
190234	01.0506	.....	210030	01.1531	19.44	220068	00.5284	16.67	230037	01.1244	17.40	230135	01.2667	20.25
190235	01.2925	.....	210031	01.5487	16.42	220070	01.2510	18.77	230038	01.7094	21.21	230137	01.1940	18.51
190236	01.2520	.....	210032	01.1786	17.97	220071	01.9203	21.67	230040	01.2241	20.53	230141	01.6811	22.44
200001	01.3789	16.92	210033	01.2619	18.58	220073	01.4122	24.14	230041	01.2166	20.75	230142	01.2194	18.90
200002	01.0690	17.70	210034	01.3724	20.34	220074	01.1891	22.82	230042	01.2296	19.32	230143	01.3149	16.58
200003	01.0950	16.03	210035	01.2687	18.11	220075	01.2648	19.51	230046	01.8829	25.32	230144	01.2245	21.19
200006	01.0479	14.97	210037	01.2430	17.38	220076	01.1779	25.46	230047	01.3366	20.37	230145	01.1813	15.96
200007	01.1177	17.01	210038	01.3268	21.63	220077	01.7898	22.92	230053	01.6418	24.16	230146	01.3082	19.56
200008	01.2260	20.19	210039	01.1902	15.94	220079	01.1685	21.68	230054	01.8205	21.45	230147	01.4359	19.70
200009	01.8101	19.95	210040	01.3322	21.01	220080	01.2694	19.58	230055	01.1631	18.26	230149	01.1837	15.51
200012	01.1118	16.55	210043	01.3061	21.32	220081	01.0022	24.81	230056	00.9878	14.55	230151	01.3894	22.02
200013	01.1203	15.69	210044	01.2653	19.38	220082	01.3094	23.04	230058	01.1530	18.69	230153	01.1308	19.70
200015	01.2329	17.41	210045	01.0746	11.42	220083	01.1973	20.43	230059	01.4442	19.01	230154	00.9371	12.43
200016	01.0114	15.76	210048	01.2062	23.30	220084	01.3131	23.23	230060	01.3135	17.97	230155	00.9376	16.93
200017	01.2508	17.94	210049	01.1553	17.77	220086	01.6454	26.01	230062	01.0219	14.41	230156	01.7147	22.91
200018	01.1950	15.20	210051	01.4237	20.03	220088	01.6091	22.68	230063	01.3162	19.15	230157	01.2050	20.15
200019	01.2411	18.59	210054	01.3298	21.05	220089	01.3364	22.69	230065	01.3398	19.44	230159	01.4900	19.64
200020	01.1431	20.96	210055	01.2663	24.26	220090	01.2573	20.95	230066	01.3895	20.58	230162	01.0467	15.60
200021	01.1730	17.78	210056	01.3807	17.67	220092	01.2338	20.66	230068	01.4452	22.15	230165	01.8500	21.91
200023	00.9047	16.15	210057	01.4127	25.76	220094	01.4159	19.82	230069	01.1623	21.95	230167	01.8077	19.21
200024	01.3239	19.84	210058	01.5368	18.09	220095	01.2495	19.06	230070	01.5719	19.57	230169	01.3462	20.88
200025	01.0831	19.51	210059	01.2633	21.44	220098	01.2547	19.71	230071	01.1318	22.00	230171	01.0260	14.42
200026	01.0264	15.97	210060	01.1827	23.61	220100	01.2637	23.69	230072	01.2319	19.32	230172	01.2802	18.87
200027	01.1198	17.27	210061	01.1772	17.65	220101	01.4389	23.41	230075	01.4721	19.41	230174	01.2980	19.50
200028	00.9739	16.24	220001	01.2891	21.80	220104	01.2663	24.79	230076	01.3549	22.67	230175	03.2600	11.15
200031	01.2810	15.26	220002	01.5403	23.02	220105	01.2690	22.16	230077	02.0661	18.62	230176	01.2365	20.69
200032	01.3464	18.90	220003	01.0737	16.71	220106	01.2609	22.14	230078	01.1320	15.79	230178	01.0169	17.92
200033	01.7900	20.16	220004	01.1625	18.66	220107	01.1935	19.21	230080	01.2235	20.92	230180	01.1055	15.79
200034	01.2370	18.05	220006	01.4299	21.04	220108	01.1996	21.13	230081	01.2880	16.73	230184	01.1528	17.45
200037	01.1965	16.09	220008	01.2944	20.45	220110	02.0104	31.74	230082	01.2051	15.97	230186	01.2241	17.37
200038	01.1089	18.23	220010	01.3126	21.44	220111	01.2673	21.76	230085	01.1173	17.76	230188	01.1832	16.01
200039	01.2710	19.03	220011	01.1495	27.00	220116	01.9996	24.40	230086	00.9982	14.88	230189	00.9248	14.93
200040	01.1083	17.37	220012	01.3759	30.46	220118	02.0700	27.44	230087	01.0511	17.12	230190	01.0342	20.21
200041	01.0939	16.19	220015	01.2326	20.94	220119	01.3155	24.27	230089	01.2833	21.86	230191	00.9127	16.65
200043	00.5261	16.46	220016	01.3818	20.87	220123	01.0410	22.86	230092	01.3125	18.29	230193	01.2154	16.97
200050	01.1881	17.84	220017	01.3923	23.16	220126	01.3402	20.63	230093	01.2189	18.91	230194	01.1126	15.94
200051	00.9540	18.29	220019	01.1528	17.57	220128	01.2030	22.97	230095	01.1979	16.51	230195	01.3113	20.94
200052	00.9785	14.12	220020	01.2405	18.68	220133	00.8368	29.15	230096	01.1742	20.60	230197	01.3274	21.41
200055	01.1748	15.29	220021	01.3591	23.88	220135	01.2410	24.67	230097	01.5896	19.03	230199	01.1798	16.61
200062	00.9125	15.03	220023	01.1731	19.92	220153	00.9842	19.37	230099	01.1193	18.90	230201	01.1765	14.03
200063	01.2559	18.27	220024	01.1999	20.61	220154	01.0045	20.83	230100	01.2045	14.82	230204	01.3907	20.13
200066	01.2145	15.65	220025	01.2157	19.07	220162	01.1096	.....	230101	01.0786	17.28	230205	01.0309	13.00
210001	01.4356	19.45	220028	01.4895	21.29	220163	02.0500	24.21	230103	01.0544	17.37	230207	01.2603	21.19
210002	02.0230	16.46	220029	01.1509	23.54	220171	01.6484	21.72	230104	01.6079	21.24	230208	01.2419	18.18
210003	01.5440	22.78	220030	01.1149	17.02	230001	01.1916	18.72	230105	01.6872	19.47	230211	00.9353	14.11
210004	01.3603	21.20	220031	02.0045	27.24	230002	01.2647	18.80	230106	01.3041	18.64	230212	01.0711	22.89
210005	01.2340	18.52	220033	01.3841	19.62	230003	01.1461	18.79	230107	00.9245	11.54	230213	01.0327	13.19
210006	01.0978	17.09	220035	01.3154	19.49	230004	01.6848	24.03	230108	01.2343	18.02	230216	01.6063	19.50
210007	01.6805	20.55	220036	01.5943	22.33	230005	01.2552	18.69	230110	01.3941	17.31	230217	01.2397	19.60
210008	01.3375	19.03	220038	01.2899	21.60	230006	01.1051	15.91	230111	00.9878	20.02	230219	00.9329	16.58
210009	01.8279	19.93	220041	01.2094	21.02	230007	01.0602	17.82	230113	00.9779	18.07	230221	01.1053	17.78
210010	01.1891	16.40	220042	01.2025	25.43	230012	00.8670	11.92	230114	00.6687	25.66	230222	01.3897	18.46
210011	01.2786	21.24	220046	01.3746	22.27	230013	01.3024	20.55	230115	01.0054	15.79	230223	01.3120	21.86
210012	01.6309	21.50	220049	01.3183	21.16	230015	01.1332	19.54	230116	00.9536	14.84	230227	01.4688	22.63
210013	01.2397	18.65	220050	01.0938	18.78	230017	01.5764	20.51	230117	01.9408	25.77	230230	01.6754	21.30
210015	01.2814	18.58	220051	01.2100	20.56	230019	01.4991	22.60	230118	01.2214	16.37	230232	00.9775	18.31

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
230235	01.0781	14.12	240066	01.4071	18.87	240153	01.0196	15.01	250058	01.1577	13.20	260013	01.1118	13.85
230236	01.2952	21.82	240069	01.2110	18.58	240154	01.0483	14.45	250059	01.0878	14.15	260014	01.7489	18.62
230239	01.1617	16.38	240071	01.1304	17.67	240155	00.9544	16.25	250060	00.7824	10.79	260015	01.3467	12.13
230241	01.1064	17.56	240072	01.0864	17.53	240157	01.1171	11.54	250061	00.8592	09.59	260017	01.2916	14.90
230244	01.3649	21.20	240073	00.9499	15.03	240160	00.9811	15.61	250063	00.8532	12.96	260018	00.9287	10.14
230253	00.9665	18.09	240075	01.1872	19.26	240161	00.9741	14.77	250065	00.9879	11.60	260019	01.0354	12.50
230254	01.2851	21.85	240076	01.1127	20.82	240162	00.9969	15.08	250066	00.9303	14.05	260020	01.6667	20.95
230257	00.8588	18.77	240077	00.9355	12.01	240163	00.9492	14.68	250067	01.1448	15.22	260021	01.5105	18.46
230259	01.1900	19.63	240078	01.5064	21.81	240166	01.0768	15.70	250068	00.8507	09.05	260022	01.2935	16.51
230264	01.0350	19.01	240079	01.0497	13.53	240169	00.9590	15.46	250069	01.4085	13.92	260023	01.3238	16.81
230269	01.3679	22.82	240080	01.4036	21.73	240170	01.1704	14.40	250071	00.9017	10.90	260024	00.9481	12.58
230270	01.2231	20.42	240082	01.0921	15.87	240171	01.0490	14.30	250072	01.3515	16.19	260025	01.2386	14.22
230273	01.5750	21.61	240083	01.3718	16.80	240172	01.0622	14.86	250076	01.5698	08.95	260027	01.5497	20.66
230275	00.5014	16.62	240084	01.3050	17.76	240173	00.9755	14.79	250077	00.9412	11.54	260029	01.1498	16.88
230276	00.6978	17.39	240085	00.9625	15.55	240179	01.0886	15.05	250078	01.4494	14.35	260030	01.1773	10.35
230277	01.2413	21.07	240086	01.0751	15.22	240184	01.0883	11.77	250079	00.8992	13.59	260031	01.5413	18.47
230278	01.8525	21.54	240087	01.1768	15.74	240187	01.1726	18.89	250081	01.3362	15.13	260032	01.6098	18.24
230279	00.6928	15.06	240088	01.4371	18.72	240193	01.0850	15.54	250082	01.2704	12.99	260034	01.0286	15.30
230280	01.0834	14.88	240089	00.9741	15.79	240196	00.6150	22.86	250083	01.0222	10.67	260035	01.0464	11.67
240001	01.5829	22.07	240090	01.0683	13.53	240200	00.9031	13.54	250084	01.1161	15.95	260036	01.0354	18.28
240002	01.7321	20.58	240093	01.3423	16.86	240205	01.0263	.....	250085	00.9835	12.43	260037	01.4487	15.56
240004	01.5187	21.05	240094	00.9944	17.38	240206	00.9489	.....	250088	00.9095	14.66	260039	01.1663	12.17
240005	01.0260	15.07	240096	00.9798	14.74	240207	01.2775	22.23	250089	01.1705	13.27	260040	01.6606	15.94
240006	01.1157	20.02	240097	01.1033	16.59	240210	01.2460	22.69	250093	01.1086	12.75	260042	01.2618	16.91
240007	01.0770	15.81	240098	00.9404	16.39	240211	00.9749	11.52	250094	01.2615	14.92	260044	01.0947	14.86
240008	01.0674	16.32	240099	01.0613	10.76	250001	01.4462	16.92	250095	01.0173	14.72	260047	01.4608	15.90
240009	01.0015	14.35	240100	01.2931	18.57	250002	00.8377	14.44	250096	01.2796	15.77	260048	01.2353	19.25
240010	01.9721	21.16	240101	01.1796	17.70	250003	01.0188	15.17	250097	01.3210	13.86	260050	01.0944	14.63
240011	01.1609	15.71	240102	00.9246	12.87	250004	01.4728	16.68	250098	00.8666	14.72	260052	01.3374	16.89
240013	01.3128	16.96	240103	01.0718	13.76	250005	01.0621	10.43	250099	01.3193	12.67	260053	01.1600	10.83
240014	01.0888	19.10	240104	01.1878	21.72	250006	00.9609	14.73	250100	01.2720	14.27	260054	01.3127	14.83
240016	01.3772	16.31	240105	01.0170	12.35	250007	01.2969	18.24	250101	00.8782	09.75	260055	01.0240	08.93
240017	01.1960	15.66	240106	01.3854	23.85	250008	00.9267	11.91	250102	01.6506	14.59	260057	01.1561	14.12
240018	01.3341	17.17	240107	00.9699	14.74	250009	01.1981	15.81	250104	01.4465	16.31	260059	01.2358	11.75
240019	01.1978	20.69	240108	00.9818	12.35	250010	01.0279	11.88	250105	00.9253	11.52	260061	01.1336	11.91
240020	01.1520	20.05	240109	00.9741	12.06	250012	00.9496	13.18	250107	00.8880	14.99	260062	01.2041	17.75
240021	01.0040	13.13	240110	00.9880	14.66	250015	01.1038	10.43	250109	00.9626	12.97	260063	01.1241	15.61
240022	01.1175	18.13	240111	01.0008	15.65	250017	00.9756	14.92	250112	00.9502	14.95	260064	01.3140	15.06
240023	01.1030	16.17	240112	01.0031	14.22	250018	01.0885	11.21	250117	01.0120	13.39	260065	01.7943	16.07
240025	01.1264	14.54	240114	00.8987	13.21	250019	01.4959	16.51	250119	01.1151	11.59	260066	01.0288	15.31
240027	01.0390	15.50	240115	01.6552	21.53	250020	00.9499	11.47	250120	01.0895	13.47	260067	00.9511	10.89
240028	01.1812	18.14	240116	00.9626	12.54	250021	00.9247	08.33	250122	01.2652	.....	260068	01.6948	19.07
240029	01.2178	17.00	240117	01.1416	17.40	250023	00.8534	.....	250123	01.3253	18.31	260070	01.0659	12.16
240030	01.2841	17.33	240119	00.8875	17.45	250024	00.9649	08.37	250124	00.9106	11.28	260073	01.0302	11.87
240031	00.9917	13.83	240121	00.9321	17.85	250025	01.1328	15.43	250125	01.3287	18.00	260074	01.3216	17.26
240036	01.5683	19.89	240122	01.0774	16.25	250027	01.0193	11.14	250126	00.9981	13.81	260077	01.7111	16.86
240037	01.0458	17.05	240123	01.0910	13.80	250029	00.8793	11.91	250127	00.7920	10.67	260078	01.2189	14.84
240038	01.4741	24.33	240124	00.9979	16.84	250030	00.9896	11.25	250128	01.1005	11.81	260079	01.0347	11.96
240040	01.1842	19.00	240125	00.8791	12.16	250031	01.3389	17.65	250131	00.9868	10.41	260080	01.0511	10.85
240041	01.2649	15.42	240127	01.1121	12.16	250032	01.2654	15.27	250134	00.9827	15.67	260081	01.5218	18.50
240043	01.2140	17.60	240128	01.1105	14.99	250033	01.1181	12.63	250136	00.9255	15.06	260082	01.1931	13.85
240044	01.1785	16.75	240129	01.0693	13.13	250034	01.6285	13.70	250138	01.2517	16.52	260085	01.5637	18.89
240045	01.1184	18.25	240130	01.0707	15.14	250035	00.8781	13.38	250141	01.2420	16.11	260086	00.9979	13.83
240047	01.5057	19.66	240132	01.2513	21.26	250036	01.0177	10.97	250145	00.9900	.....	260089	01.0806	12.16
240048	01.2505	21.83	240133	01.1407	16.89	250037	00.8362	09.52	250146	01.0321	12.44	260091	01.6471	20.21
240049	01.7838	21.16	240135	00.8896	11.98	250038	00.9499	12.49	250148	01.1361	15.43	260094	01.2145	17.53
240050	01.1393	22.26	240137	01.2269	15.99	250039	01.0330	12.23	250149	00.9132	13.16	260095	01.4120	15.92
240051	00.9412	14.60	240138	00.9554	12.39	250040	01.3374	16.36	260001	01.6349	16.67	260096	01.5939	23.01
240052	01.2644	18.14	240139	00.9722	14.07	250042	01.2430	13.72	260002	01.4569	20.60	260097	01.1570	16.79
240053	01.5109	19.37	240141	01.1688	18.92	250043	01.0013	11.48	260003	00.9755	13.10	260100	01.0555	13.31
240056	01.2706	21.66	240142	01.1018	15.56	250044	00.9982	14.17	260004	01.0307	12.81	260102	01.0503	17.58
240057	01.7848	21.08	240143	01.1208	11.76	250045	01.1343	17.75	260005	01.6937	20.17	260103	01.3951	16.96
240058	00.9673	10.32	240144	01.0057	13.66	250047	00.9900	11.39	260006	01.4647	16.81	260104	01.7016	19.61
240059	01.1120	19.63	240145	00.9274	12.01	250048	01.5333	14.39	260007	01.6398	14.42	260105	01.8395	21.04
240061	01.7782	21.05	240146	00.9883	18.68	250049	00.9030	11.19	260008	01.2717	16.18	260107	01.4283	19.39
240063	01.5142	22.26	240148	01.0886	08.84	250050	01.2902	12.79	260009	01.2279	15.64	260108	01.8648	18.57
240064	01.2569	20.39	240150	00.8880	12.16	250051	00.8720	08.88	260011	01.6382	17.12	260109	00.9885	11.86
240065	01.0639	10.79	240152	01.0422	18.29	250057	01.2899	14.84	260012	01.1117	12.21	260110	01.5646	14.92

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260113	01.0840	14.31	270036	00.9396	09.94	280051	01.1961	13.85	290022	01.6834	20.50	310043	01.2814	19.99
260115	01.2379	14.59	270039	01.0701	12.96	280052	00.9828	12.52	290027	00.9705	15.03	310044	01.3355	20.03
260116	01.1035	13.89	270040	01.0918	19.79	280054	01.2699	16.10	290032	01.4454	18.24	310045	01.4264	27.62
260119	01.1902	13.28	270041	01.0742	11.52	280055	00.9226	12.19	290036	01.0395	13.90	310047	01.3550	24.05
260120	01.2141	14.60	270044	01.1489	14.40	280056	01.0135	13.28	290038	00.9396	17.61	310048	01.2514	21.34
260122	01.1460	13.40	270046	00.9270	13.70	280057	00.9801	15.61	290039	01.3445	.....	310049	01.3215	23.91
260123	01.0152	14.74	270048	01.0798	14.13	280058	01.3647	14.36	300001	01.3832	21.03	310050	01.2306	21.48
260127	00.9860	13.88	270049	01.8351	19.31	280060	01.5777	18.24	300003	01.8909	21.59	310051	01.3464	23.27
260128	01.0214	09.22	270050	01.0761	17.43	280061	01.4895	15.95	300005	01.2724	19.13	310052	01.2876	21.19
260129	01.2044	13.52	270051	01.3392	18.76	280062	01.1457	12.55	300006	01.1393	17.36	310054	01.3052	23.97
260131	01.4057	15.91	270052	01.0912	12.73	280064	01.0808	13.94	300007	01.1629	17.04	310056	01.3867	20.63
260134	01.1566	14.28	270053	00.9396	09.78	280065	01.2724	17.49	300008	01.2128	18.30	310057	01.2933	23.67
260137	01.5528	14.25	270057	01.2166	12.70	280066	01.0334	11.48	300009	01.1536	18.16	310058	01.0905	26.79
260138	01.8916	21.17	270058	00.9506	11.51	280068	01.0867	09.89	300010	01.2286	17.88	310060	01.1999	18.73
260141	01.9538	17.10	270059	00.8656	15.65	280070	01.0111	10.30	300011	01.3592	22.07	310061	01.2544	20.23
260142	01.2385	13.99	270060	00.9132	13.26	280073	01.0115	13.94	300012	01.3391	21.42	310062	01.2896	24.98
260143	00.9915	11.96	270063	00.9457	14.23	280074	01.1316	12.68	300013	01.1451	17.06	310063	01.3667	21.28
260147	01.0192	12.91	270068	00.9009	15.59	280075	01.2286	13.10	300014	01.2207	19.36	310064	01.2739	22.29
260148	00.9522	09.30	270072	00.7732	11.39	280076	01.0462	12.93	300015	01.1783	18.08	310067	01.3277	23.76
260158	01.1073	11.77	270073	01.1623	11.16	280077	01.3438	17.26	300016	01.2027	15.73	310069	01.2844	20.03
260159	01.0850	19.81	270074	00.8727	.....	280079	01.2143	10.42	300017	01.2359	21.96	310070	01.4051	22.98
260160	01.0956	11.84	270075	00.9757	.....	280080	01.0583	12.11	300018	01.2174	19.62	310072	01.2857	20.57
260162	01.5758	19.55	270076	00.7920	.....	280081	01.6898	18.79	300019	01.2701	18.77	310073	01.6784	23.53
260163	01.3316	15.35	270079	00.9171	13.66	280082	01.0127	13.48	300020	01.2718	20.72	310074	01.4649	22.61
260164	00.9996	12.17	270080	01.2061	15.83	280083	01.0991	14.54	300021	01.1855	15.34	310075	01.3852	23.13
260166	01.2350	21.39	270081	01.0741	12.39	280084	01.0433	11.01	300022	01.1119	17.22	310076	01.4347	28.74
260172	00.9974	13.47	270082	01.0739	14.18	280088	01.7879	17.98	300023	01.2955	19.78	310077	01.5659	23.51
260173	01.0051	11.78	270083	01.0517	16.28	280089	01.0322	14.37	300024	01.1815	16.74	310078	01.2978	24.59
260175	01.1637	14.99	270084	00.9318	14.12	280090	00.9935	13.49	300028	01.2393	16.75	310081	01.2833	21.29
260176	01.7266	18.43	280001	01.1165	12.98	280091	01.2101	14.18	300029	01.3274	22.44	310083	01.2856	22.33
260177	01.3281	20.42	280003	02.0364	18.79	280092	00.8896	12.18	300033	01.1182	13.69	310084	01.3535	20.99
260178	01.4918	18.91	280005	01.4366	16.76	280094	01.0535	14.07	300034	02.0357	23.32	310086	01.2273	21.30
260179	01.6454	18.70	280009	01.7536	17.25	280097	01.0852	12.27	310001	01.7927	25.90	310087	01.2824	19.26
260180	01.6989	20.07	280011	00.8644	11.91	280098	00.9677	10.40	310002	01.7252	26.26	310088	01.2278	20.64
260183	01.5585	16.14	280012	01.3033	15.43	280101	01.0917	13.18	310003	01.2649	24.08	310090	01.2311	24.50
260186	01.2994	15.97	280013	01.8329	20.31	280102	01.1442	12.76	310005	01.2313	20.54	310091	01.3337	20.80
260188	01.2526	18.64	280014	00.9614	13.39	280104	00.9770	10.84	310006	01.2035	19.56	310092	01.3119	20.70
260189	00.8480	11.26	280015	01.0138	15.19	280105	01.3787	17.28	310008	01.3813	22.73	310093	01.1685	19.79
260190	01.2487	18.90	280017	01.1011	13.94	280106	00.9285	13.93	310009	01.2826	22.80	310096	01.8614	23.17
260191	01.2524	17.92	280018	01.0931	13.35	280107	01.0876	11.13	310010	01.2543	20.81	310105	01.2399	23.63
260193	01.2325	18.75	280020	01.6141	18.93	280108	01.2094	13.96	310011	01.2880	21.55	310108	01.4305	21.85
260195	01.1677	14.49	280021	01.3229	15.49	280109	00.9160	09.80	310012	01.5919	24.30	310110	01.2375	20.38
260197	01.1436	17.26	280022	01.0087	12.52	280110	01.0169	11.19	310013	01.2782	21.84	310111	01.3032	20.46
260198	01.3417	15.86	280023	01.4104	14.77	280111	01.2167	15.63	310014	01.6890	24.26	310112	01.3240	21.02
260200	01.3591	19.10	280024	00.9413	13.05	280114	00.9785	12.99	310015	01.9538	24.97	310113	01.2381	20.60
270002	01.2857	15.06	280025	00.9422	12.14	280115	00.9481	14.77	310016	01.2557	22.34	310115	01.2937	19.31
270003	01.2209	19.76	280026	01.0322	15.28	280117	01.1926	14.47	310017	01.3633	23.40	310116	01.2358	21.84
270004	01.7072	19.74	280028	01.0549	14.53	280118	00.9922	15.17	310018	01.1279	20.55	310118	01.2541	22.53
270006	01.0910	14.78	280029	01.2160	14.02	280119	00.8653	.....	310019	01.6089	23.53	310119	01.6063	30.37
270007	00.9226	13.18	280030	01.7242	24.40	280123	00.9506	15.63	310020	01.2426	21.55	310120	01.0681	17.44
270009	01.0828	15.34	280031	01.0182	13.10	290001	01.6689	21.85	310021	01.3936	22.03	310121	01.1650	20.34
270011	01.0735	15.52	280032	01.3285	15.57	290002	00.9842	17.79	310022	01.2809	21.47	320001	01.4673	17.14
270012	01.6735	18.11	280033	01.1021	14.24	290003	01.6564	20.74	310024	01.3576	22.85	320002	01.3450	20.13
270013	01.4138	17.77	280034	01.3125	13.86	290005	01.4911	19.03	310025	01.2579	22.27	320003	01.1854	15.65
270014	01.7993	16.86	280035	00.9238	11.81	290006	01.1665	16.15	310026	01.2329	22.67	320004	01.2651	17.19
270016	00.9333	13.23	280037	01.0189	14.28	290007	01.9072	27.06	310027	01.3359	20.94	320005	01.3181	18.87
270017	01.3074	18.67	280038	01.0809	14.53	290008	01.1850	18.73	310028	01.1829	21.21	320006	01.3623	15.96
270019	01.0378	14.02	280039	01.1314	13.99	290009	01.5619	22.25	310029	01.9763	22.49	320009	01.5982	16.52
270021	01.1585	16.23	280040	01.6182	18.67	290010	01.1281	11.93	310031	02.8592	24.35	320011	01.0288	17.06
270023	01.3591	20.08	280041	00.9200	11.80	290011	01.0270	14.67	310032	01.3459	21.17	320012	00.9809	16.21
270024	00.9898	13.05	280042	01.1024	13.11	290012	01.3986	20.67	310034	01.2650	21.26	320013	01.1612	19.19
270026	00.9412	12.95	280043	01.0606	14.76	290013	01.0582	15.39	310036	01.1459	19.86	320014	01.1014	11.24
270027	01.0785	11.91	280045	01.2844	13.63	290014	01.0288	16.38	310037	01.3381	26.92	320016	01.1858	13.77
270028	01.0843	15.37	280046	01.1494	11.04	290015	01.0017	15.15	310038	02.0243	23.35	320017	01.1639	16.85
270029	00.9485	16.24	280047	01.0939	15.34	290016	01.2292	19.81	310039	01.2854	21.42	320018	01.5091	17.37
270032	01.1184	15.80	280048	01.1833	12.06	290019	01.3453	19.06	310040	01.2606	24.06	320019	01.5428	22.95
270033	00.8853	12.19	280049	01.0480	13.30	290020	01.0868	17.66	310041	01.3379	21.96	320021	01.7525	17.31
270035	01.0156	17.11	280050	00.9680	13.11	290021	01.6469	19.51	310042	01.2137	22.13	320022	01.2437	16.07

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
320023	00.9909	16.72	330059	01.5929	29.90	330171	01.3206	21.95	330268	01.0351	14.44	340023	01.4078	17.97
320030	01.0522	18.27	330061	01.3120	23.60	330175	01.1547	14.34	330270	01.9728	32.47	340024	01.1778	15.07
320031	00.9076	12.36	330062	01.1602	15.58	330177	01.0010	13.74	330273	01.3703	23.35	340025	01.1795	14.80
320032	00.9382	15.10	330064	01.4487	29.63	330179	00.8711	14.38	330275	01.3086	18.58	340027	01.1882	15.59
320033	01.1251	20.90	330065	01.1874	17.24	330180	01.1878	16.40	330276	01.1943	17.02	340028	01.5461	17.32
320035	00.9732	14.60	330066	01.3105	17.53	330181	01.3086	30.46	330277	01.1399	16.32	340030	02.0657	20.58
320037	01.2259	15.59	330067	01.3362	20.60	330182	02.4681	28.41	330279	01.3463	18.52	340031	01.0087	11.97
320038	01.2177	13.85	330072	01.3519	27.86	330183	01.5110	18.72	330285	01.7826	22.52	340032	01.3862	18.60
320046	01.2515	18.15	330073	01.1568	14.87	330184	01.3693	26.85	330286	01.3178	24.25	340035	01.1812	15.73
320048	01.3042	17.40	330074	01.2164	17.15	330185	01.3284	25.44	330290	01.7803	29.90	340036	01.2483	17.33
320056	00.9777	.....	330075	01.0811	17.25	330186	00.8858	19.79	330293	01.1544	13.43	340037	01.1212	15.85
320057	00.9961	.....	330078	01.3881	17.05	330188	01.2058	18.28	330304	01.2543	26.20	340038	01.0711	15.42
320058	00.8563	.....	330079	01.2322	17.05	330189	01.4328	16.85	330306	01.4671	27.44	340039	01.2888	19.52
320059	01.1577	.....	330080	01.4470	27.21	330191	01.3327	17.06	330307	01.2478	19.43	340040	01.7915	18.22
320060	00.9420	.....	330084	01.0602	16.46	330193	01.3167	27.97	330308	01.2513	29.68	340041	01.2345	17.24
320061	01.1055	.....	330085	01.3285	18.64	330194	01.8377	25.39	330309	01.2698	24.10	340042	01.1974	14.01
320062	00.9114	.....	330086	01.2430	24.99	330195	01.6497	29.85	330314	01.4597	22.18	340044	01.0183	13.44
320063	01.2900	12.84	330088	01.0583	24.62	330196	01.3112	28.36	330315	16.1090	25.23	340045	00.9957	09.61
320065	01.3717	16.38	330090	01.5512	16.76	330197	01.0557	14.99	330316	01.2631	21.85	340047	01.8712	18.39
320067	00.8637	17.64	330091	01.3277	18.50	330198	01.4009	22.87	330327	00.9920	16.17	340048	00.9368	14.02
320068	00.8811	14.99	330092	01.1181	14.07	330199	01.4019	26.06	330331	01.2272	29.77	340049	00.6961	13.94
320069	00.9953	10.67	330094	01.1757	16.51	330201	01.6400	27.62	330332	01.2979	25.01	340050	01.1971	17.37
320070	00.9025	.....	330095	01.2329	17.55	330202	01.6494	28.76	330333	01.2530	23.81	340051	01.3335	16.08
320074	01.0790	17.04	330096	01.0910	15.45	330203	01.3914	19.06	330336	01.3462	28.99	340052	01.0094	18.41
320079	01.1541	17.22	330097	01.2372	15.36	330204	01.3917	28.09	330338	01.2385	23.09	340053	01.6620	19.08
330001	01.1750	25.49	330100	00.7187	26.07	330205	01.1520	20.29	330339	00.8847	18.73	340054	01.1119	13.09
330002	01.4149	25.22	330101	01.7628	33.56	330208	01.2512	24.55	330340	01.1888	21.17	340055	01.1909	17.40
330003	01.3160	17.67	330102	01.3509	17.47	330209	01.2145	23.11	330350	01.8002	28.27	340060	01.1481	16.69
330004	01.3302	19.08	330103	01.2729	16.46	330211	01.1985	17.23	330353	01.3364	30.33	340061	01.6989	19.91
330005	01.7965	20.49	330104	01.3856	26.74	330212	01.1045	21.12	330354	01.5239	.....	340063	01.0467	13.08
330006	01.2737	23.92	330106	01.5963	34.42	330213	01.1784	15.72	330357	01.3755	33.49	340064	01.2127	17.10
330007	01.3460	17.71	330107	01.3256	21.55	330214	01.7511	29.72	330359	00.9233	19.54	340065	01.3418	14.39
330008	01.2046	15.62	330108	01.2169	16.28	330215	01.2278	15.66	330372	01.2025	24.47	340067	01.2760	15.88
330009	01.3758	30.32	330111	01.0618	14.81	330218	01.1332	17.94	330381	01.1984	28.03	340068	01.2350	14.77
330010	01.2804	15.07	330114	00.9802	16.13	330219	01.6757	19.13	330385	01.1745	26.83	340069	01.7385	19.47
330011	01.3292	17.98	330115	01.2205	15.23	330221	01.3401	27.53	330386	01.1994	23.03	340070	01.3821	17.57
330012	01.7032	31.01	330116	00.9768	14.21	330222	01.2792	17.64	330387	01.0268	23.95	340071	01.0850	15.08
330013	02.0647	17.36	330118	01.6278	18.94	330223	01.0631	15.37	330389	01.7543	29.43	340072	01.0658	15.20
330014	01.3775	28.72	330119	01.7614	33.48	330224	01.2427	18.20	330390	01.2733	30.36	340073	01.5479	20.23
330016	01.0528	15.47	330121	01.0392	16.10	330225	01.1712	24.38	330393	01.7116	27.22	340075	01.2024	16.26
330019	01.2906	25.33	330122	01.0841	21.84	330226	01.2737	16.28	330394	01.5398	18.37	340080	01.0616	12.72
330020	01.0589	15.26	330125	01.8638	19.53	330229	01.3073	15.69	330395	01.2975	30.64	340084	01.0587	15.61
330023	01.2488	23.30	330126	01.1887	22.34	330230	01.4289	28.69	330396	01.3518	31.58	340085	01.1725	15.65
330024	01.8102	30.17	330127	01.3382	25.03	330231	01.0965	29.91	330397	01.2796	25.47	340087	01.1033	16.01
330025	01.1843	16.20	330128	01.3718	27.71	330232	01.2398	16.42	330398	01.2707	26.92	340088	01.1389	16.22
330027	01.4582	30.93	330132	01.0795	14.60	330233	01.5355	29.70	330399	01.2655	29.65	340089	01.0362	12.85
330028	01.4159	24.95	330133	01.3670	30.50	330234	02.2504	29.60	340001	01.5501	19.47	340090	01.1535	17.15
330029	01.0093	19.09	330135	01.1584	18.28	330235	01.1446	18.33	340002	01.8976	18.38	340091	01.7185	19.42
330030	01.2056	16.22	330136	01.2983	16.54	330236	01.4017	27.87	340003	01.1485	17.08	340093	01.0725	12.10
330033	01.2685	13.82	330140	01.7550	17.51	330238	01.2317	14.19	340004	01.4880	17.16	340094	01.4425	17.65
330034	00.7483	32.72	330141	01.3513	24.27	330239	01.1938	15.39	340005	01.1584	13.24	340096	01.1689	17.33
330036	01.2233	22.66	330144	00.9795	13.70	330240	01.3306	27.41	340006	01.0906	14.60	340097	01.1822	16.61
330037	01.1592	14.92	330148	01.0842	14.58	330241	01.9041	22.30	340007	01.1627	16.20	340098	01.7248	19.46
330038	01.2091	14.81	330151	01.0739	14.55	330242	01.3798	23.99	340008	01.1478	16.55	340099	01.1578	12.70
330039	00.8379	14.25	330152	01.4451	28.88	330245	01.3025	17.35	340009	01.4763	19.70	340101	01.1697	11.80
330041	01.3314	30.19	330153	01.7110	17.15	330246	01.3563	25.33	340010	01.3230	16.97	340104	00.8557	12.36
330043	01.3067	26.43	330154	01.6447	.....	330247	00.7683	25.98	340011	01.1353	14.36	340105	01.3824	17.94
330044	01.2714	17.50	330157	01.3606	19.48	330249	01.1711	15.98	340012	01.3201	15.92	340106	01.2125	18.52
330045	01.4023	26.05	330158	01.4101	23.06	330250	01.3091	16.77	340013	01.2494	15.63	340107	01.4157	16.68
330046	01.4855	29.75	330159	01.3179	18.08	330252	00.8801	15.72	340014	01.5841	22.01	340109	01.3465	16.84
330047	01.2553	16.37	330160	01.4447	28.65	330254	01.1655	15.21	340015	01.2963	17.05	340111	01.1815	13.75
330048	01.2233	16.94	330161	00.7222	16.75	330258	01.3709	26.99	340016	01.2058	15.58	340112	01.0676	13.87
330049	01.3230	17.81	330162	01.2585	26.51	330259	01.5058	22.66	340017	01.2663	15.96	340113	01.9984	21.03
330053	01.1834	15.15	330163	01.2525	18.88	330261	01.2898	25.24	340018	01.1806	15.29	340114	01.5616	19.74
330055	01.4840	31.04	330164	01.3791	19.40	330263	01.0205	18.52	340019	01.0455	13.86	340115	01.5419	18.15
330056	01.3098	27.72	330166	01.0009	15.11	330264	01.2445	23.18	340020	01.2079	17.65	340116	01.8193	20.54
330057	01.6936	16.97	330167	01.7072	28.82	330265	01.3598	16.53	340021	01.2692	16.22	340119	01.2909	16.28
330058	01.3085	16.22	330169	01.4102	32.57	330267	01.2237	23.35	340022	01.0376	14.98	340120	01.0939	12.31

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
340121	01.1272	15.36	350043	01.7063	16.69	360064	01.6051	21.61	360145	01.6513	17.67	370015	01.2714	14.88
340123	01.1203	16.92	350044	00.8706	10.29	360065	01.2767	17.59	360147	01.2402	15.85	370016	01.4234	15.52
340124	01.0590	13.70	350047	01.1747	16.78	360066	01.4340	18.88	360148	01.1244	17.65	370017	01.0984	11.48
340125	01.4925	18.36	350049	01.2578	10.74	360067	01.2694	12.77	360149	01.2274	17.72	370018	01.3359	16.48
340126	01.4255	16.47	350050	00.9351	10.74	360068	01.7278	22.41	360150	01.2493	19.17	370019	01.2722	13.17
340127	01.2939	15.72	350051	00.9967	15.46	360069	01.1325	16.74	360151	01.3575	17.46	370020	01.2996	12.51
340129	01.2947	17.50	350053	01.0948	10.34	360070	01.7308	17.18	360152	01.4717	17.88	370021	00.8951	09.76
340130	01.4418	17.46	350055	00.8596	12.12	360071	01.3511	16.78	360153	01.1783	14.12	370022	01.2960	16.91
340131	01.5306	17.10	350056	00.9765	12.81	360072	01.2123	16.99	360154	01.0363	12.79	370023	01.3264	15.36
340132	01.4381	13.48	350058	00.8581	12.32	360074	01.3755	19.42	360155	01.3328	19.43	370025	01.3632	16.03
340133	01.0955	14.59	350060	00.7725	07.81	360075	01.4503	20.74	360156	01.3471	17.17	370026	01.4139	16.34
340137	01.1470	16.93	350061	01.0750	14.05	360076	01.3497	17.88	360159	01.2236	19.63	370028	01.9000	19.01
340138	01.0564	14.77	350063	00.8496	.....	360077	01.5372	19.34	360161	01.2522	19.38	370029	01.2231	13.67
340141	01.6712	19.46	350064	00.9598	.....	360078	01.3085	20.54	360162	01.2461	18.42	370030	01.2222	15.66
340142	01.2328	14.52	350066	00.4249	.....	360079	01.8680	21.00	360163	01.8359	19.83	370032	01.5723	15.46
340143	01.4477	17.07	360001	01.3378	16.97	360080	01.1089	15.47	360164	00.9012	14.82	370033	01.0214	11.30
340144	01.3647	18.62	360002	01.2156	16.93	360081	01.3825	19.32	360165	01.1732	14.70	370034	01.2608	13.35
340145	01.4178	16.83	360003	01.7711	21.00	360082	01.3422	20.33	360166	01.2022	14.95	370035	01.6224	16.49
340146	01.0449	12.52	360006	01.7569	20.88	360083	01.2835	16.28	360170	01.3679	17.38	370036	01.1150	10.48
340147	01.3116	18.57	360007	01.0845	16.02	360084	01.6050	19.41	360172	01.3918	16.51	370037	01.7463	17.69
340148	01.5003	18.58	360008	01.2538	17.40	360085	01.7758	20.40	360174	01.3082	17.57	370038	00.9813	11.67
340151	01.2153	15.08	360009	01.3941	17.80	360086	01.4419	18.21	360175	01.2537	18.78	370039	01.4120	14.24
340153	01.8958	19.07	360010	01.1953	16.42	360087	01.4087	17.90	360176	01.1682	14.85	370040	01.0735	12.21
340155	01.4075	20.03	360011	01.3112	18.17	360088	01.2554	16.38	360177	01.3012	16.97	370041	01.0348	14.17
340156	00.8391	.....	360012	01.2910	19.29	360089	01.1463	17.74	360178	01.1912	16.88	370042	00.8602	12.67
340158	01.2118	16.64	360013	01.1166	17.72	360090	01.2393	19.06	360179	01.2984	19.34	370043	00.9396	13.83
340159	01.1739	17.58	360014	01.1725	17.98	360091	01.2353	19.17	360180	02.1422	22.61	370045	01.0172	10.45
340160	01.1173	13.34	360016	01.5863	17.93	360092	01.1745	18.70	360184	00.4826	16.57	370046	01.0071	11.67
340162	01.1881	17.44	360017	01.8234	20.42	360093	01.2346	16.69	360185	01.2323	17.09	370047	01.3660	15.46
340164	01.5854	18.61	360018	01.6349	19.27	360094	01.3179	19.51	360186	01.1303	14.23	370048	01.2382	14.10
340166	01.3581	20.11	360019	01.2464	19.11	360095	01.2963	17.00	360187	01.3922	16.45	370049	01.3876	15.65
340168	00.5171	14.86	360020	01.4455	19.77	360096	01.1048	16.11	360188	00.9743	15.83	370051	00.9683	12.64
340171	01.1309	20.34	360021	01.2171	17.75	360098	01.3545	17.96	360189	01.0832	16.02	370054	01.4892	15.09
340173	01.2673	.....	360024	01.4066	18.60	360099	01.0438	15.01	360192	01.3251	20.42	370056	01.5847	18.24
350001	01.0123	11.96	360025	01.2789	18.44	360100	01.2631	16.54	360193	01.3592	16.93	370057	01.1516	13.78
350002	01.7485	15.76	360026	01.3183	16.15	360101	01.5633	19.00	360194	01.2185	16.98	370059	01.1145	17.59
350003	01.1883	16.16	360027	01.5006	19.53	360102	01.3173	20.31	360195	01.1450	18.15	370060	01.0938	12.84
350004	01.9386	17.55	360028	01.3927	16.15	360103	01.3791	19.64	360197	01.2415	18.15	370063	01.0275	13.43
350005	01.1692	12.94	360029	01.1968	17.00	360106	01.0835	14.96	360200	01.0110	14.16	370064	01.0078	10.63
350006	01.4616	15.92	360030	01.2855	16.35	360107	01.2884	17.73	360203	01.1551	15.13	370065	00.9984	15.50
350007	00.9387	11.95	360031	01.3350	18.56	360108	01.0393	15.34	360204	01.1958	17.97	370071	01.0541	11.99
350008	00.9665	15.65	360032	01.0939	18.26	360109	01.0943	17.32	360210	01.1513	19.78	370072	00.9059	12.83
350009	01.2060	15.95	360034	01.2933	13.90	360112	01.8152	22.51	360211	01.2508	18.78	370076	01.2821	12.00
350010	01.2000	12.15	360035	01.5996	20.13	360113	01.3358	19.54	360212	01.3943	19.17	370077	01.1968	16.27
350011	01.9051	17.35	360036	01.3867	17.62	360114	01.0899	17.10	360213	01.1498	17.17	370078	01.6755	14.49
350012	01.2168	11.99	360037	02.0410	20.51	360115	01.2893	17.95	360218	01.3251	16.46	370079	00.9520	12.41
350013	01.0734	15.32	360038	01.5770	18.07	360116	01.1193	16.64	360230	01.5118	19.37	370080	00.9631	11.68
350014	01.0043	15.46	360039	01.3058	16.07	360118	01.3823	18.32	360231	01.0811	12.11	370082	00.8621	13.46
350015	01.6873	15.63	360040	01.4255	17.31	360121	01.2332	17.90	360234	01.3514	18.54	370083	00.9402	11.35
350016	01.0383	10.92	360041	01.3554	18.33	360123	01.1988	18.37	360236	01.2821	17.59	370084	01.1283	11.02
350017	01.4320	15.24	360042	01.1544	17.62	360125	01.0770	17.38	360239	01.3231	19.51	370085	00.8919	14.52
350018	01.0665	11.21	360044	01.1752	15.64	360126	01.2087	20.09	360241	00.5984	18.86	370086	01.1210	07.79
350019	01.6314	18.43	360045	01.5364	20.90	360127	01.2267	16.48	360242	01.6845	.....	370089	01.2563	13.16
350020	01.7038	20.24	360046	01.1470	19.88	360128	01.1952	14.73	360243	00.7548	15.52	370091	01.7651	17.18
350021	01.0657	11.41	360047	01.1546	13.65	360129	01.0119	14.59	360244	00.6196	15.74	370092	01.0486	14.38
350023	00.9037	15.30	360048	01.7847	21.55	360130	01.1375	15.59	360245	00.7558	14.33	370093	01.8654	18.71
350024	01.0898	15.40	360049	01.2053	18.18	360131	01.3635	17.38	360247	00.4249	.....	370094	01.4086	17.00
350025	01.0197	13.34	360050	01.1555	12.37	360132	01.3113	18.78	370001	01.7020	18.73	370095	00.9433	11.66
350027	00.9438	12.32	360051	01.6065	22.36	360133	01.4867	18.44	370002	01.2595	13.98	370097	01.4514	18.02
350029	00.8818	13.02	360052	01.7593	18.41	360134	01.7147	19.43	370004	01.3100	15.35	370099	01.1946	12.65
350030	00.9790	15.93	360054	01.2902	15.83	360135	01.1776	16.82	370005	01.0107	13.12	370100	00.9605	13.45
350033	00.9672	14.33	360055	01.2729	19.12	360136	01.0797	15.96	370006	01.2229	15.08	370103	00.9375	15.07
350034	00.9622	14.56	360056	01.4338	16.47	360137	01.6205	18.82	370007	01.2258	13.82	370105	01.9925	16.23
350035	00.8570	09.95	360057	01.1143	13.87	360140	01.0283	16.19	370008	01.4034	16.68	370106	01.5287	16.46
350038	01.0474	14.07	360058	01.3442	16.66	360141	01.4692	21.06	370011	01.0552	12.95	370108	01.0528	11.73
350039	01.0412	13.84	360059	01.5702	20.39	360142	00.9974	15.98	370012	00.8901	09.07	370112	01.0761	13.21
350041	00.9787	14.99	360062	01.5152	19.27	360143	01.3979	18.13	370013	01.7959	19.41	370113	01.2411	16.23
350042	01.0876	11.16	360063	01.1537	18.08	360144	01.3184	20.77	370014	01.2915	18.49	370114	01.6734	15.49

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
370121	01.1456	17.38	380035	01.3707	19.01	390037	01.3363	18.93	390118	01.2116	16.26	390211	01.2753	16.99
370122	01.1334	07.58	380036	01.0573	20.26	390039	01.1242	15.66	390119	01.3751	17.59	390213	01.0005	16.41
370123	01.2119	12.32	380037	01.1645	19.53	390040	00.9636	13.13	390121	01.3408	17.47	390215	01.2741	21.06
370125	01.0078	13.37	380038	01.3353	22.64	390041	01.3184	17.07	390122	01.0708	17.57	390217	01.2339	18.51
370126	00.9515	15.34	380039	01.3785	29.30	390042	01.5616	21.73	390123	01.3538	20.71	390219	01.3280	19.67
370131	01.0025	12.88	380040	01.2637	19.96	390043	01.1718	14.85	390125	01.2277	15.61	390220	01.1974	19.37
370133	01.1482	10.09	380042	01.1658	20.57	390044	01.6542	19.63	390126	01.2947	21.03	390222	01.3127	20.33
370138	01.1319	15.23	380047	01.7042	22.12	390045	01.7640	18.05	390127	01.2463	20.96	390223	01.5485	23.11
370139	01.1351	12.56	380048	01.0410	14.68	390046	01.6118	19.79	390128	01.2129	18.14	390224	00.9185	13.35
370140	00.9528	10.99	380050	01.3882	17.45	390047	01.7879	28.26	390130	01.1528	17.20	390225	01.2038	17.25
370141	01.3712	17.30	380051	01.5603	20.05	390048	01.1662	16.60	390131	01.2893	16.30	390226	01.7722	24.15
370146	01.0068	10.73	380052	01.1841	16.75	390049	01.6471	20.69	390132	01.3456	15.42	390228	01.2584	19.38
370148	01.5163	18.46	380055	01.1753	24.14	390050	02.1332	22.39	390133	01.8248	21.71	390231	01.3380	25.11
370149	01.2715	15.35	380056	01.0662	17.36	390051	02.2314	25.28	390135	01.3067	21.05	390233	01.3166	17.22
370153	01.1566	13.86	380060	01.4332	21.98	390052	01.2173	19.41	390136	01.1980	15.39	390235	01.6737	24.38
370154	00.9918	13.05	380061	01.5328	22.07	390054	01.2362	16.08	390137	01.5014	16.35	390236	01.2218	15.88
370156	01.0804	12.49	380062	01.1673	14.40	390055	01.8446	21.81	390138	01.3175	17.93	390237	01.5879	20.36
370158	00.9865	11.75	380063	01.2839	19.01	390056	01.1627	16.81	390139	01.5583	23.54	390238	01.4187	16.51
370159	01.2579	15.59	380064	01.3699	21.25	390057	01.2722	18.70	390142	01.6478	23.18	390242	01.2892	18.48
370163	00.8584	12.16	380065	01.0989	22.49	390058	01.3320	18.67	390145	01.3920	19.48	390244	00.8955	09.83
370165	01.2002	12.46	380066	01.4293	18.58	390060	01.1507	16.92	390146	01.2908	16.44	390245	01.3725	23.05
370166	01.1412	16.32	380068	01.0536	19.05	390061	01.4904	19.08	390147	01.2386	19.08	390246	01.2495	17.25
370169	01.0923	11.25	380069	01.1444	18.59	390062	01.2096	16.01	390150	01.1114	18.10	390247	01.0371	18.26
370170	01.0998	.....	380070	01.3975	21.24	390063	01.7632	19.24	390151	01.2811	18.58	390249	00.9800	12.06
370171	01.0602	.....	380071	01.3430	20.07	390065	01.2783	19.30	390152	01.0751	18.81	390256	01.8447	23.21
370172	00.9962	.....	380072	00.9558	14.66	390066	01.3181	17.77	390153	01.2365	22.46	390258	01.2636	20.08
370173	01.1720	.....	380075	01.4074	19.72	390067	01.7805	18.91	390154	01.2353	16.67	390260	01.2223	21.36
370174	01.1211	.....	380078	01.1136	17.41	390068	01.2705	17.23	390155	01.2835	19.44	390262	02.1044	17.77
370176	01.1786	15.29	380081	01.0882	18.84	390069	01.2052	17.75	390156	01.4384	21.37	390263	01.4788	19.16
370177	01.0146	10.09	380082	01.3415	22.96	390070	01.2877	20.39	390157	01.3442	17.99	390265	01.2975	18.82
370178	01.0038	10.96	380083	01.2329	20.06	390071	01.1345	13.41	390158	01.5815	18.96	390266	01.1903	16.81
370179	00.8178	17.33	380084	01.3178	21.43	390072	01.0884	15.91	390160	01.2481	18.50	390267	01.2766	19.80
370180	00.9743	.....	380087	01.0131	15.38	390073	01.6228	19.03	390161	01.1216	14.43	390268	01.3984	20.44
370183	01.0112	12.06	380088	01.0312	16.16	390074	01.3104	16.05	390162	01.4567	19.59	390270	01.3195	16.67
370186	01.0207	13.15	380089	01.3743	22.25	390075	01.3024	16.41	390163	01.2442	15.99	390272	00.5086	.....
370189	00.9532	07.82	380090	01.3216	25.71	390076	01.3560	21.07	390164	02.1520	20.37	390277	00.5135	22.55
370190	01.5726	15.31	380091	01.2636	25.13	390078	01.0405	16.88	390166	01.1028	18.31	390278	00.6667	18.42
370192	01.3093	17.57	390001	01.3377	18.25	390079	01.7573	16.81	390167	01.3539	21.30	390279	01.0585	15.32
370194	01.8498	.....	390002	01.3642	18.62	390080	01.3310	19.14	390168	01.2630	18.43	390281	02.6697	.....
370195	01.7510	.....	390003	01.2533	15.88	390081	01.3720	22.88	390169	01.2861	18.72	390282	02.8720	.....
370196	01.2186	.....	390004	01.4312	18.12	390083	01.1651	22.01	390170	01.9027	21.25	400001	01.3075	08.65
370197	01.0898	.....	390005	01.0800	14.24	390084	01.1937	15.57	390173	01.1957	17.78	400002	01.5650	11.00
380001	01.3595	21.21	390006	01.7512	18.17	390086	01.2015	15.86	390174	01.7556	25.41	400003	01.2778	08.44
380002	01.1948	19.35	390007	01.1629	21.90	390088	01.3108	22.62	390176	01.1738	18.14	400004	01.1644	08.18
380003	01.2011	20.71	390008	01.1581	15.47	390090	01.8609	18.97	390178	01.2971	18.44	400005	01.0829	06.61
380004	01.7699	23.34	390009	01.6156	17.81	390091	01.1345	17.40	390179	01.3028	22.12	400006	01.1988	07.59
380005	01.2498	21.15	390010	01.1928	17.10	390093	01.1545	14.99	390180	01.5562	23.40	400007	01.2163	07.46
380006	01.3682	19.26	390011	01.2677	16.82	390095	01.1947	14.46	390181	01.0663	18.59	400009	01.0136	07.71
380007	01.5884	23.43	390012	01.2600	19.73	390096	01.3337	17.00	390183	01.2197	18.03	400010	00.9361	08.53
380008	01.0562	17.82	390013	01.2411	16.90	390097	01.3295	21.56	390184	01.1453	18.07	400011	00.9932	08.12
380009	01.8380	23.30	390015	01.1668	13.12	390098	01.7987	20.75	390185	01.2103	16.34	400012	01.2302	07.40
380010	01.1162	20.67	390016	01.2453	16.40	390100	01.6689	20.03	390189	01.0957	15.96	400013	01.2495	08.19
380011	01.0890	20.97	390017	01.1322	15.43	390101	01.2433	16.62	390191	01.1789	14.33	400014	01.3919	09.06
380013	01.2719	17.76	390018	01.3522	20.05	390102	01.3985	20.58	390192	01.1862	16.36	400015	01.2207	10.98
380014	01.5562	20.77	390019	01.1189	15.59	390103	01.0990	18.00	390193	01.2159	16.13	400016	01.3485	10.89
380017	01.8262	23.17	390022	01.3277	.....	390104	01.0912	14.99	390194	01.0905	18.91	400017	01.2423	07.70
380018	01.7650	21.22	390023	01.3020	18.98	390106	01.0779	15.15	390195	01.8842	22.93	400018	01.2939	09.80
380019	01.3206	19.33	390024	00.9902	23.26	390107	01.2940	19.04	390196	01.4403	.....	400019	01.8123	09.34
380020	01.4383	21.87	390025	00.6319	15.97	390108	01.3549	20.08	390197	01.3000	18.49	400021	01.4962	08.79
380021	01.2983	19.44	390026	01.2842	20.94	390109	01.1618	14.14	390198	01.2260	15.75	400022	01.3207	10.01
380022	01.2237	21.01	390027	01.9139	25.88	390110	01.5969	18.05	390199	01.3087	15.40	400024	00.9888	07.79
380023	01.2422	17.43	390028	01.9063	17.78	390111	01.8405	27.77	390200	01.0941	14.88	400026	00.9734	06.74
380025	01.2509	22.55	390029	01.9567	18.83	390112	01.1937	12.26	390201	01.2601	19.26	400027	01.1951	09.06
380026	01.1673	17.54	390030	01.2362	17.37	390113	01.2115	16.25	390203	01.3880	20.96	400028	01.0432	07.89
380027	01.3334	23.09	390031	01.1652	17.15	390114	01.2440	22.27	390204	01.2807	18.56	400029	01.1384	09.92
380029	01.1591	18.45	390032	01.2748	18.10	390115	01.3799	22.31	390205	01.4152	20.63	400031	01.1944	08.50
380031	01.0213	18.48	390035	01.2522	17.79	390116	01.2575	21.78	390206	01.4067	20.14	400032	01.1883	08.21
380033	01.7400	24.13	390036	01.4191	18.06	390117	01.1969	15.62	390209	01.0490	15.09	400044	01.2161	09.13

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
400048	01.2242	07.12	420056	01.1507	13.66	430062	00.8088	10.50	440072	01.4213	14.81	440208	01.9916	.....
400061	01.5742	13.14	420057	01.1643	15.20	430064	01.1702	12.48	440073	01.3464	18.39	440209	01.7950	.....
400079	01.3004	08.37	420059	00.9868	13.80	430065	01.0035	10.34	440078	01.0317	13.14	440211	00.8607	.....
400087	01.4245	08.10	420061	01.1719	16.99	430066	00.9891	11.87	440081	01.1813	15.86	450002	01.5247	15.76
400094	01.1019	09.07	420062	01.3818	16.51	430073	01.0151	13.25	440082	02.0414	21.47	450004	01.2254	12.21
400098	01.2325	07.84	420064	01.1548	14.32	430076	00.9907	10.30	440083	01.1353	12.16	450005	01.2214	13.65
400102	01.2159	07.59	420065	01.3523	17.37	430077	01.6483	16.77	440084	01.1861	12.89	450007	01.2627	13.51
400103	01.4404	09.09	420066	00.9284	15.38	430079	01.0189	11.63	440090	00.8532	11.62	450008	01.3666	14.74
400104	01.4125	09.01	420067	01.2688	16.48	430081	00.9311	.....	440091	01.6476	16.91	450010	01.4032	15.09
400105	01.3335	09.08	420068	01.3427	17.07	430082	00.9287	.....	440100	01.0717	13.60	450011	01.6018	14.66
400106	01.2054	07.87	420069	01.0615	14.29	430083	00.7707	.....	440102	01.0749	12.64	450014	01.0418	14.53
400109	01.4891	09.67	420070	01.2880	15.76	430084	00.9960	.....	440103	01.2611	16.57	450015	01.5262	15.25
400110	01.1489	08.39	420071	01.3268	17.29	430085	00.8973	.....	440104	01.6975	18.53	450016	01.6392	17.49
400111	01.1258	08.52	420072	01.0362	11.62	430087	00.9273	08.64	440105	01.0672	16.52	450018	01.5953	21.98
400112	01.2481	08.03	420073	01.3173	18.17	430089	00.8485	.....	440109	01.1135	12.71	450020	01.0239	16.23
400113	01.2690	07.41	420074	00.9872	11.49	440001	01.1428	12.99	440110	00.9608	16.41	450021	01.8331	21.68
400114	01.0608	07.55	420075	00.9616	14.51	440002	01.6292	16.75	440111	01.3704	18.75	450023	01.4566	16.60
400115	01.0263	07.86	420078	01.7953	19.92	440003	01.1369	15.46	440114	01.0812	12.28	450024	01.3230	16.74
400117	01.1722	09.01	420079	01.5952	17.29	440006	01.4817	18.40	440115	01.0718	15.34	450025	01.5940	15.72
400118	01.2085	09.52	420080	01.3266	21.07	440007	00.9709	11.94	440120	01.5405	18.26	450028	01.5631	18.19
400120	01.3142	09.23	420081	01.2360	19.59	440008	01.0209	12.34	440125	01.4775	18.20	450029	01.4549	14.12
400121	01.0939	06.53	420082	01.4198	19.00	440009	01.2686	14.38	440130	01.2126	13.33	450031	01.5168	16.40
400122	01.0238	06.66	420083	01.2843	17.31	440010	00.9443	10.15	440131	01.1300	13.71	450032	01.2480	12.89
400123	01.1445	09.36	420085	01.5070	17.06	440011	01.3311	16.51	440132	01.1379	14.75	450033	01.6134	17.70
400124	02.3594	11.32	420086	01.3720	16.96	440012	01.5149	18.04	440133	01.5674	18.67	450034	01.7067	18.08
410001	01.3373	22.95	420087	01.6970	16.86	440014	01.1197	09.84	440135	01.2783	17.25	450035	01.5310	19.16
410004	01.3108	20.70	420088	01.1977	15.27	440015	01.7227	18.12	440137	01.0167	13.14	450037	01.6277	18.03
410005	01.3532	22.65	420089	01.2349	20.60	440016	00.9968	12.59	440141	01.0482	14.12	450039	01.3300	15.55
410006	01.3138	20.73	420091	01.2859	15.25	440017	01.6389	20.72	440142	01.0271	11.05	450040	01.5616	17.73
410007	01.7020	21.60	420093	01.0323	.....	440018	01.4094	17.06	440143	01.1050	15.73	450042	01.7484	15.78
410008	01.2204	21.52	420094	01.0179	.....	440019	01.7169	17.21	440144	01.2388	18.01	450044	01.6262	18.91
410009	01.3136	21.34	430004	01.1109	15.06	440020	01.2203	15.78	440145	00.9912	14.42	450046	01.3343	15.81
410010	01.0657	25.32	430005	01.3614	14.44	440022	01.1220	14.01	440147	01.5238	23.56	450047	01.0984	11.06
410011	01.2324	23.69	430007	01.0857	12.77	440023	01.0808	13.04	440148	01.1480	15.54	450050	01.0051	14.35
410012	01.8245	20.26	430008	01.1123	13.56	440024	01.3172	16.88	440149	01.1537	15.28	450051	01.6250	18.53
410013	01.3313	27.36	430010	01.1579	11.70	440025	01.1300	13.54	440150	01.2962	19.97	450052	01.0403	13.01
420002	01.3770	20.19	430011	01.2798	14.49	440029	01.2918	16.93	440151	01.3053	16.20	450053	01.0959	13.82
420004	01.8223	18.16	430012	01.2820	15.03	440030	01.2279	12.15	440152	01.7854	17.68	450054	01.6711	21.71
420005	01.2080	14.51	430013	01.2916	15.39	440031	01.0160	13.14	440153	01.2929	15.19	450055	01.1378	13.89
420006	01.1685	17.19	430014	01.3110	16.99	440032	01.0578	14.47	440156	01.5822	19.18	450056	01.6884	17.92
420007	01.4966	16.92	430015	01.2134	15.17	440033	01.1116	14.61	440157	01.0406	13.83	450058	01.5849	16.46
420009	01.2388	16.92	430016	01.8671	17.78	440034	01.5553	17.68	440159	01.3164	14.02	450059	01.2856	13.85
420010	01.1193	15.13	430018	00.9520	13.13	440035	01.3293	16.53	440161	01.8760	20.06	450063	00.9511	10.66
420011	01.1234	15.28	430022	00.9351	11.95	440039	01.6928	17.44	440162	01.0104	16.30	450064	01.4865	15.57
420014	01.0951	14.36	430023	00.9521	10.34	440040	01.0082	10.81	440166	01.5684	18.25	450065	01.1163	14.73
420015	01.3662	16.84	430024	00.9521	12.07	440041	01.0593	12.23	440168	01.0424	12.43	450068	01.8875	21.36
420016	01.0745	14.21	430026	01.0086	11.18	440046	01.2853	15.30	440173	01.5484	17.50	450072	01.2285	18.67
420018	01.8185	20.00	430027	01.7827	17.63	440047	00.9404	14.52	440174	01.0215	12.74	450073	01.1020	12.06
420019	01.1984	14.70	430028	01.1366	13.29	440048	01.8480	17.82	440175	01.1777	18.60	450076	01.6669	.....
420020	01.3480	16.94	430029	00.9657	13.84	440049	01.6757	16.37	440176	01.4491	19.17	450078	00.9704	11.75
420023	01.4482	18.50	430031	00.9226	11.58	440050	01.3472	16.52	440178	01.2515	17.07	450079	01.4553	21.93
420026	01.8746	.....	430033	01.0529	13.10	440051	00.9680	13.82	440180	01.2303	16.96	450080	01.2792	15.99
420027	01.3574	16.82	430034	01.1146	11.59	440052	01.1954	14.76	440181	01.0357	12.37	450081	01.0888	14.50
420030	01.2767	16.95	430036	01.0229	11.83	440053	01.3492	16.28	440182	01.0196	12.53	450082	01.0008	14.70
420031	00.9777	11.88	430037	00.9883	13.15	440054	01.2010	14.55	440183	01.5112	19.69	450083	01.7831	19.58
420033	01.1637	18.91	430038	01.0476	10.83	440056	01.1009	13.57	440184	01.3998	18.96	450085	01.0851	17.24
420036	01.3500	16.42	430040	01.0238	12.64	440057	01.0218	12.15	440185	01.2194	17.48	450087	01.4649	18.74
420037	01.2806	20.66	430041	00.9678	12.47	440058	01.2498	16.30	440186	01.0749	15.77	450090	01.2173	13.26
420038	01.2733	14.80	430043	01.2174	11.82	440059	01.3794	14.85	440187	01.1423	14.65	450092	01.2090	11.88
420039	01.1655	15.64	430044	00.8368	14.07	440060	01.3032	14.20	440189	01.5094	19.13	450094	01.3357	17.87
420042	01.1364	14.05	430047	01.0865	11.92	440061	01.1966	15.89	440192	01.1998	15.37	450096	01.5725	17.19
420043	01.2714	19.12	430048	01.2962	15.48	440063	01.6337	17.90	440193	01.2956	18.60	450097	01.4817	18.51
420048	01.1481	15.56	430049	00.9274	12.70	440064	01.1162	14.56	440194	01.2216	17.13	450098	01.1764	15.10
420049	01.2072	15.85	430051	00.9319	13.84	440065	01.2912	17.78	440197	01.3735	19.23	450099	01.3101	23.18
420051	01.6308	18.01	430054	01.0413	12.79	440067	01.2815	14.99	440200	01.0981	15.64	450101	01.4883	15.44
420053	01.2774	14.99	430056	00.8740	09.56	440068	01.2253	17.28	440203	00.9109	13.09	450102	01.7049	17.58
420054	01.2582	17.08	430057	00.9229	10.73	440070	01.1015	14.28	440205	01.1096	15.47	450104	01.2444	14.23
420055	01.0221	14.59	430060	00.9262	08.64	440071	01.3899	16.32	440206	01.0802	13.80	450107	01.6233	22.05

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
450108	00.9815	12.48	450222	01.6052	18.35	450388	01.8099	17.12	450597	01.0314	14.53	450716	01.2930	19.56
450109	00.9148	14.70	450224	01.3658	20.66	450389	01.3230	17.71	450603	00.7195	16.81	450717	01.2558	23.86
450110	01.2769	19.30	450229	01.5642	15.41	450393	01.3196	19.70	450604	01.4409	14.00	450718	01.2324	19.03
450111	01.2174	18.93	450231	01.6420	18.25	450395	01.0474	13.74	450605	01.3903	17.67	450723	01.3871	18.21
450112	01.3148	14.31	450234	01.0004	13.07	450399	01.0593	15.59	450609	00.9173	11.77	450724	01.3694	17.44
450113	01.2852	17.93	450235	01.0302	13.46	450400	01.1860	11.76	450610	01.5468	17.21	450725	00.9483	17.49
450118	01.5829	20.36	450236	01.2196	13.99	450403	01.2999	21.22	450614	01.0061	12.53	450727	01.2086	10.80
450119	01.3813	17.13	450237	01.6231	16.83	450411	00.9126	12.20	450615	01.0935	12.80	450728	00.9365	12.62
450121	01.5542	19.99	450239	01.0605	13.70	450417	01.0959	19.31	450617	01.3517	20.12	450730	01.3301	21.46
450123	01.0936	15.98	450241	00.9264	12.67	450418	01.4986	21.43	450620	01.1357	12.16	450733	01.3644	16.88
450124	01.7106	16.25	450243	00.7792	09.65	450419	01.2778	17.19	450623	01.1891	16.71	450735	01.0419	12.02
450126	01.3628	16.01	450246	00.9464	17.09	450422	00.8249	24.65	450626	01.0657	16.03	450742	01.2935	19.47
450128	01.1960	12.44	450249	00.9685	09.95	450423	01.5847	21.56	450628	00.9294	12.34	450743	01.4234	17.79
450130	01.4849	16.93	450250	00.9480	11.36	450424	01.2491	17.77	450630	01.6663	23.25	450746	01.0195	13.81
450131	01.4085	18.24	450253	01.3010	11.92	450429	01.1054	12.87	450631	01.7531	20.15	450747	01.3630	17.04
450132	01.7189	16.46	450258	01.1072	10.85	450431	01.6301	18.76	450632	00.9769	11.39	450749	01.0131	14.63
450133	01.5938	17.90	450259	01.1636	18.29	450438	01.2603	11.50	450633	01.6373	20.20	450750	01.0217	12.20
450135	01.6826	23.54	450264	00.8770	13.08	450446	00.6484	12.67	450634	01.6146	23.56	450751	01.3430	15.58
450137	01.5005	22.19	450269	01.0728	13.96	450447	01.3879	18.07	450638	01.5891	22.00	450754	00.9520	13.49
450140	00.9941	17.44	450270	01.2548	08.84	450451	01.1562	16.96	450639	01.4390	21.06	450755	01.1665	15.54
450142	01.4559	20.28	450271	01.2644	14.84	450457	01.7826	17.34	450641	01.0419	13.24	450757	00.9463	13.62
450143	01.0346	11.10	450272	01.3480	15.38	450460	01.0543	12.46	450643	01.2287	17.43	450758	02.0308	21.92
450144	01.0940	15.29	450276	01.0121	12.63	450462	01.7703	20.49	450644	01.5108	19.07	450760	01.2570	18.35
450145	00.8190	13.36	450278	00.9870	13.64	450464	01.0046	15.15	450646	01.6546	31.36	450761	01.1320	09.57
450146	00.9883	20.32	450280	01.5295	23.09	450465	01.3413	16.93	450647	01.9647	23.27	450763	01.0156	16.60
450147	01.4166	17.72	450283	01.1089	12.43	450467	00.9719	14.01	450648	00.9843	09.48	450766	02.0743	20.76
450148	01.2606	20.21	450286	01.0057	16.36	450469	01.3764	17.25	450649	01.0397	14.06	450769	00.9968	13.40
450149	01.4187	19.53	450288	01.2657	13.67	450473	00.9945	15.03	450651	01.7497	22.80	450770	01.0425	14.57
450150	00.9226	13.75	450289	01.4333	19.14	450475	01.1405	14.96	450652	00.8637	13.96	450771	01.7860	22.32
450151	01.1247	14.16	450292	01.2492	21.03	450484	01.4464	18.03	450653	01.2233	15.20	450774	01.0941	21.24
450152	01.2598	15.74	450293	00.9756	12.41	450488	01.3242	16.08	450654	00.9512	12.28	450775	01.2818	17.09
450153	01.6202	18.44	450296	01.3760	15.38	450489	01.0196	12.72	450656	01.5372	17.19	450776	00.9164	11.18
450154	01.1969	13.12	450299	01.3407	13.00	450497	01.1733	12.88	450658	00.9714	12.32	450777	01.0384	16.60
450155	01.0262	14.09	450303	00.9926	11.50	450498	01.0536	13.15	450659	01.5376	20.54	450779	01.2550	21.36
450157	00.9708	12.80	450306	01.2021	12.82	450508	01.4210	13.21	450661	01.2312	18.51	450780	01.4170	16.91
450160	00.9461	17.12	450307	00.7810	14.25	450514	01.1932	18.47	450662	01.6120	17.38	450781	01.5749	11.01
450162	01.2508	18.76	450309	01.0665	14.17	450517	00.9085	11.11	450665	00.9174	12.95	450785	01.0228	16.39
450163	01.1399	16.82	450315	01.0404	18.63	450518	01.5597	16.38	450666	01.3365	19.72	450788	01.4465	19.31
450164	01.1216	12.83	450320	01.3540	18.45	450523	01.5809	19.54	450668	01.5985	19.60	450794	01.4278	16.20
450165	01.0205	10.46	450321	01.0170	13.51	450530	01.3722	14.27	450669	01.3372	19.26	450795	00.8684	20.22
450166	01.0252	13.06	450322	00.8216	16.61	450534	01.0396	18.02	450670	01.3101	17.24	450797	00.7374	16.67
450169	01.0085	11.97	450324	01.6983	15.77	450535	01.2947	21.25	450672	01.6189	20.69	450798	00.8432	08.88
450170	00.9952	12.46	450325	00.9022	11.47	450537	01.3071	19.69	450673	01.0516	12.14	450801	01.4775	22.80
450176	01.2954	15.32	450327	01.0143	12.60	450538	01.2092	20.77	450674	00.9786	19.88	450802	01.2334	.....
450177	01.2766	11.10	450330	01.1500	15.62	450539	01.4110	14.67	450675	01.5234	20.99	450803	00.8631	.....
450178	01.0184	15.84	450334	01.0516	12.11	450544	01.3641	19.25	450677	01.4283	17.43	450804	01.5585	.....
450181	01.0644	14.13	450337	01.1601	13.85	450545	01.2684	20.93	450678	01.5025	20.85	450807	00.9198	.....
450184	01.5231	13.53	450340	01.3229	12.68	450547	01.1540	15.13	450683	01.3410	17.23	450808	00.9783	.....
450185	01.0793	08.69	450341	01.0487	15.87	450550	01.0672	18.37	450684	01.3031	21.41	450809	01.6796	.....
450187	01.2402	16.51	450346	01.4259	15.73	450551	01.2241	13.01	450686	01.6052	14.14	450810	01.3049	.....
450188	01.0927	12.80	450347	01.1507	16.68	450558	01.7279	20.85	450688	01.3639	19.63	450811	02.1669	.....
450190	01.1709	.....	450348	00.9843	11.20	450559	00.9392	12.26	450690	01.4058	21.41	450812	01.5923	.....
450191	01.0842	15.87	450351	01.1951	17.71	450561	01.6915	17.18	450691	00.9630	.....	460001	01.8018	20.73
450192	01.2916	17.51	450352	01.1046	16.53	450563	01.2766	23.92	450694	01.1385	18.16	460003	01.6984	17.86
450193	02.0357	21.80	450353	01.2637	16.98	450565	01.2685	16.10	450696	01.9697	22.02	460004	01.7275	21.45
450194	01.2661	17.65	450355	01.1523	13.03	450570	01.0784	15.81	450697	01.4970	13.82	460005	01.6827	18.56
450196	01.4873	16.93	450358	02.0795	20.80	450571	01.4769	15.53	450698	00.9778	11.65	460006	01.4501	19.40
450200	01.4249	17.40	450362	01.1675	13.83	450573	01.0612	14.35	450700	00.9476	13.15	460007	01.3572	20.40
450201	01.0038	15.45	450369	01.0553	13.10	450574	00.9359	11.72	450702	01.5805	18.94	460008	01.3860	15.91
450203	01.2170	17.46	450370	01.2765	11.11	450575	01.0735	16.62	450703	01.5428	18.24	460009	01.8462	19.39
450209	01.4952	21.78	450371	01.1605	12.16	450578	00.9338	12.99	450704	01.4192	18.02	460010	02.0177	20.86
450210	01.1667	12.30	450372	01.3132	21.02	450580	01.1376	13.29	450705	00.9145	18.50	460011	01.4613	16.34
450211	01.4111	16.52	450373	01.1587	13.38	450583	00.9816	13.04	450706	01.2508	22.63	460013	01.5206	16.74
450213	01.6457	15.42	450374	00.9148	11.66	450584	01.1817	13.02	450709	01.3400	19.78	460014	01.0850	15.12
450214	01.4227	19.51	450376	01.4827	17.78	450586	01.0491	11.16	450711	01.5979	18.18	460015	01.2184	20.40
450217	01.0015	11.56	450378	01.1028	19.87	450587	01.2525	15.98	450712	00.7899	11.12	460016	00.9611	12.50
450219	01.1518	14.78	450379	01.5239	21.62	450591	01.1497	18.92	450713	01.4954	20.85	460017	01.5581	16.40
450221	01.1688	14.40	450381	00.9929	12.86	450596	01.3942	17.15	450715	01.3740	18.59	460018	00.9973	15.45

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Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
460019	01.1179	14.45	490035	01.1338	13.02	490130	01.2939	15.07	500097	01.2116	17.46	510071	01.3174	15.64
460020	01.0427	16.33	490037	01.2373	13.99	490131	00.9879	14.74	500098	01.0380	15.44	510072	01.0597	13.24
460021	01.3861	19.46	490038	01.2643	13.43	490132	01.0342	.....	500101	01.0064	15.92	510077	01.1812	15.36
460022	00.9383	19.23	490040	01.4769	21.68	500001	01.3664	21.66	500102	01.0235	19.46	510080	01.2137	11.53
460023	01.2249	21.08	490041	01.2707	16.21	500002	01.4348	19.10	500104	01.3261	19.88	510081	01.1592	12.97
460024	01.0133	14.78	490042	01.3538	15.75	500003	01.3881	25.32	500106	00.9016	20.08	510082	01.2159	12.89
460025	00.8148	13.73	490043	01.4488	20.60	500005	01.8225	21.58	500107	01.1551	15.79	510084	00.9547	13.24
460026	00.9812	17.03	490044	01.3525	17.15	500007	01.3876	21.79	500108	01.7177	21.74	510085	01.3537	17.90
460027	00.9312	19.08	490045	01.2318	18.29	500008	01.9449	23.18	500110	01.2300	19.44	510086	01.0856	15.08
460029	01.0389	18.60	490046	01.4958	17.80	500011	01.4259	22.64	500118	01.1761	21.92	520002	01.2177	18.84
460030	01.1718	17.32	490047	01.0908	16.50	500012	01.4808	21.18	500119	01.3377	20.39	520003	01.1201	15.41
460032	01.0291	21.16	490048	01.6102	17.44	500014	01.4972	20.92	500122	01.2814	21.99	520004	01.1861	16.78
460033	00.9685	17.97	490050	01.4630	21.02	500015	01.3782	21.85	500123	00.8465	18.56	520006	01.0231	18.17
460035	00.9265	12.17	490052	01.6078	15.45	500016	01.4757	23.26	500124	01.3142	22.83	520007	01.2287	14.55
460036	01.0220	20.05	490053	01.2686	14.77	500019	01.3364	21.38	500125	01.0100	11.61	520008	01.5752	22.49
460037	00.9878	17.48	490054	01.1012	14.36	500021	01.5592	21.91	500129	01.7381	23.35	520009	01.6581	17.31
460039	01.0927	20.36	490057	01.5483	17.69	500023	01.2130	19.53	500132	00.9524	18.51	520010	01.1686	19.33
460041	01.2537	20.90	490059	01.6177	19.41	500024	01.6817	22.23	500134	00.6974	15.59	520011	01.2161	16.85
460042	01.4822	17.04	490060	01.0839	17.79	500025	01.8740	23.44	500138	03.9749	.....	520013	01.3799	18.80
460043	01.2702	21.71	490063	01.7052	22.93	500026	01.4019	23.85	500139	01.5091	21.25	520014	01.1396	16.08
460044	01.1845	19.83	490066	01.3637	18.00	500027	01.5352	25.23	500141	01.3275	22.22	520015	01.1912	16.72
460046	00.9068	12.27	490067	01.2271	15.82	500028	01.1235	14.69	500143	00.7385	15.20	520016	01.1027	13.21
460047	01.7432	19.82	490069	01.4520	14.96	500029	00.9534	13.71	500146	01.1734	26.11	520017	01.1540	17.45
460049	01.9647	17.85	490071	01.5024	18.60	500030	01.5279	22.55	510001	01.8125	17.35	520018	01.1214	16.17
460050	01.2748	21.99	490073	01.4695	17.55	500031	01.3419	20.58	510002	01.2928	14.18	520019	01.3048	16.63
460051	01.2923	32.89	490074	01.3688	16.77	500033	01.2759	18.41	510004	01.1211	13.65	520021	01.3122	19.90
470001	01.1614	18.73	490075	01.3977	16.37	500036	01.3202	19.95	510005	00.9608	14.19	520024	01.0463	13.11
470003	01.7901	20.70	490077	01.2584	17.87	500037	01.1682	18.70	510006	01.2948	17.42	520025	01.1116	18.58
470004	01.1007	15.85	490079	01.3240	15.15	500039	01.3867	22.10	510007	01.4908	17.98	520026	01.0837	17.49
470005	01.2726	20.26	490083	00.7754	15.02	500041	01.2893	23.23	510008	01.1457	15.55	520027	01.2413	19.27
470006	01.2468	17.83	490084	01.3000	15.43	500042	01.3518	22.37	510012	01.1036	14.37	520028	01.3033	17.76
470008	01.1912	16.76	490085	01.2391	13.39	500043	01.1927	17.16	510013	01.1691	15.80	520029	00.9692	16.94
470010	01.1212	19.03	490088	01.1817	14.44	500044	01.9850	20.96	510015	00.9444	12.51	520030	01.6451	21.19
470011	01.1945	19.82	490089	01.1287	16.18	500045	01.1350	20.81	510016	00.9168	12.66	520031	01.1198	15.24
470012	01.2433	17.88	490090	01.2018	15.17	500048	00.9633	16.46	510018	01.1807	15.26	520032	01.2371	15.25
470015	01.2218	16.67	490091	01.2793	18.78	500049	01.4916	19.24	510020	01.1194	10.56	520033	01.1663	16.22
470018	01.2205	20.53	490092	01.2074	15.13	500050	01.4321	20.96	510022	01.8872	19.16	520034	01.1973	17.64
470020	00.9787	15.18	490093	01.3622	15.83	500051	01.6718	23.18	510023	01.1987	16.62	520035	01.3370	15.87
470023	01.2848	19.08	490094	01.1740	14.52	500052	01.3138	.....	510024	01.4379	18.43	520037	01.6533	19.06
470024	01.1442	18.26	490095	01.4751	16.79	500053	01.3072	20.42	510026	01.0140	12.33	520038	01.3030	16.45
490001	01.2391	19.51	490097	01.1539	14.52	500054	01.8790	21.08	510027	00.9461	14.62	520039	00.9943	16.33
490002	01.0988	14.56	490098	01.2285	11.67	500055	01.1227	20.13	510028	01.0819	18.99	520040	01.4729	19.34
490003	00.5817	17.19	490099	00.9532	16.51	500057	01.3062	17.22	510029	01.2900	16.78	520041	01.1752	14.93
490004	01.2302	16.97	490100	01.4486	17.21	500058	01.5259	20.32	510030	01.0514	14.39	520042	01.0956	16.42
490005	01.5903	16.31	490101	01.2168	22.93	500059	01.1436	20.76	510031	01.4818	15.97	520044	01.4078	16.15
490006	01.1307	13.82	490104	00.8468	16.07	500060	01.4042	23.27	510033	01.3546	15.30	520045	01.7365	18.68
490007	02.0885	17.16	490105	00.6278	18.83	500061	01.0337	18.19	510035	01.3607	16.81	520047	00.9913	15.41
490009	01.8640	18.27	490106	00.8554	16.48	500062	01.1311	18.80	510036	01.0693	11.64	520048	01.4698	18.11
490010	01.1608	17.32	490107	01.3315	22.98	500064	01.5874	22.08	510038	01.1630	13.36	520049	02.0300	18.52
490011	01.4254	17.33	490108	00.9003	15.39	500065	01.2122	18.72	510039	01.3322	15.48	520051	01.7856	20.21
490012	01.2232	15.30	490109	00.9328	17.44	500068	01.0306	18.40	510043	00.9306	11.52	520053	01.1223	15.45
490013	01.2160	16.75	490110	01.4165	15.07	500069	01.2223	19.76	510046	01.2749	15.91	520054	01.0828	17.03
490014	01.4808	22.42	490111	01.2440	15.83	500071	01.2861	19.80	510047	01.2457	18.06	520056	01.7830	18.87
490015	01.4311	18.76	490112	01.6006	18.51	500072	01.2065	22.83	510048	01.0990	18.22	520057	01.1254	16.59
490017	01.3601	16.73	490113	01.3494	21.59	500073	01.0524	16.74	510050	01.5722	16.11	520058	01.1042	18.17
490018	01.2981	17.15	490114	01.1413	15.47	500074	01.1555	15.67	510053	01.0304	14.12	520059	01.4123	18.74
490019	01.1876	16.46	490115	01.2226	14.46	500077	01.3811	21.68	510055	01.2691	19.68	520060	01.4284	15.26
490020	01.2060	15.76	490116	01.3299	15.48	500079	01.3672	21.40	510058	01.1974	17.03	520062	01.3510	16.73
490021	01.2422	17.30	490117	01.1828	12.41	500080	00.8662	11.72	510059	01.4747	14.25	520063	01.1983	17.63
490022	01.4383	19.31	490118	01.7803	21.05	500084	01.1847	20.78	510060	01.1523	15.55	520064	01.7057	20.15
490023	01.2993	18.01	490119	01.3740	16.40	500085	01.0690	19.55	510061	01.0363	13.37	520066	01.5302	18.82
490024	01.8166	16.27	490120	01.3266	17.49	500086	01.3071	20.03	510062	01.1784	15.77	520068	00.9859	16.85
490027	01.1596	13.29	490122	01.4671	21.19	500088	01.3442	23.37	510063	00.9557	16.84	520069	01.1921	17.13
490028	01.3111	20.17	490123	01.1856	15.29	500089	01.0273	15.05	510065	01.0484	11.49	520070	01.6335	17.38
490030	01.1728	10.83	490124	01.2023	17.12	500090	00.9361	13.67	510066	01.1335	11.93	520071	01.1575	17.53
490031	01.1124	13.00	490126	01.4227	14.85	500092	01.0544	17.86	510067	01.2735	17.97	520074	01.0679	15.42
490032	01.7731	19.42	490127	01.0020	14.52	500094	00.9089	15.30	510068	01.1169	14.34	520075	01.4644	18.02
490033	01.2333	16.48	490129	01.1425	19.20	500096	00.9886	18.51	510070	01.3315	15.86	520076	01.1607	15.11

Provider	Case mix index	Avg. hour wage	Provider	Case mix index	Avg. hour wage
520077	00.8551	14.03	530003	01.0202	12.47
520078	01.6182	18.63	530004	00.9980	14.18
520082	01.2818	16.43	530005	01.0061	13.47
520083	01.6772	21.60	530006	01.1369	16.52
520084	01.0951	16.87	530007	01.0829	12.98
520087	01.6988	18.12	530008	01.3394	16.82
520088	01.3099	17.98	530009	01.0060	16.77
520089	01.5179	19.50	530010	01.4102	16.12
520090	01.2381	16.18	530011	01.1085	16.94
520091	01.3629	18.13	530012	01.5449	18.11
520092	01.1204	15.74	530014	01.4213	15.18
520094	00.7915	16.12	530015	01.2755	18.00
520095	01.3651	17.84	530016	01.2972	14.93
520096	01.4356	18.94	530017	00.8748	16.97
520097	01.3151	18.65	530018	01.0355	18.67
520098	01.8153	20.17	530019	01.0136	15.32
520100	01.2531	16.72	530022	01.0909	16.71
520101	01.1237	16.09	530023	00.8526	18.57
520102	01.2023	19.37	530025	01.2398	18.76
520103	01.3275	17.94	530026	01.0928	15.48
520107	01.3021	17.50	530027	00.9181	10.62
520109	01.0056	17.63	530029	01.0278	13.46
520110	01.1489	17.94	530031	00.8952	11.67
520111	00.9540	16.01	530032	01.0874	17.89
520112	01.1191	16.89			
520113	01.2037	19.18			
520114	01.0845	13.27			
520115	01.2574	16.02			
520116	01.2507	18.13			
520117	01.0619	15.78			
520118	00.9442	10.53			
520120	00.9138	12.70			
520121	00.9503	15.67			
520122	00.9742	14.73			
520123	01.0924	16.93			
520124	01.1427	14.93			
520130	01.0475	13.47			
520131	01.0271	16.78			
520132	01.1689	14.48			
520134	01.0805	15.97			
520135	00.9428	17.28			
520136	01.5019	19.05			
520138	01.8566	19.44			
520139	01.2786	19.89			
520140	01.6085	21.15			
520141	01.0486	15.86			
520142	00.8723	13.20			
520144	01.0324	16.42			
520145	00.9102	16.59			
520146	01.0848	13.94			
520148	01.0827	15.34			
520149	00.9713	13.44			
520151	01.0919	15.42			
520152	01.1630	17.07			
520153	00.9224	13.81			
520154	01.0978	17.71			
520156	01.1062	16.69			
520157	01.0441	13.77			
520159	00.9343	16.85			
520160	01.7963	19.07			
520161	01.0063	15.94			
520170	01.2376	19.95			
520171	00.9321	13.23			
520173	01.1559	18.34			
520174	01.3534	21.51			
520177	01.5919	20.16			
520178	01.0908	15.23			
530002	01.1953	19.16			

Note: Case mix indexes do not include discharges from PPS-exempt units.
Case mix indexes include cases received in HCFA central office through December 1996

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS

Urban area (constituent counties)	Wage index	GAF
0040 Abilene, TX	0.8294	0.8798
Taylor, TX		
0060 Aguadilla, PR	0.4191	0.5513
Aguada, PR		
Aguadilla, PR		
Moca, PR		
0080 Akron, OH	0.9736	0.9818
Portage, OH		
Summit, OH		
0120 Albany, GA	0.7920	0.8524
Dougherty, GA		
Lee, GA		
0160 Albany-Schenectady-Troy, NY	0.8485	0.8936
Albany, NY		
Montgomery, NY		
Rensselaer, NY		
Saratoga, NY		
Schenectady, NY		
Schoharie, NY		
0200 Albuquerque, NM	0.9336	0.9540
Bernalillo, NM		
Sandoval, NM		
Valencia, NM		
0220 Alexandria, LA	0.8275	0.8784
Rapides, LA		
0240 Allentown-Bethlehem-Easton, PA	1.0093	1.0064
Carbon, PA		
Lehigh, PA		
Northampton, PA		
0280 Altoona, PA	0.9144	0.9406
Blair, PA		
0320 Amarillo, TX	0.9503	0.9657
Potter, TX		
Randall, TX		
0380 Anchorage, AK	1.3015	1.1978
Anchorage, AK		
0440 Ann Arbor, MI	1.1794	1.1196
Lenawee, MI		
Livingston, MI		
Washtenaw, MI		
0450 Anniston, AL	0.8272	0.8782
Calhoun, AL		
0460 Appleton-Oshkosh-Neenah, WI	0.9003	0.9306
Calumet, WI		
Outagamie, WI		
Winnebago, WI		
0470 Arecibo, PR	0.4221	0.5540
Arecibo, PR		
Camuy, PR		
Hatillo, PR		
0480 Asheville, NC	0.9078	0.9359
Buncombe, NC		
Madison, NC		
0500 Athens, GA	0.9093	0.9370
Clarke, GA		
Madison, GA		
Oconee, GA		
0520 *Atlanta, GA	0.9812	0.9871
Barrow, GA		
Bartow, GA		
Carroll, GA		
Cherokee, GA		
Clayton, GA		
Cobb, GA		
Coweta, GA		
DeKalb, GA		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
Douglas, GA		
Fayette, GA		
Forsyth, GA		
Fulton, GA		
Gwinnett, GA		
Henry, GA		
Newton, GA		
Paulding, GA		
Pickens, GA		
Rockdale, GA		
Spalding, GA		
Walton, GA		
0560 Atlantic-Cape May, NJ	1.0732	1.0496
Atlantic, NJ		
Cape May, NJ		
0600 Augusta-Aiken, GA–SC	0.9341	0.9544
Columbia, GA		
McDuffie, GA		
Richmond, GA		
Aiken, SC		
Edgefield, SC		
0640 Austin-San Marcos, TX	0.8690	0.9083
Bastrop, TX		
Caldwell, TX		
Hays, TX		
Travis, TX		
Williamson, TX		
0680 Bakersfield, CA	1.0021	1.0014
Kern, CA		
0720 *Baltimore, MD	0.9696	0.9791
Anne Arundel, MD		
Baltimore, MD		
Baltimore City, MD		
Carroll, MD		
Harford, MD		
Howard, MD		
Queen Anne's, MD		
0733 Bangor, ME	0.9485	0.9644
Penobscot, ME		
0743 Barnstable-Yarmouth, MA	1.4302	1.2777
Barnstable, MA		
0760 Baton Rouge, LA	0.8416	0.8886
Ascension, LA		
East Baton Rouge, LA		
Livingston, LA		
West Baton Rouge, LA		
0840 Beaumont-Port Arthur, TX	0.8576	0.9001
Hardin, TX		
Jefferson, TX		
Orange, TX		
0860 Bellingham, WA	1.1229	1.0826
Whatcom, WA		
0870 Benton Harbor, MI	0.8640	0.9047
Berrien, MI		
0875 *Bergen-Passaic, NJ	1.1573	1.1052
Bergen, NJ		
Passaic, NJ		
0880 Billings, MT	0.9728	0.9813
Yellowstone, MT		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
0920 Biloxi-Gulfport-Pascagoula, MS	0.8422	0.8890
Hancock, MS		
Harrison, MS		
Jackson, MS		
0960 Binghamton, NY	0.9088	0.9366
Broome, NY		
Tioga, NY		
1000 Birmingham, AL	0.8933	0.9256
Blount, AL		
Jefferson, AL		
St. Clair, AL		
Shelby, AL		
1010 Bismarck, ND	0.7874	0.8490
Burleigh, ND		
Morton, ND		
1020 Bloomington, IN	0.9134	0.9399
Monroe, IN		
1040 Bloomington-Normal, IL	0.8783	0.9150
McLean, IL		
1080 Boise City, ID	0.8893	0.9228
Ada, ID		
Canyon, ID		
1123 *Boston-Worcester-Lawrence-Lowell-Brockton, MA–NH	1.1430	1.0958
Bristol, MA		
Essex, MA		
Middlesex, MA		
Norfolk, MA		
Plymouth, MA		
Suffolk, MA		
Worcester, MA		
Hillsborough, NH		
Merrimack, NH		
Rockingham, NH		
Strafford, NH		
1125 Boulder-Longmont, CO	1.0023	1.0016
Boulder, CO		
1145 Brazoria, TX	0.9136	0.9400
Brazoria, TX		
1150 Bremerton, WA	1.1007	1.0679
Kitsap, WA		
1240 Brownsville-Harlingen-San Benito, TX	0.8699	0.9090
Cameron, TX		
1260 Bryan-College Station, TX	0.7040	0.7864
Brazos, TX		
1280 *Buffalo-Niagara Falls, NY	0.9266	0.9491
Erie, NY		
Niagara, NY		
1303 Burlington, VT	1.0098	1.0067
Chittenden, VT		
Franklin, VT		
Grand Isle, VT		
1310 Caguas, PR	0.4551	0.5833
Caguas, PR		
Cayey, PR		
Cidra, PR		
Gurabo, PR		
San Lorenzo, PR		
1320 Canton-Massillon, OH	0.8968	0.9281

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
Carroll, OH		
Stark, OH		
1350 Casper, WY	0.9019	0.9317
Natrona, WY		
1360 Cedar Rapids, IA	0.8535	0.8972
Linn, IA		
1400 Champaign-Urbana, IL	0.8740	0.9119
Champaign, IL		
1440 Charleston-North Charleston, SC	0.8739	0.9118
Berkeley, SC		
Charleston, SC		
Dorchester, SC		
1480 Charleston, WV	0.9148	0.9408
Kanawha, WV		
Putnam, WV		
1520 *Charlotte-Gastonia-Rock Hill, NC–SC	0.9758	0.9834
Cabarrus, NC		
Gaston, NC		
Lincoln, NC		
Mecklenburg, NC		
Rowan, NC		
Union, NC		
York, SC		
1540 Charlottesville, VA	0.9065	0.9350
Albemarle, VA		
Charlottesville City, VA		
Fluvanna, VA		
Greene, VA		
1560 Chattanooga, TN–GA	0.8664	0.9065
Catoosa, GA		
Dade, GA		
Walker, GA		
Hamilton, TN		
Marion, TN		
1580 Cheyenne, WY	0.7560	0.8257
Laramie, WY		
1600 *Chicago, IL	1.0829	1.0561
Cook, IL		
DeKalb, IL		
DuPage, IL		
Grundy, IL		
Kane, IL		
Kendall, IL		
Lake, IL		
McHenry, IL		
Will, IL		
1620 Chico-Paradise, CA	1.0394	1.0268
Butte, CA		
1640 *Cincinnati, OH–KY–IN	0.9565	0.9700
Dearborn, IN		
Ohio, IN		
Boone, KY		
Campbell, KY		
Gallatin, KY		
Grant, KY		
Kenton, KY		
Pendleton, KY		
Brown, OH		
Clermont, OH		
Hamilton, OH		
Warren, OH		
1660 Clarksville-Hopkinsville, TN–KY	0.7857	0.8478
Christian, KY		
Montgomery, TN		
1680* Cleveland-Lorain-Elyria, OH	0.9811	0.9870
Ashtabula, OH		
Cuyahoga, OH		
Geauga, OH		
Lake, OH		
Lorain, OH		
Medina, OH		
1720 Colorado Springs, CO	0.9323	0.9531
El Paso, CO		
1740 Columbia, MO	0.8887	0.9224
Boone, MO		
1760 Columbia, SC	0.9222	0.9460
Lexington, SC		
Richland, SC		
1800 Columbus, GA–AL	0.8294	0.8798
Russell, AL		
Chattahoochee, GA		
Harris, GA		
Muscogee, GA		
1840 *Columbus, OH	0.9800	0.9863
Delaware, OH		
Fairfield, OH		
Franklin, OH		
Licking, OH		
Madison, OH		
Pickaway, OH		
1880 Corpus Christi, TX	0.8951	0.9269
Nueces, TX		
San Patricio, TX		
1900 Cumberland, MD–WV	0.8829	0.9182
Allegany, MD		
Mineral, WV		
1920 *Dallas, TX	0.9624	0.9741
Collin, TX		
Dallas, TX		
Denton, TX		
Ellis, TX		
Henderson, TX		
Hunt, TX		
Kaufman, TX		
Rockwall, TX		
1950 Danville, VA	0.8152	0.8694
Danville City, VA		
Pittsylvania, VA		
1960 Davenport-Moline-Rock Island, IA–IL	0.8411	0.8883
Scott, IA		
Henry, IL		
Rock Island, IL		
2000 Dayton-Springfield, OH	0.9292	0.9510
Clark, OH		
Greene, OH		
Miami, OH		
Montgomery, OH		
2020 Daytona Beach, FL	0.8356	0.8843
Flagler, FL		
Volusia, FL		
2030 Decatur, AL	0.8292	0.8796
Lawrence, AL		
Morgan, AL		
2040 Decatur, IL	0.7920	0.8524
Macon, IL		
2080 *Denver, CO	1.0299	1.0204
Adams, CO		
Arapahoe, CO		
Denver, CO		
Douglas, CO		
Jefferson, CO		
2120 Des Moines, IA	0.8718	0.9103
Dallas, IA		
Polk, IA		
Warren, IA		
2160 *Detroit, MI	1.0844	1.0571
Lapeer, MI		
Macomb, MI		
Monroe, MI		
Oakland, MI		
St. Clair, MI		
Wayne, MI		
2180 Dothan, AL	0.8076	0.8639
Dale, AL		
Houston, AL		
2190 Dover, DE	0.9222	0.9460
Kent, DE		
2200 Dubuque, IA	0.8094	0.8652
Dubuque, IA		
2240 Duluth-Superior, MN–WI.		
St. Louis, MN	0.9786	0.9853
Douglas, WI		
2281 Dutchess County, NY	1.0644	1.0437
Dutchess, NY		
2290 Eau Claire, WI	0.8771	0.9141
Chippewa, WI		
Eau Claire, WI		
2320 El Paso, TX	0.9719	0.9807
El Paso, TX		
2330 Elkhart-Goshen, IN	0.9087	0.9365
Elkhart, IN		
2335 Elmira, NY	0.8253	0.8768
Chemung, NY		
2340 Enid, OK	0.7968	0.8559
Garfield, OK		
2360 Erie, PA	0.8869	0.9211
Erie, PA		
2400 Eugene-Springfield, OR	1.1700	1.1135
Lane, OR		
2440 Evansville-Henderson, IN–KY	0.8648	0.9053
Posey, IN		
Vanderburgh, IN		
Warrick, IN		
Henderson, KY		
2520 Fargo-Moorhead, ND–MN	0.8844	0.9193
Clay, MN		
Cass, ND		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
2560 Fayetteville, NC	0.8740	0.9119
Cumberland, NC		
2580 Fayetteville-Springdale-Rogers, AR	0.7466	0.8186
Benton, AR		
Washington, AR		
2620 Flagstaff, AZ–UT	0.9122	0.9390
Coconino, AZ		
Kane, UT		
2640 Flint, MI	1.1191	1.0801
Genesee, MI		
2650 Florence, AL	0.7722	0.8378
Colbert, AL		
Lauderdale, AL		
2655 Florence, SC	0.8243	0.8761
Florence, SC		
2670 Fort Collins-Loveland, CO	1.0255	1.0174
Larimer, CO		
2680 *Ft. Lauderdale, FL	1.0802	1.0543
Broward, FL		
2700 Fort Myers-Cape Coral, FL	0.8384	0.8863
Lee, FL		
2710 Fort Pierce-Port St. Lucie, FL	0.9782	0.9850
Martin, FL		
St. Lucie, FL		
2720 Fort Smith, AR–OK	0.7775	0.8417
Crawford, AR		
Sebastian, AR		
Sequoyah, OK		
2750 Fort Walton Beach, FL	0.8555	0.8986
Okaloosa, FL		
2760 Fort Wayne, IN	0.8907	0.9238
Adams, IN		
Allen, IN		
De Kalb, IN		
Huntington, IN		
Wells, IN		
Whitley, IN		
2800 *Forth Worth-Arlington, TX	0.9691	0.9787
Hood, TX		
Johnson, TX		
Parker, TX		
Tarrant, TX		
2840 Fresno, CA	1.0601	1.0408
Fresno, CA		
Madera, CA		
2880 Gadsden, AL	0.8821	0.9177
Etowah, AL		
2900 Gainesville, FL	0.9603	0.9726
Alachua, FL		
2920 Galveston-Texas City, TX	1.0572	1.0388
Galveston, TX		
2960 Gary, IN	0.9276	0.9498
Lake, IN		
Porter, IN		
2975 Glens Falls, NY	0.8359	0.8845
Warren, NY		
Washington, NY		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
2980 Goldsboro, NC	0.8449	0.8910
Wayne, NC		
2985 Grand Forks, ND–MN	0.8853	0.9200
Polk, MN		
Grand Forks, ND		
2995 Grand Junction, CO	0.8557	0.8988
Mesa, CO		
3000 Grand Rapids-Muskegon-Holland, MI	1.0154	1.0105
Allegan, MI		
Kent, MI		
Muskegon, MI		
Ottawa, MI		
3040 Great Falls, MT	0.9321	0.9530
Cascade, MT		
3060 Greeley, CO	1.0104	1.0071
Weld, CO		
3080 Green Bay, WI	0.9592	0.9719
Brown, WI		
3120 *Greensboro-Winston-Salem-High Point, NC	0.9357	0.9555
Alamance, NC		
Davidson, NC		
Davie, NC		
Forsyth, NC		
Guilford, NC		
Randolph, NC		
Stokes, NC		
Yadkin, NC		
3150 Greenville, NC	0.9071	0.9354
Pitt, NC		
3160 Greenville-Spartanburg-Anderson, SC	0.9066	0.9351
Anderson, SC		
Cherokee, SC		
Greenville, SC		
Pickens, SC		
Spartanburg, SC		
3180 Hagerstown, MD	0.9688	0.9785
Washington, MD		
3200 Hamilton-Middletown, OH	0.8862	0.9206
Butler, OH		
3240 Harrisburg-Lebanon-Carlisle, PA	1.0159	1.0109
Cumberland, PA		
Dauphin, PA		
Lebanon, PA		
Perry, PA		
3283 *Hartford, CT	1.2572	1.1697
Hartford, CT		
Litchfield, CT		
Middlesex, CT		
Tolland, CT		
3285 Hattiesburg, MS	0.7197	0.7983
Forrest, MS		
Lamar, MS		
3290 Hickory-Morganton-Lenoir, NC	0.8291	0.8796
Alexander, NC		
Burke, NC		
Caldwell, NC		
Catawba, NC		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
3320 Honolulu, HI	1.1826	1.1217
Honolulu, HI		
3350 Houma, LA	0.7859	0.8479
Lafourche, LA		
Terrebonne, LA		
3360 *Houston, TX	0.9633	0.9747
Chambers, TX		
Fort Bend, TX		
Harris, TX		
Liberty, TX		
Montgomery, TX		
Waller, TX		
3400 Huntington-Ashland, WV–KY–OH	0.9159	0.9416
Boyd, KY		
Carter, KY		
Greenup, KY		
Lawrence, OH		
Cabell, WV		
Wayne, WV		
3440 Huntsville, AL	0.8491	0.8940
Limestone, AL		
Madison, AL		
3480 *Indianapolis, IN	0.9851	0.9898
Boone, IN		
Hamilton, IN		
Hancock, IN		
Hendricks, IN		
Johnson, IN		
Madison, IN		
Marion, IN		
Morgan, IN		
Shelby, IN		
3500 Iowa City, IA	0.9408	0.9591
Johnson, IA		
3520 Jackson, MI	0.9058	0.9345
Jackson, MI		
3560 Jackson, MS	0.7799	0.8435
Hinds, MS		
Madison, MS		
Rankin, MS		
3580 Jackson, TN	0.8529	0.8968
Madison, TN		
Chester, TN		
3600 Jacksonville, FL	0.8986	0.9294
Clay, FL		
Duval, FL		
Nassau, FL		
St. Johns, FL		
3605 Jacksonville, NC	0.6978	0.7816
Onslow, NC		
3610 Jamestown, NY	0.7551	0.8250
Chautauqua, NY		
3620 Janesville-Beloit, WI	0.8831	0.9184
Rock, WI		
3640 Jersey City, NJ	1.1420	1.0952
Hudson, NJ		
3660 Johnson City-Kingsport-Bristol, TN–VA	0.9120	0.9389
Carter, TN		
Hawkins, TN		
Sullivan, TN		
Unicoi, TN		
Washington, TN		
Bristol City, VA		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
Scott, VA		
Washington, VA		
3680 Johnstown, PA ..	0.8384	0.8863
Cambria, PA		
Somerset, PA		
3700 Jonesboro, AR ...	0.7449	0.8174
Craighead, AR		
3710 Joplin, MO	0.7519	0.8226
Jasper, MO		
Newton, MO		
3720 Kalamazoo-Battlecreek, MI	1.0676	1.0458
Calhoun, MI		
Kalamazoo, MI		
Van Buren, MI		
3740 Kankakee, IL	0.8655	0.9058
Kankakee, IL		
3760 *Kansas City, KS–MO	0.9571	0.9704
Johnson, KS		
Leavenworth, KS		
Miami, KS		
Wyandotte, KS		
Cass, MO		
Clay, MO		
Clinton, MO		
Jackson, MO		
Lafayette, MO		
Platte, MO		
Ray, MO		
3800 Kenosha, WI	0.9203	0.9447
Kenosha, WI		
3810 Killeen-Temple, TX	1.0259	1.0177
Bell, TX		
Coryell, TX		
3840 Knoxville, TN	0.8837	0.9188
Anderson, TN		
Blount, TN		
Knox, TN		
Loudon, TN		
Sevier, TN		
Union, TN		
3850 Kokomo, IN	0.8422	0.8890
Howard, IN		
Tipton, IN		
3870 La Crosse, WI–MN	0.8755	0.9130
Houston, MN		
La Crosse, WI		
3880 Lafayette, LA	0.8226	0.8748
Acadia, LA		
Lafayette, LA		
St. Landry, LA		
St. Martin, LA		
3920 Lafayette, IN	0.9181	0.9432
Clinton, IN		
Tippecanoe, IN		
3960 Lake Charles, LA	0.7781	0.8421
Calcasieu, LA		
3980 Lakeland-Winter Haven, FL	0.8812	0.9170
Polk, FL		
4000 Lancaster, PA	0.9492	0.9649
Lancaster, PA		
4040 Lansing-East Lansing, MI	1.0093	1.0064
Clinton, MI		
Eaton, MI		
Ingham, MI		
4080 Laredo, TX	0.7330	0.8084
Webb, TX		
4100 Las Cruces, NM	0.8664	0.9065
Dona Ana, NM		
4120 *Las Vegas, NV–AZ	1.0601	1.0408
Mohave, AZ		
Clark, NV		
Nye, NV		
4150 Lawrence, KS	0.8615	0.9029
Douglas, KS		
4200 Lawton, OK	0.9052	0.9341
Comanche, OK		
4243 Lewiston-Auburn, ME	0.9543	0.9685
Androscoggin, ME		
4280 Lexington, KY	0.8422	0.8890
Bourbon, KY		
Clark, KY		
Fayette, KY		
Jessamine, KY		
Madison, KY		
Scott, KY		
Woodford, KY		
4320 Lima, OH	0.9192	0.9439
Allen, OH		
Auglaize, OH		
4360 Lincoln, NE	0.9093	0.9370
Lancaster, NE		
4400 Little Rock-North Little Rock, AR	0.8496	0.8944
Faulkner, AR		
Lonoke, AR		
Pulaski, AR		
Saline, AR		
4420 Longview-Marshall, TX	0.8611	0.9027
Gregg, TX		
Harrison, TX		
Upshur, TX		
4480 *Los Angeles-Long Beach, CA	1.2290	1.1517
Los Angeles, CA		
4520 Louisville, KY–IN	0.9498	0.9653
Clark, IN		
Floyd, IN		
Harrison, IN		
Scott, IN		
Bullitt, KY		
Jefferson, KY		
Oldham, KY		
4600 Lubbock, TX	0.8345	0.8835
Lubbock, TX		
4640 Lynchburg, VA ...	0.8199	0.8729
Amherst, VA		
Bedford, VA		
Bedford City, VA		
Campbell, VA		
Lynchburg City, VA		
4680 Macon, GA	0.9069	0.9353
Bibb, GA		
Houston, GA		
Jones, GA		
Peach, GA		
Twiggs, GA		
4720 Madison, WI	1.0062	1.0042
Dane, WI		
4800 Mansfield, OH	0.8645	0.9051
Crawford, OH		
Richland, OH		
4840 Mayaguez, PR ...	0.4486	0.5776
Anasco, PR		
Cabo Rojo, PR		
Hormigueros, PR		
Mayaguez, PR		
Sabana Grande, PR		
San German, PR		
4880 McAllen-Edinburg-Mission, TX	0.8034	0.8608
Hidalgo, TX		
4890 Medford-Ashland, OR	1.0361	1.0246
Jackson, OR		
4900 Melbourne-Titusville-Palm Bay, FL	0.8825	0.9180
Brevard, Fl		
4920 *Memphis, TN–AR–MS	0.8595	0.9015
Crittenden, AR		
DeSoto, MS		
Fayette, TN		
Shelby, TN		
Tipton, TN		
4940 Merced, CA	1.0913	1.0617
Merced, CA		
5000 *Miami, FL	0.9301	0.9516
Dade, FL		
5015 *Middlesex-Somerset-Hunterdon, NJ ..	1.0883	1.0597
Hunterdon, NJ		
Middlesex, NJ		
Somerset, NJ		
5080 *Milwaukee-Waukesha, WI	0.9826	0.9881
Milwaukee, WI		
Ozaukee, WI		
Washington, WI		
Waukesha, WI		
5120 *Minneapolis-St. Paul, MN–WI	1.0739	1.0500
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		
5160 Mobile, AL	0.8458	0.8916
Baldwin, AL		
Mobile, AL		
5170 Modesto, CA	1.0384	1.0261
Stanislaus, CA		
5190 *Monmouth-Ocean, NJ	1.0912	1.0616

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
Monmouth, NJ		
Ocean, NJ		
5200 Monroe, LA	0.8420	0.8889
Ouachita, LA		
5240 Montgomery, AL	0.7818	0.8449
Autauga, AL		
Elmore, AL		
Montgomery, AL		
5280 Muncie, IN	0.9156	0.9414
Delaware, IN		
5330 Myrtle Beach, SC	0.7978	0.8567
Horry, SC		
5345 Naples, FL	1.0116	1.0079
Collier, FL		
5360 *Nashville, TN	0.9189	0.9437
Cheatham, TN		
Davidson, TN		
Dickson, TN		
Robertson, TN		
Rutherford TN		
Sumner, TN		
Williamson, TN		
Wilson, TN		
5380 *Nassau-Suffolk, NY	1.3276	1.2142
Nassau, NY		
Suffolk, NY		
5483 *New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT	1.2629	1.1733
Fairfield, CT		
New Haven, CT		
5523 New London-Norwich, CT	1.2266	1.1501
New London, CT		
5560 *New Orleans, LA	0.9566	0.9701
Jefferson, LA		
Orleans, LA		
Plaquemines, LA		
St. Bernard, LA		
St. Charles, LA		
St. James, LA		
St. John The Baptist, LA		
St. Tammany, LA		
5600 *New York, NY	1.4352	1.2807
Bronx, NY		
Kings, NY		
New York, NY		
Putnam, NY		
Queens, NY		
Richmond, NY		
Rockland, NY		
Westchester, NY		
5640 *Newark, NJ	1.1101	1.0741
Essex, NJ		
Morris, NJ		
Sussex, NJ		
Union, NJ		
Warren, NJ		
5660 Newburgh, NY–PA	1.1291	1.0867
Orange, NY		
Pike, PA		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
5720 *Norfolk-Virginia Beach-Newport News, VA–NC	0.8314	0.8812
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		
5775 *Oakland, CA	1.5239	1.3344
Alameda, CA		
Contra Costa, CA		
5790 Ocala, FL	0.9039	0.9332
Marion, FL		
5800 Odessa-Midland, TX	0.8666	0.9066
Ector, TX		
Midland, TX		
5880 *Oklahoma City, OK	0.8487	0.8937
Canadian, OK		
Cleveland, OK		
Logan, OK		
McClain, OK		
Oklahoma, OK		
Pottawatomie, OK		
5910 Olympia, WA	1.0866	1.0585
Thurston, WA		
5920 Omaha, NE–IA	0.9406	0.9589
Pottawattamie, IA		
Cass, NE		
Douglas, NE		
Sarpy, NE		
Washington, NE		
5945 *Orange County, CA	1.1408	1.0944
Orange, CA		
5960 *Orlando, FL	0.9328	0.9535
Lake, FL		
Orange, FL		
Osceola, FL		
Seminole, FL		
5990 Owensboro, KY	0.7486	0.8201
Daviess, KY		
6015 Panama City, FL	0.8343	0.8833
Bay, FL		
6020 Parkersburg-Marietta, WV–OH	0.8052	0.8621
Washington, OH		
Wood, WV		
6080 Pensacola, FL	0.8199	0.8729
Escambia, FL		
Santa Rosa, FL		
6120 Peoria-Pekin, IL	0.8555	0.8986
Peoria, IL		
Tazewell, IL		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
Woodford, IL		
6160 *Philadelphia, PA–NJ	1.1380	1.0926
Burlington, NJ		
Camden, NJ		
Gloucester, NJ		
Salem, NJ		
Bucks, PA		
Chester, PA		
Delaware, PA		
Montgomery, PA		
Philadelphia, PA		
6200 *Phoenix-Mesa, AZ	0.9451	0.9621
Maricopa, AZ		
Pinal, AZ		
6240 Pine Bluff, AR	0.7832	0.8459
Jefferson, AR		
6280 *Pittsburgh, PA	0.9733	0.9816
Allegheny, PA		
Beaver, PA		
Butler, PA		
Fayette, PA		
Washington, PA		
Westmoreland, PA		
6323 Pittsfield, MA	1.0623	1.0423
Berkshire, MA		
6340 Pocatello, ID	0.9543	0.9685
Bannock, ID		
6360 Ponce, PR	0.4560	0.5841
Guayanilla, PR		
Juana Diaz, PR		
Penuelas, PR		
Ponce, PR		
Villalba, PR		
Yauco, PR		
6403 Portland, ME	0.9634	0.9748
Cumberland, ME		
Sagadahoc, ME		
York, ME		
6440 *Portland-Vancouver, OR–WA	1.1352	1.0907
Clackamas, OR		
Columbia, OR		
Multnomah, OR		
Washington, OR		
Yamhill, OR		
Clark, WA		
6483 *Providence-Warwick-Pawtucket, RI	1.1062	1.0716
Bristol, RI		
Kent, RI		
Newport, RI		
Providence, RI		
Washington, RI		
6520 Provo-Orem, UT	1.0080	1.0055
Utah, UT		
6560 Pueblo, CO	0.8166	0.8705
Pueblo, CO		
6580 Punta Gorda, FL	0.8587	0.9009
Charlotte, FL		
6600 Racine, WI	0.8941	0.9262
Racine, WI		
6640 Raleigh-Durham-Chapel Hill, NC	0.9825	0.9880
Chatham, NC		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
Durham, NC		
Franklin, NC		
Johnston, NC		
Orange, NC		
Wake, NC		
6660 Rapid City, SD	0.8351	0.8839
Pennington, SD		
6680 Reading, PA	0.9523	0.9671
Berks, PA		
6690 Redding, CA	1.1781	1.1188
Shasta, CA		
6720 Reno, NV	1.0776	1.0525
Washoe, NV		
6740 Richland-Kennewick-Pasco, WA	0.9925	0.9949
Benton, WA		
Franklin, WA		
6760 Richmond-Petersburg, VA	0.9175	0.9427
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		
6780 *Riverside-San Bernardino, CA	1.1166	1.0785
Riverside, CA		
San Bernardino, CA		
6800 Roanoke, VA	0.8362	0.8847
Botetourt, VA		
Roanoke, VA		
Roanoke City, VA		
Salem City, VA		
6820 Rochester, MN	1.0509	1.0346
Olmsted, MN		
6840 *Rochester, NY	0.9498	0.9653
Genesee, NY		
Livingston, NY		
Monroe, NY		
Ontario, NY		
Orleans, NY		
Wayne, NY		
6880 Rockford, IL	0.9087	0.9365
Boone, IL		
Ogle, IL		
Winnebago, IL		
6895 Rocky Mount, NC	0.9038	0.9331
Edgecombe, NC		
Nash, NC		
6920 *Sacramento, CA	1.2225	1.1475
El Dorado, CA		
Placer, CA		
Sacramento, CA		
6960 Saginaw-Bay City-Midland, MI	0.9571	0.9704
Bay, MI		
Midland, MI		
Saginaw, MI		
6980 St. Cloud, MN	0.9551	0.9690
Benton, MN		
Stearns, MN		
7000 St. Joseph, MO	0.8372	0.8854
Andrew, MO		
Buchanan, MO		
7040 *St. Louis, MO–IL	0.9145	0.9406
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		
7080 Salem, OR	0.9942	0.9960
Marion, OR		
Polk, OR		
7120 Salinas, CA	1.4523	1.2911
Monterey, CA		
7160 *Salt Lake City-Ogden, UT	0.9869	0.9910
Davis, UT		
Salt Lake, UT		
Weber, UT		
7200 San Angelo, TX	0.7504	0.8215
Tom Green, TX		
7240 *San Antonio, TX	0.8225	0.8748
Bexar, TX		
Comal, TX		
Guadalupe, TX		
Wilson, TX		
7320 *San Diego, CA	1.2266	1.1501
San Diego, CA		
7360 *San Francisco, CA	1.4120	1.2665
Marin, CA		
San Francisco, CA		
San Mateo, CA		
7400 *San Jose, CA	1.4245	1.2742
Santa Clara, CA		
7440 *San Juan-Bayamon, PR	0.4704	0.5966
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		
7460 San Luis Obispo-Atascadero-Paso Robles, CA	1.1379	1.0925
San Luis Obispo, CA		
7480 Santa Barbara-Santa Maria-Lompoc, CA	1.0696	1.0472
Santa Barbara, CA		
7485 Santa Cruz-Watsonville, CA	1.4199	1.2714
Santa Cruz, CA		
7490 Santa Fe, NM	1.0081	1.0055
Los Alamos, NM		
Santa Fe, NM		
7500 Santa Rosa, CA	1.2609	1.1721
Sonoma, CA		
7510 Sarasota-Bradenton, FL	0.9764	0.9838
Manatee, FL		
Sarasota, FL		
7520 Savannah, GA	0.8678	0.9075
Bryan, GA		
Chatham, GA		
Effingham, GA		
7560 Scranton-Wilkes-Barre-Hazleton, PA	0.8546	0.8980
Columbia, PA		
Lackawanna, PA		
Luzerne, PA		
Wyoming, PA		
7600 *Seattle-Bellevue-Everett, WA	1.1383	1.0928
Island, WA		
King, WA		
Snohomish, WA		
7610 Sharon, PA	0.8790	0.9155
Mercer, PA		
7620 Sheboygan, WI	0.7868	0.8486
Sheboygan, WI		
7640 Sherman-Denison, TX	0.8528	0.8967
Grayson, TX		
7680 Shreveport-Bossier City, LA	0.9396	0.9582
Bossier, LA		
Caddo, LA		
Webster, LA		
7720 Sioux City, IA–NE	0.8026	0.8602
Woodbury, IA		
Dakota, NE		
7760 Sioux Falls, SD	0.8718	0.9103
Lincoln, SD		

TABLE 4A.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR URBAN AREAS—Continued

Urban area (constituent counties)	Wage index	GAF
Minnehaha, SD		
7800 South Bend, IN ..	0.9887	0.9922
St. Joseph, IN		
7840 Spokane, WA	1.0491	1.0334
Spokane, WA		
7880 Springfield, IL	0.8719	0.9104
Menard, IL		
Sangamon, IL		
7920 Springfield, MO ..	0.7969	0.8560
Christian, MO		
Greene, MO		
Webster, MO		
8003 Springfield, MA ..	1.0661	1.0448
Hampden, MA		
Hampshire, MA		
8050 State College, PA	0.9642	0.9753
Centre, PA		
8080 Steubenville-Weirton, OH–WV	0.8652	0.9056
Jefferson, OH		
Brooke, WV		
Hancock, WV		
8120 Stockton-Lodi, CA	1.1527	1.1022
San Joaquin, CA		
8140 Sumter, SC	0.7848	0.8471
Sumter, SC		
8160 Syracuse, NY	0.9464	0.9630
Cayuga, NY		
Madison, NY		
Onondaga, NY		
Oswego, NY		
8200 Tacoma, WA	1.1024	1.0690
Pierce, WA		
8240 Tallahassee, FL	0.8338	0.8830
Gadsden, FL		
Leon, FL		
8280 *Tampa-St. Petersburg-Clearwater, FL	0.9191	0.9439
Hernando, FL		
Hillsborough, FL		
Pasco, FL		
Pinellas, FL		
8320 Terre Haute, IN	0.8620	0.9033
Clay, IN		
Vermillion, IN		
Vigo, IN		
8360 Texarkana, AR–Texarkana, TX	0.9594	0.9720
Miller, AR		
Bowie, TX		
8400 Toledo, OH	1.0147	1.0100
Fulton, OH		
Lucas, OH		
Wood, OH		
8440 Topeka, KS	0.9365	0.9561
Shawnee, KS		
8480 Trenton, NJ	1.0375	1.0255
Mercer, NJ		
8520 Tucson, AZ	0.9187	0.9436
Pima, AZ		
8560 Tulsa, OK	0.8080	0.8642
Creek, OK		
Osage, OK		
Rogers, OK		
Tulsa, OK		
Wagoner, OK		
8600 Tuscaloosa, AL ..	0.8134	0.8681
Tuscaloosa, AL		
8640 Tyler, TX	0.9516	0.9666
Smith, TX		
8680 Utica-Rome, NY	0.8362	0.8847
Herkimer, NY		
Oneida, NY		
8720 Vallejo-Fairfield-Napa, CA	1.3442	1.2245
Napa, CA		
Solano, CA		
8735 Ventura, CA	1.0551	1.0374
Ventura, CA		
8750 Victoria, TX	0.8517	0.8959
Victoria, TX		
8760 Vineland-Millville-Bridgeton, NJ	1.0118	1.0081
Cumberland, NJ		
8780 Visalia-Tulare-Porterville, CA	0.9931	0.9953
Tulare, CA		
8800 Waco, TX	0.7701	0.8362
McLennan, TX		
8840 *Washington, DC–MD–VA–WV	1.0786	1.0532
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		
8920 Waterloo-Cedar Falls, IA	0.8649	0.9054
Black Hawk, IA		
8940 Wausau, WI	1.0553	1.0375
Marathon, WI		
8960 West Palm Beach-Boca Raton, FL	1.0331	1.0226
Palm Beach, FL		
9000 Wheeling, OH–WV	0.7712	0.8370
Belmont, OH		
Marshall, WV		
Ohio, WV		
9040 Wichita, KS	0.9369	0.9563
Butler, KS		
Harvey, KS		
Sedgwick, KS		
9080 Wichita Falls, TX	0.7645	0.8320
Archer, TX		
Wichita, TX		
9140 Williamsport, PA	0.8554	0.8986
Lycoming, PA		
9160 Wilmington-Newark, DE–MD	1.1549	1.1036
New Castle, DE		
Cecil, MD		
9200 Wilmington, NC	0.9329	0.9535
New Hanover, NC		
Brunswick, NC		
9260 Yakima, WA	1.0109	1.0075
Yakima, WA		
9270 Yolo, CA	1.1439	1.0964
Yolo, CA		
9280 York, PA	0.9422	0.9600
York, PA		
9320 Youngstown-Warren, OH	0.9944	0.9962
Columbiana, OH		
Mahoning, OH		
Trumbull, OH		
9340 Yuba City, CA	1.0479	1.0326
Sutter, CA		
Yuba, CA		
9360 Yuma, AZ	0.9739	0.9821
Yuma, AZ		

*Large Urban Area

TABLE 4B.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR RURAL AREAS

Nonurban area	Wage index	GAF
Alabama	0.7257	0.8029
Alaska	1.2319	1.1535
Arizona	0.7995	0.8579
Arkansas	0.7010	0.7841
California	1.0005	1.0003
Colorado	0.8068	0.8633
Connecticut	1.2626	1.1731
Delaware	0.8932	0.9256
Florida	0.8846	0.9195
Georgia	0.7747	0.8396
Hawaii	1.0236	1.0161
Idaho	0.8209	0.8736
Illinois	0.7651	0.8325
Indiana	0.8176	0.8712
Iowa	0.7387	0.8127
Kansas	0.7207	0.7991
Kentucky	0.7784	0.8424
Louisiana	0.7400	0.8137
Maine	0.8474	0.8928
Maryland	0.8623	0.9035
Massachusetts	1.0726	1.0492
Michigan	0.8939	0.9261
Minnesota	0.8202	0.8731

TABLE 4B.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR RURAL AREAS—Continued

Nonurban area	Wage index	GAF
Mississippi	0.6919	0.7771
Missouri	0.7221	0.8001
Montana	0.8142	0.8687
Nebraska	0.7358	0.8105
Nevada	0.8922	0.9249
New Hampshire	0.9730	0.9814
New Jersey [1]	.....	.....
New Mexico	0.7893	0.8504
New York	0.8375	0.8856
North Carolina	0.7938	0.8537
North Dakota	0.7347	0.8097
Ohio	0.8438	0.8902
Oklahoma	0.7065	0.7883
Oregon	0.9988	0.9992
Pennsylvania	0.8439	0.8903
Puerto Rico	0.3999	0.5338
Rhode Island [1]	.....	.....
South Carolina	0.7909	0.8516
South Dakota	0.6982	0.7819
Tennessee	0.7357	0.8104
Texas	0.7322	0.8078
Utah	0.8932	0.9256
Vermont	0.9320	0.9529
Virginia	0.7763	0.8408
Washington	1.0223	1.0152
West Virginia	0.7964	0.8556
Wisconsin	0.8477	0.8930
Wyoming	0.8250	0.8766

[1] All counties within the State are classified as urban.

TABLE 4C.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED

Urban area	Wage index	GAF
Abilene, TX	0.8294	0.8798
Albuquerque, NM	0.9336	0.9540
Alexandria, LA	0.8275	0.8784
Amarillo, TX	0.9503	0.9657
Anchorage, AK	1.3015	1.1978
Asheville, NC	0.9078	0.9359
Athens, GA	0.9093	0.9370
Atlanta, GA	0.9812	0.9871
Austin-San Marcos, TX	0.8690	0.9083
Bangor, ME	0.9485	0.9644
Barnstable-Yarmouth, MA	1.3837	1.2491
Baton Rouge, LA	0.8416	0.8886
Benton Harbor, MI	0.8640	0.9047
Benton Harbor, MI (Rural Michigan Hosp.)	0.8939	0.9261
Bergen-Passaic, NJ	1.1573	1.1052
Billings, MT	0.9147	0.9408
Birmingham, AL	0.8933	0.9256
Bismarck, ND	0.7874	0.8490
Boise City, ID	0.8893	0.9228
Boston-Worcester-Lawrence-Lowell-Brockton, MA–NH	1.1430	1.0958
Caguas, PR	0.4551	0.5833
Casper, WY	0.9019	0.9317

TABLE 4C.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED—Continued

Urban area	Wage index	GAF
Champaign-Urbana, IL	0.8740	0.9119
Charlotte-Gastonia-Rock Hill, NC–SC	0.9758	0.9834
Charlottesville, VA	0.8897	0.9231
Chattanooga, TN–GA	0.8664	0.9065
Chicago, IL	1.0829	1.0561
Cincinnati, OH–KY–IN	0.9565	0.9700
Cleveland-Lorain-Elyria, OH	0.9811	0.9870
Columbia, MO	0.8685	0.9080
Columbus, OH	0.9800	0.9863
Dallas, TX	0.9624	0.9741
Davenport-Moline-Rock Island, IA–IL	0.8411	0.8883
Denver, CO	1.0299	1.0204
Des Moines, IA	0.8718	0.9103
Detroit, MI	1.0844	1.0571
Duluth-Superior, MN–WI	0.9786	0.9853
Dutchess County, NY	1.0174	1.0119
Eugene-Springfield, OR	1.1700	1.1135
Fargo-Moorhead, ND–MN	0.8730	0.9112
Fayetteville, NC	0.8468	0.8924
Flint, MI	1.1191	1.0801
Florence, AL	0.7722	0.8378
Florence, SC	0.8243	0.8761
Ft. Lauderdale, FL	1.0802	1.0543
Fort Pierce-Port St. Lucie, FL	0.9782	0.9850
Fort Walton Beach, FL	0.8555	0.8986
Fort Worth-Arlington, TX	0.9691	0.9787
Gadsden, AL	0.8821	0.9177
Gainesville, FL	0.9603	0.9726
Gary, IN	0.9121	0.9389
Grand Forks, ND–MN	0.8853	0.9200
Grand Junction, CO	0.8557	0.8988
Great Falls, MT	0.9321	0.9530
Greeley, CO	0.9798	0.9861
Green Bay, WI	0.9592	0.9719
Greensboro-Winston-Salem-High Point, NC	0.9357	0.9555
Harrisburg-Lebanon-Carlisle, PA	1.0044	1.0030
Honolulu, HI	1.1826	1.1217
Houma, LA	0.7859	0.8479
Houston, TX	0.9633	0.9747
Huntington-Ashland, WV–KY–OH	0.9159	0.9416
Huntsville, AL	0.8491	0.8940
Indianapolis, IN	0.9851	0.9898
Iowa City, IA	0.9192	0.9439
Jackson, MS	0.7799	0.8435
Johnson City-Kingsport-Bristol, TN–VA	0.9120	0.9389
Jonesboro, AR	0.7449	0.8174
Joplin, MO	0.7519	0.8226
Kalamazoo-Battle Creek, MI	1.0676	1.0458
Kansas City, KS–MO	0.9571	0.9704
Knoxville, TN	0.8837	0.9188
Lafayette, LA	0.8226	0.8748
Lafayette, IN	0.9181	0.9432
Lansing-East Lansing, MI	1.0093	1.0064
Las Cruces, NM	0.8664	0.9065
Las Vegas, NV–AZ	1.0601	1.0408

TABLE 4C.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED—Continued

Urban area	Wage index	GAF
Lexington, KY	0.8422	0.8890
Lima, OH	0.9192	0.9439
Lincoln, NE	0.8935	0.9258
Little Rock-North Little Rock, AR	0.8496	0.8944
Longview-Marshall, TX	0.8508	0.8953
Los Angeles-Long Beach, CA	1.2290	1.1517
Louisville, KY–IN	0.9498	0.9653
Macon, GA	0.9069	0.9353
Madison, WI	1.0062	1.0042
Mansfield, OH	0.8645	0.9051
Medford-Ashland, OR	1.0361	1.0246
Memphis, TN–AR–MS	0.8595	0.9015
Milwaukee-Waukesha, WI	0.9826	0.9881
Minneapolis-St. Paul, MN–WI	1.0739	1.0500
Monroe, LA	0.8420	0.8889
Montgomery, AL	0.7818	0.8449
Nashville, TN	0.9189	0.9437
New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT	1.2629	1.1733
New London-Norwich, CT	1.2266	1.1501
New Orleans, LA	0.9566	0.9701
New York, NY	1.4352	1.2807
Newark, NJ	1.1101	1.0741
Newburgh, NY–PA	1.1468	1.0983
Oakland, CA	1.5239	1.3344
Odessa-Midland, TX	0.8522	0.8963
Oklahoma City, OK	0.8487	0.8937
Omaha, NE–IA	0.9406	0.9589
Orange County, CA	1.1408	1.0944
Peoria-Pekin, IL	0.8555	0.8986
Philadelphia, PA–NJ	1.1380	1.0926
Pittsburgh, PA	0.9591	0.9718
Pocatello, ID	0.8987	0.9295
Portland, ME	0.9634	0.9748
Portland-Vancouver, OR–WA	1.1352	1.0907
Provo-Orem, UT	1.0080	1.0055
Raleigh-Durham-Chapel Hill, NC	0.9825	0.9880
Rapid City, SD	0.8351	0.8839
Rochester, MN	1.0509	1.0346
Rockford, IL	0.9087	0.9365
Sacramento, CA	1.2225	1.1475
Saginaw-Bay City-Midland, MI	0.9571	0.9704
St. Cloud, MN	0.9551	0.9690
St. Louis, MO–IL	0.9145	0.9406
Salinas, CA	1.4309	1.2781
Salt Lake City-Ogden, UT	0.9869	0.9910
San Diego, CA	1.2266	1.1501
San Francisco, CA	1.4120	1.2665
Santa Fe, NM	0.9818	0.9875
Santa Rosa, CA	1.2447	1.1617
Seattle-Bellevue-Everett, WA	1.1383	1.0928
Sherman-Denison, TX	0.8345	0.8835
Sioux City, IA–NE	0.8026	0.8602
Sioux Falls, SD	0.8613	0.9028
South Bend, IN	0.9887	0.9922

TABLE 4C.—WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF) FOR HOSPITALS THAT ARE RECLASSIFIED—Continued

Urban area	Wage index	GAF
Spokane, WA	1.0316	1.0215
Springfield, IL	0.8617	0.9031
Springfield, MO	0.7969	0.8560
Stockton-Lodi, CA	1.1527	1.1022
Syracuse, NY	0.9464	0.9630
Tampa-St. Petersburg-Clearwater, FL	0.9191	0.9439
Texarkana, AR-Texarkana, TX	0.9482	0.9642
Topeka, KS	0.9240	0.9473
Tucson, AZ	0.9187	0.9436
Tulsa, OK	0.8080	0.8642
Tyler, TX	0.9379	0.9570
Vallejo-Fairfield-Napa, CA	1.3442	1.2245
Washington, DC–MD–VA–WV	1.0786	1.0532
Waterloo-Cedar Falls, IA	0.8649	0.9054
Wausau, WI	0.9853	0.9899
Wichita, KS	0.9130	0.9396
Wichita Falls, TX	0.7645	0.8320
Rural Florida	0.8846	0.9195
Rural Louisiana	0.7400	0.8137
Rural Minnesota	0.8202	0.8731
Rural Missouri	0.7221	0.8001
Rural New Hampshire	0.9730	0.9814
Rural New Mexico	0.7893	0.8504
Rural North Carolina	0.7938	0.8537
Rural Oregon	0.9988	0.9992
Rural Washington	1.0223	1.0152
Rural West Virginia	0.7964	0.8556
Rural Wyoming	0.8250	0.8766

TABLE 4D.—AVERAGE HOURLY WAGE FOR URBAN AREAS

Urban area	Average hourly wage
Abilene, TX	16.6537
Aguadilla, PR	8.4161
Akron, OH	19.6368
Albany, GA	15.9028
Albany-Schenectady-Troy, NY	17.0385
Albuquerque, NM	18.7069
Alexandria, LA	16.4017
Allentown-Bethlehem-Easton, PA	20.2671
Altoona, PA	18.3612
Amarillo, TX	18.9399
Anchorage, AK	25.8065
Ann Arbor, MI	23.6829
Anniston, AL	16.6112
Appleton-Oshkosh-Neenah, WI	18.0782
Arecibo, PR	8.4753
Asheville, NC	18.2293
Athens, GA	18.2596
Atlanta, GA	19.7032
Atlantic-Cape May, NJ	22.4152
Augusta-Aiken, GA–SC	18.7566
Austin-San Marcos, TX	17.4495
Bakersfield, CA	20.1222
Baltimore, MD	19.4693
Bangor, ME	19.0467
Barnstable-Yarmouth, MA	28.7181

TABLE 4D.—AVERAGE HOURLY WAGE FOR URBAN AREAS—Continued

Urban area	Average hourly wage
Baton Rouge, LA	16.9004
Beaumont-Port Arthur, TX	17.2215
Bellingham, WA	22.5492
Benton Harbor, MI	17.3503
Bergen-Passaic, NJ	24.3291
Billings, MT	19.5350
Biloxi-Gulfport-Pascagoula, MS	16.9110
Binghamton, NY	18.2489
Birmingham, AL	17.9378
Bismarck, ND	15.4640
Bloomington,IN	18.3421
Bloomington-Normal, IL	17.6360
Boise City, ID	17.7955
Boston-Worcester-Lawrence-Lowell-Brockton, MA–NH	22.9698
Boulder-Longmont, CO	20.1260
Brazoria, TX	18.7704
Bremerton, WA	22.1033
Brownsville-Harlingen-San Benito, TX	17.4677
Bryan-College Station, TX	14.1367
Buffalo-Niagara Falls, NY	18.6068
Burlington, VT	20.2766
Caguas, PR	9.0320
Canton-Massillon, OH	18.0078
Casper, WY	18.1110
Cedar Rapids, IA	17.1383
Champaign-Urbana, IL	17.5502
Charleston-North Charleston, SC	17.5483
Charleston, WV	18.3703
Charlotte-Gastonia-Rock Hill, NC–SC	19.5947
Charlottesville, VA	18.2038
Chattanooga, TN–GA	17.3976
Cheyenne, WY	15.1808
Chicago, IL	21.7444
Chico-Paradise, CA	20.8709
Cincinnati, OH–KY–IN	19.0516
Clarksville-Hopkinsville, TN–KY	15.7778
Cleveland-Lorain-Elyria, OH	19.7007
Colorado Springs, CO	18.7205
Columbia, MO	17.8452
Columbia, SC	18.5185
Columbus, GA–AL	16.6542
Columbus, OH	19.6781
Corpus Christi, TX	17.9745
Cumberland, MD–WV	17.7280
Dallas, TX	19.3876
Danville, VA	16.3692
Davenport-Moline-Rock Island, IA–IL	16.8903
Dayton-Springfield, OH	19.3553
Daytona Beach, FL	16.7797
Decatur, AL	16.6503
Decatur, IL	15.9047
Denver, CO	20.6808
Des Moines, IA	17.5070
Detroit, MI	21.7434
Dothan, AL	16.2160
Dover, DE	18.5175
Dubuque, IA	16.2530
Duluth-Superior, MN–WI	19.6500
Dutchess County, NY	21.3729
Eau Claire, WI	17.6122
El Paso, TX	19.5169
Elkhart-Goshen, IN	18.2474
Elmira, NY	16.5714
Enid, OK	16.0002
Erie, PA	17.8087

TABLE 4D.—AVERAGE HOURLY WAGE FOR URBAN AREAS—Continued

Urban area	Average hourly wage
Eugene-Springfield, OR	23.0592
Evansville, Henderson, IN–KY	17.3648
Fargo-Moorhead, ND–MN	17.7585
Fayetteville, NC	17.5510
Fayetteville-Springdale-Rogers, AR	14.9924
Flagstaff, AZ–UT	18.3168
Flint, MI	22.4728
Florence, AL	15.1732
Florence, SC	16.5268
Fort Collins-Loveland, CO	20.5933
Fort Lauderdale, FL	20.8970
Fort Myers-Cape Coral, FL	16.8350
Fort Pierce-Port St. Lucie, FL	19.6424
Fort Smith, AR–OK	15.6127
Fort Walton Beach, FL	17.1797
Fort Wayne, IN	17.8865
Fort Worth-Arlington, TX	19.3702
Fresno, CA	21.2867
Gadsden, AL	17.7134
Gainesville, FL	19.2822
Galveston-Texas City, TX	21.2286
Gary, IN	19.3581
Glens Falls, NY	16.7853
Goldsboro, NC	16.9659
Grand Forks, ND–MN	17.5737
Grand Junction, CO	15.6876
Grand Rapids-Muskegon-Holland, MI	20.3894
Great Falls, MT	17.9668
Greeley, CO	20.2891
Green Bay, WI	18.2802
Greensboro-Winston-Salem-High Point, NC	18.7901
Greenville, NC	18.2150
Greenville-Spartanburg-Anderson, SC	18.2047
Hagerstown, MD	19.4546
Hamilton-Middletown, OH	17.7961
Harrisburg-Lebanon-Carlisle, PA	20.3990
Hartford, CT	25.2442
Hattiesburg, MS	14.4517
Hickory-Morganton-Lenoir, NC	17.4555
Honolulu, HI	23.7434
Houma, LA	15.7820
Houston, TX	19.3444
Huntington-Ashland, WV–KY–OH	18.3921
Huntsville, AL	17.0504
Indianapolis, IN	19.7810
Iowa City, IA	18.8914
Jackson, MI	18.1893
Jackson, MS	15.6018
Jackson, TN	17.1259
Jacksonville, FL	18.0438
Jacksonville, NC	14.0121
Jamestown, NY	15.1621
Janesville-Beloit, WI	17.7327
Jersey City, NJ	22.9317
Johnson City-Kingsport-Bristol, TN–VA	18.3136
Johnstown, PA	16.8349
Jonesboro, AR	14.9575
Joplin, MO	15.0332
Kalamazoo-Battlecreek, MI	21.4383
Kankakee, IL	17.3802
Kansas City, KS–MO	19.2182
Kenosha, WI	18.4799
Killeen-Temple, TX	20.6010
Knoxville, TN	17.7457

TABLE 4D.—AVERAGE HOURLY WAGE FOR URBAN AREAS—Continued

Urban area	Average hourly wage
Kokomo, IN	16.9123
La Crosse, WI–MN	17.5812
Lafayette, LA	16.4732
Lafayette, IN	18.4349
Lake Charles, LA	15.6250
Lakeland-Winter Haven, FL	17.6957
Lancaster, PA	19.0606
Lansing-East Lansing, MI	20.2670
Laredo, TX	14.7188
Las Cruces, NM	17.3739
Las Vegas, NV–AZ	21.2874
Lawrence, KS	17.2986
Lawton, OK	18.1767
Lewiston-Auburn, ME	19.1630
Lexington, KY	16.8603
Lima, OH	18.4571
Lincoln, NE	18.2595
Little Rock-North Little Rock, AR	17.0606
Longview-Marshall, TX	17.2912
Los Angeles-Long Beach, CA	24.6067
Louisville, KY–IN	19.0725
Lubbock, TX	16.7563
Lynchburg, VA	16.4640
Macon, GA	18.2107
Madison, WI	20.2048
Mansfield, OH	17.3603
Mayaguez, PR	9.0075
McAllen-Edinburg-Mission, TX	16.1323
Medford-Ashland, OR	20.8059
Melbourne-Titusville-Palm Bay, FL	17.7216
Memphis, TN–AR–MS	17.2589
Merced, CA	21.9146
Miami, FL	19.8627
Middlesex-Somerset-Hunterdon, NJ	22.0067
Milwaukee-Waukesha, WI	19.7306
Minneapolis-St. Paul, MN–WI	21.5643
Mobile, AL	16.9845
Modesto, CA	21.6914
Monmouth-Ocean, NJ	21.9116
Monroe, LA	16.9075
Montgomery, AL	15.4155
Muncie, IN	18.3854
Myrtle Beach, SC	16.0211
Naples, FL	20.3132
Nashville, TN	18.4518
Nassau-Suffolk, NY	27.7072
New Haven-Bridgeport-Stamford-Waterbury-Danbury, CT	25.3561
New London-Norwich, CT	24.1396
New Orleans, LA	19.2096
New York, NY	28.8193
Newark, NJ	24.0494
Newburgh, NY–PA	22.6737
Norfolk-Virginia Beach-Newport News, VA–NC	16.6956
Oakland, CA	30.4360
Ocala, FL	18.1497
Odessa-Midland, TX	17.4016
Oklahoma City, OK	17.0417
Olympia, WA	21.8203
Omaha, NE–IA	18.8876
Orange County, CA	23.0599
Orlando, FL	18.7302
Owensboro, KY	15.0313
Panama City, FL	16.7539
Parkersburg-Marietta, WV–OH	16.1677
Pensacola, FL	16.4635
Peoria-Pekin, IL	17.1794

TABLE 4D.—AVERAGE HOURLY WAGE FOR URBAN AREAS—Continued

Urban area	Average hourly wage
Philadelphia, PA–NJ	22.8513
Phoenix-Mesa, AZ	18.9787
Pine Bluff, AR	15.7267
Pittsburgh, PA	19.5446
Pittsfield, MA	21.3310
Pocatello, ID	19.1619
Ponce, PR	9.1572
Portland, ME	19.3456
Portland-Vancouver, OR–WA	22.7959
Providence-Warwick, RI	22.2138
Provo-Orem, UT	20.2420
Pueblo, CO	16.3970
Punta Gorda, FL	17.2423
Racine, WI	17.9536
Raleigh-Durham-Chapel Hill, NC	19.7297
Rapid City, SD	16.7698
Reading, PA	19.1233
Redding, CA	23.6558
Reno, NV	21.6378
Richland-Kennewick-Pasco, WA	19.9294
Richmond-Petersburg, VA	18.4237
Riverside-San Bernardino, CA	22.7449
Roanoke, VA	16.7913
Rochester, MN	21.1030
Rochester, NY	19.0730
Rockford, IL	18.2476
Rocky Mount, NC	18.1482
Sacramento, CA	24.5491
Saginaw-Bay City-Midland, MI	19.2180
St. Cloud, MN	19.1778
St. Joseph, MO	16.8108
St. Louis, MO–IL	18.3627
Salem, OR	19.9649
Salinas, CA	29.1634
Salt Lake City-Ogden, UT	19.8077
San Angelo, TX	15.0684
San Antonio, TX	16.5159
San Diego, CA	24.5670
San Francisco, CA	28.5345
San Jose, CA	28.6049
San Juan-Bayamon, PR	9.4463
San Luis Obispo-Atascadero-Paso Robles, CA	22.8504
Santa Barbara-Santa Maria-Lompoc, CA	21.4774
Santa Cruz-Watsonville, CA	28.5128
Santa Fe, NM	20.2428
Santa Rosa, CA	26.2920
Sarasota-Bradenton, FL	19.6072
Savannah, GA	17.4249
Scranton-Wilkes Barre-Hazleton, PA	17.1601
Seattle-Bellevue-Everett, WA	22.7858
Sharon, PA	17.6500
Sheboygan, WI	15.7984
Sherman-Denison, TX	17.1241
Shreveport-Bossier City, LA	18.8682
Sioux City, IA–NE	16.1162
Sioux Falls, SD	17.5067
South Bend, IN	19.8290
Spokane, WA	21.0664
Springfield, IL	17.5080
Springfield, MO	15.8980
Springfield, MA	21.4074
State College, PA	19.3613
Steubenville-Weirton, OH–WV	17.3728
Stockton-Lodi, CA	23.1020
Sumter, SC	15.7585
Syracuse, NY	18.9634

TABLE 4D.—AVERAGE HOURLY WAGE FOR URBAN AREAS—Continued

Urban area	Average hourly wage
Tacoma, WA	22.1357
Tallahassee, FL	16.7434
Tampa-St. Petersburg-Clearwater, FL	18.2677
Terre Haute, IN	17.3093
Texarkana, AR-Texarkana, TX	19.2649
Toledo, OH	20.8792
Topeka, KS	18.8050
Trenton, NJ	20.8336
Tucson, AZ	18.4477
Tulsa, OK	16.2252
Tuscaloosa, AL	16.3331
Tyler, TX	19.1086
Utica-Rome, NY	16.7919
Vallejo-Fairfield-Napa, CA	27.4125
Ventura, CA	21.9959
Victoria, TX	17.1016
Vineland-Millville-Bridgeton, NJ	20.3170
Visalia-Tulare-Porterville, CA	19.9417
Waco, TX	15.4645
Washington, DC–MD–VA–WV	21.6582
Waterloo-Cedar Falls, IA	17.3631
Wausau, WI	21.1907
West Palm Beach-Boca Raton, FL	20.8691
Wheeling, OH–WV	15.4868
Wichita, KS	18.8137
Wichita Falls, TX	15.3505
Williamsport, PA	17.1768
Wilmington-Newark, DE–MD	23.1911
Wilmington, NC	18.7325
Yakima, WA	20.2994
Yolo, CA	22.9704
York, PA	18.9189
Youngstown-Warren, OH	19.9688
Yuba City, CA	21.0423
Yuma, AZ	19.5572

TABLE 4E.—AVERAGE HOURLY WAGE FOR RURAL AREAS

Nonurban area	Average hourly wage
Alabama	14.5723
Alaska	24.7367
Arizona	16.0545
Arkansas	14.0756
California	20.0902
Colorado	16.2015
Connecticut	25.3532
Delaware	17.9354
Florida	17.7628
Georgia	15.5563
Hawaii	20.5550
Idaho	16.4839
Illinois	15.3631
Indiana	16.4180
Iowa	14.8337
Kansas	14.4720
Kentucky	15.6298
Louisiana	14.8596
Maine	17.0166
Maryland	17.3152
Massachusetts	21.5382
Michigan	17.9507
Minnesota	16.4669
Mississippi	13.8932

TABLE 4E.—AVERAGE HOURLY WAGE FOR RURAL AREAS—Continued

Nonurban area	Average hourly wage
Missouri	14.4980
Montana	16.3497
Nebraska	14.7745
Nevada	17.9159
New Hampshire	19.5250
New Jersey [1]	.....
New Mexico	15.8297
New York	16.8172
North Carolina	15.9365
North Dakota	14.7534

TABLE 4E.—AVERAGE HOURLY WAGE FOR RURAL AREAS—Continued

Nonurban area	Average hourly wage
Ohio	16.9442
Oklahoma	14.1874
Oregon	20.0517
Pennsylvania	16.9465
Puerto Rico	8.0298
Rhode Island [1]	.....
South Carolina	15.8812
South Dakota	14.0203
Tennessee	14.7740
Texas	14.7038

TABLE 4E.—AVERAGE HOURLY WAGE FOR RURAL AREAS—Continued

Nonurban area	Average hourly wage
Utah	17.9362
Vermont	18.7155
Virginia	15.5887
Washington	20.5277
West Virginia	15.9342
Wisconsin	17.0214
Wyoming	16.5656

[1] All counties within the State are classified as urban.

TABLE 4F.—PUERTO RICO WAGE INDEX AND CAPITAL GEOGRAPHIC ADJUSTMENT FACTOR (GAF)

Area	Wage index	GAF	Wage index—reclass. hospitals	GAF—reclass. hospitals
Aguadilla, PR	0.9152	0.9411	.....	.....
Arecibo, PR	0.9217	0.9457	.....	.....
Caguas, PR	0.9937	0.9957	0.9937	0.9957
Mayaguez, PR	0.9795	0.9859	.....	.....
Ponce, PR	0.9958	0.9971	.....	.....
San Juan–Bayamon, PR	1.0273	1.0186	.....	.....
Rural Puerto Rico	0.8732	0.9113	.....	.....

TABLE 5.—LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC AND ARITHMETIC MEAN LENGTH

				Relative weights	Geometric mean LOS	Arithmetic mean LOS
1	01	SURG	CRANIOTOMY AGE >17 EXCEPT FOR TRAUMA	3.0381	6.9	10.0
2	01	SURG	CRANIOTOMY FOR TRAUMA AGE >17	3.0527	7.9	10.6
3	01	SURG	*CRANIOTOMY AGE 0–17	1.9470	12.7	12.7
4	01	SURG	SPINAL PROCEDURES	2.3738	5.5	8.5
5	01	SURG	EXTRACRANIAL VASCULAR PROCEDURES	1.5019	2.9	3.9
6	01	SURG	CARPAL TUNNEL RELEASE	.7573	2.2	3.3
7	01	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W CC	2.4812	7.6	11.6
8	01	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	1.1314	2.5	3.6
9	01	MED	SPINAL DISORDERS & INJURIES	1.2570	5.1	7.2
10	01	MED	NERVOUS SYSTEM NEOPLASMS W CC	1.2176	5.3	7.4
11	01	MED	NERVOUS SYSTEM NEOPLASMS W/O CC	.7857	3.2	4.3
12	01	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS	.9357	5.0	6.8
13	01	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	.7809	4.7	5.8
14	01	MED	SPECIFIC CEREBROVASCULAR DISORDERS EXCEPT TIA	1.1904	5.1	6.8
15	01	MED	TRANSIENT ISCHEMIC ATTACK & PRECEREBRAL OCCLUSIONS	.7249	3.2	4.1
16	01	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W CC	1.0452	4.6	6.1
17	01	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	.6176	2.9	3.7
18	01	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W CC	.9400	4.5	5.9
19	01	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	.6290	3.2	4.1
20	01	MED	NERVOUS SYSTEM INFECTION EXCEPT VIRAL MENINGITIS	2.5777	8.0	10.8
21	01	MED	VIRAL MENINGITIS	1.4784	5.4	7.1
22	01	MED	HYPERTENSIVE ENCEPHALOPATHY	.8687	3.7	4.8
23	01	MED	NONTRAUMATIC STUPOR & COMA	.7820	3.3	4.6
24	01	MED	SEIZURE & HEADACHE AGE >17 W CC	.9588	3.9	5.4
25	01	MED	SEIZURE & HEADACHE AGE >17 W/O CC	.5809	2.8	3.6
26	01	MED	SEIZURE & HEADACHE AGE 0–17	.9598	3.7	5.0
27	01	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR	1.2609	3.4	5.5
28	01	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W CC	1.1684	4.4	6.4
29	01	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	.6364	2.8	3.8
30	01	MED	*TRAUMATIC STUPOR & COMA, COMA <1 HR AGE 0–17	.3292	2.0	2.0
31	01	MED	CONCUSSION AGE >17 W CC	.8364	3.5	4.8
32	01	MED	CONCUSSION AGE >17 W/O CC	.5087	2.2	3.1
33	01	MED	*CONCUSSION AGE 0–17	.2069	1.6	1.6
34	01	MED	OTHER DISORDERS OF NERVOUS SYSTEM W CC	1.0365	4.2	5.8
35	01	MED	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	.5930	3.0	3.9
36	02	SURG	RETINAL PROCEDURES	.6246	1.3	1.5

TABLE 5.—LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC AND ARITHMETIC MEAN LENGTH—Continued

				Relative weights	Geometric mean LOS	Arithmetic mean LOS
37	02	SURG	ORBITAL PROCEDURES	.9697	2.6	3.9
38	02	SURG	PRIMARY IRIS PROCEDURES	.4780	1.9	2.7
39	02	SURG	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	.5414	1.5	2.0
40	02	SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	.7386	2.2	3.3
41	02	SURG	*EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE 0–17	.3351	1.6	1.6
42	02	SURG	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS	.5659	1.5	2.0
43	02	MED	HYPHEMA	.4123	2.9	4.0
44	02	MED	ACUTE MAJOR EYE INFECTIONS	.6026	4.3	5.3
45	02	MED	NEUROLOGICAL EYE DISORDERS	.6709	2.9	3.6
46	02	MED	OTHER DISORDERS OF THE EYE AGE >17 W CC	.7231	3.7	4.9
47	02	MED	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	.4635	2.7	3.6
48	02	MED	*OTHER DISORDERS OF THE EYE AGE 0–17	.2953	2.9	2.9
49	03	SURG	MAJOR HEAD & NECK PROCEDURES	1.7911	3.8	5.3
50	03	SURG	SIALOADENECTOMY	.8117	1.7	2.1
51	03	SURG	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	.8380	2.0	2.9
52	03	SURG	CLEFT LIP & PALATE REPAIR	1.2445	2.2	3.2
53	03	SURG	SINUS & MASTOID PROCEDURES AGE >17	1.0663	2.3	3.6
54	03	SURG	*SINUS & MASTOID PROCEDURES AGE 0–17	.4786	3.2	3.2
55	03	SURG	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES	.8318	2.0	2.9
56	03	SURG	RHINOPLASTY	.8845	2.1	2.8
57	03	SURG	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17.	1.0234	2.8	4.0
58	03	SURG	*T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0–17.	.2718	1.5	1.5
59	03	SURG	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	.8026	2.2	3.1
60	03	SURG	*TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0–17	.2070	1.5	1.5
61	03	SURG	MYRINGOTOMY W TUBE INSERTION AGE >17	1.1426	2.8	4.6
62	03	SURG	*MYRINGOTOMY W TUBE INSERTION AGE 0–17	.2931	1.3	1.3
63	03	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	1.2390	3.1	4.6
64	03	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY	1.1531	4.4	6.7
65	03	MED	DYSEQUILIBRIUM	.5174	2.5	3.2
66	03	MED	EPISTAXIS	.5588	2.8	3.5
67	03	MED	EPIGLOTTITIS	.7881	3.1	3.8
68	03	MED	OTITIS MEDIA & URI AGE >17 W CC	.6842	3.5	4.3
69	03	MED	OTITIS MEDIA & URI AGE >17 W/O CC	.5170	2.9	3.5
70	03	MED	OTITIS MEDIA & URI AGE 0–17	.3837	2.7	3.3
71	03	MED	LARYNGOTRACHEITIS	.6844	3.0	3.9
72	03	MED	NASAL TRAUMA & DEFORMITY	.6277	2.7	3.5
73	03	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	.7661	3.4	4.7
74	03	MED	*OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0–17	.3330	2.1	2.1
75	04	SURG	MAJOR CHEST PROCEDURES	3.1862	8.3	10.5
76	04	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W CC	2.6396	8.7	11.7
77	04	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC	1.1098	3.6	5.1
78	04	MED	PULMONARY EMBOLISM	1.4278	6.6	7.7
79	04	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W CC	1.6310	6.8	8.7
80	04	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	.9138	4.9	6.0
81	04	MED	*RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0–17	1.5079	6.1	6.1
82	04	MED	RESPIRATORY NEOPLASMS	1.3326	5.4	7.3
83	04	MED	MAJOR CHEST TRAUMA W CC	.9660	4.6	5.9
84	04	MED	MAJOR CHEST TRAUMA W/O CC	.5235	2.8	3.5
85	04	MED	PLEURAL EFFUSION W CC	1.2226	5.3	6.9
86	04	MED	PLEURAL EFFUSION W/O CC	.6697	3.1	4.1
87	04	MED	PULMONARY EDEMA & RESPIRATORY FAILURE	1.3668	4.9	6.5
88	04	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	.9746	4.6	5.7
89	04	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W CC	1.1033	5.4	6.6
90	04	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	.6793	4.0	4.7
91	04	MED	SIMPLE PNEUMONIA & PLEURISY AGE 0–17	.7951	3.7	4.4
92	04	MED	INTERSTITIAL LUNG DISEASE W CC	.1929	5.3	6.6
93	04	MED	INTERSTITIAL LUNG DISEASE W/O CC	.7367	3.6	4.6
94	04	MED	PNEUMOTHORAX W CC	1.1833	5.1	6.7
95	04	MED	PNEUMOTHORAX W/O CC	.5950	3.2	4.0
96	04	MED	BRONCHITIS & ASTHMA AGE >17 W CC	.8093	4.2	5.1
97	04	MED	BRONCHITIS & ASTHMA AGE >17 W/O CC	.5990	3.3	4.0
98	04	MED	BRONCHITIS & ASTHMA AGE 0–17	.6334	2.2	3.8
99	04	MED	RESPIRATORY SIGNS & SYMPTOMS W CC	.6716	2.5	3.2
100	04	MED	RESPIRATORY SIGNS & SYMPTOMS W/O CC	.5105	1.8	2.2
101	04	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W CC	.8495	3.5	4.7
102	04	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	.5298	2.3	2.9
103	05	SURG	HEART TRANSPLANT	16.1872	31.7	47.3
104	05	SURG	CARDIAC VALVE PROCEDURES W CARDIAC CATH	7.3312	10.8	13.4

TABLE 5.—LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC AND ARITHMETIC MEAN LENGTH—Continued

				Relative weights	Geometric mean LOS	Arithmetic mean LOS
105 ...	05	SURG	CARDIAC VALVE PROCEDURES W/O CARDIAC CATH	5.6831	8.4	10.2
106 ...	05	SURG	CORONARY BYPASS W CARDIAC CATH	5.5811	9.8	11.1
107 ...	05	SURG	CORONARY BYPASS W/O CARDIAC CATH	4.0780	7.3	8.3
108 ...	05	SURG	OTHER CARDIOTHORACIC PROCEDURES	6.1040	9.5	12.1
109 ...	.....		NO LONGER VALID	.0000	.0	.0
110 ...	05	SURG	MAJOR CARDIOVASCULAR PROCEDURES W CC	4.1852	7.7	10.2
111 ...	05	SURG	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	2.2254	5.4	6.2
112 ...	05	SURG	PERCUTANEOUS CARDIOVASCULAR PROCEDURES	1.9997	3.1	4.2
113 ...	05	SURG	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE.	2.6574	9.7	13.1
114 ...	05	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	1.5397	6.4	8.8
115 ...	05	SURG	PERM PACE IMPLNT W AMI,HRT FAIL OR SHOCK OR AICD LEAD OR GEN PROC.	3.5473	6.7	9.2
116 ...	05	SURG	OTH PERM CARDIAC PACEMAKER IMPLANT OR PTCA W CORONARY ART STENT.	2.5183	3.5	4.7
117 ...	05	SURG	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1.1922	2.7	4.0
118 ...	05	SURG	CARDIAC PACEMAKER DEVICE REPLACEMENT	1.5923	2.0	3.0
119 ...	05	SURG	VEIN LIGATION & STRIPPING	1.2041	3.1	5.1
120 ...	05	SURG	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	1.9153	5.0	8.5
121 ...	05	MED	CIRCULATORY DISORDERS W AMI & MAJOR COMP DISCH ALIVE	1.6563	6.0	7.3
122 ...	05	MED	CIRCULATORY DISORDERS W AMI W/O MAJOR COMP DISCH ALIVE	1.1474	3.9	4.7
123 ...	05	MED	CIRCULATORY DISORDERS W AMI, EXPIRED	1.4704	2.7	4.5
124 ...	05	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH & COMPLEX DIAG.	1.3575	3.6	4.6
125 ...	05	MED	CIRCULATORY DISORDERS EXCEPT AMI, W CARD CATH W/O COMPLEX DIAG.	.9739	2.3	2.9
126 ...	05	MED	ACUTE & SUBACUTE ENDOCARDITIS	2.4892	10.0	13.1
127 ...	05	MED	HEART FAILURE & SHOCK	1.0219	4.5	5.8
128 ...	05	MED	DEEP VEIN THROMBOPHLEBITIS	.7832	5.6	6.4
129 ...	05	MED	CARDIAC ARREST, UNEXPLAINED	1.1434	1.9	3.2
130 ...	05	MED	PERIPHERAL VASCULAR DISORDERS W CC	.9409	5.1	6.3
131 ...	05	MED	PERIPHERAL VASCULAR DISORDERS W/O CC	.6042	4.1	4.9
132 ...	05	MED	ATHEROSCLEROSIS W CC	.6763	2.7	3.3
133 ...	05	MED	ATHEROSCLEROSIS W/O CC	.5391	2.2	2.7
134 ...	05	MED	HYPERTENSION	.5785	2.8	3.6
135 ...	05	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W CC	.8331	3.4	4.5
136 ...	05	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W/O CC	.5732	2.4	3.1
137 ...	05	MED	*CARDIAC CONGENITAL & VALVULAR DISORDERS AGE 0–17	.8125	3.3	3.3
138 ...	05	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W CC	.7960	3.2	4.2
139 ...	05	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	.4979	2.2	2.7
140 ...	05	MED	ANGINA PECTORIS	.6036	2.6	3.2
141 ...	05	MED	SYNCOPE & COLLAPSE W CC	.6998	3.1	4.1
142 ...	05	MED	SYNCOPE & COLLAPSE W/O CC	.5220	2.3	2.9
143 ...	05	MED	CHEST PAIN	.5193	1.9	2.4
144 ...	05	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W CC	1.0902	3.9	5.4
145 ...	05	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC	.6397	2.3	3.0
146 ...	06	SURG	RECTAL RESECTION W CC	2.7395	9.3	10.5
147 ...	06	SURG	RECTAL RESECTION W/O CC	1.5895	6.3	6.9
148 ...	06	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W CC	3.3879	10.6	12.6
149 ...	06	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1.5505	6.5	7.1
150 ...	06	SURG	PERITONEAL ADHESIOLYSIS W CC	2.7137	9.1	11.1
151 ...	06	SURG	PERITONEAL ADHESIOLYSIS W/O CC	1.2634	4.9	6.1
152 ...	06	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W CC	1.9120	7.2	8.5
153 ...	06	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1.1591	5.2	5.8
154 ...	06	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W CC.	4.1799	10.8	14.1
155 ...	06	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC.	1.3360	3.9	5.0
156 ...	06	SURG	*STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0–17	.8368	6.0	6.0
157 ...	06	SURG	ANAL & STOMAL PROCEDURES W CC	1.1844	4.0	5.6
158 ...	06	SURG	ANAL & STOMAL PROCEDURES W/O CC	.6286	2.2	2.8
159 ...	06	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W CC.	1.2556	3.8	5.1
160 ...	06	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC.	.7189	2.3	2.8
161 ...	06	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W CC	1.0571	3.0	4.2
162 ...	06	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W/O CC	.5897	1.7	2.1
163 ...	06	SURG	HERNIA PROCEDURES AGE 0–17	.8538	3.1	4.7
164 ...	06	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W CC	2.3460	7.5	8.7
165 ...	06	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	1.2284	4.7	5.4

TABLE 5.—LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC AND ARITHMETIC MEAN LENGTH—Continued

				Relative weights	Geometric mean LOS	Arithmetic mean LOS
166 ...	06	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W CC	1.4655	4.3	5.4
167 ...	06	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	.8352	2.5	3.0
168 ...	03	SURG	MOUTH PROCEDURES W CC	1.1152	3.2	4.7
169 ...	03	SURG	MOUTH PROCEDURES W/O CC	.6870	2.0	2.5
170 ...	06	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W CC	2.7585	8.1	11.8
171 ...	06	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC	1.1221	3.7	5.1
172 ...	06	MED	DIGESTIVE MALIGNANCY W CC	1.2870	5.3	7.4
173 ...	06	MED	DIGESTIVE MALIGNANCY W/O CC	.6749	2.8	3.9
174 ...	06	MED	G.I. HEMORRHAGE W CC	.9939	4.1	5.2
175 ...	06	MED	G.I. HEMORRHAGE W/O CC	.5383	2.7	3.2
176 ...	06	MED	COMPLICATED PEPTIC ULCER	1.1050	4.5	5.8
177 ...	06	MED	UNCOMPLICATED PEPTIC ULCER W CC	.8584	3.8	4.7
178 ...	06	MED	UNCOMPLICATED PEPTIC ULCER W/O CC	.6255	2.8	3.3
179 ...	06	MED	INFLAMMATORY BOWEL DISEASE	1.1142	5.2	6.7
180 ...	06	MED	G.I. OBSTRUCTION W CC	.9167	4.4	5.7
181 ...	06	MED	G.I. OBSTRUCTION W/O CC	.5208	3.1	3.7
182 ...	06	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W CC.	.7684	3.5	4.6
183 ...	06	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC.	.5513	2.6	3.2
184 ...	06	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0–17	.5679	2.7	3.7
185 ...	03	MED	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17.	.8431	3.5	4.8
186 ...	03	MED	*DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE 0–17.	.3190	2.9	2.9
187 ...	03	MED	DENTAL EXTRACTIONS & RESTORATIONS	.7018	3.0	3.9
188 ...	06	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W CC	1.0732	4.3	5.8
189 ...	06	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC	.5484	2.5	3.4
190 ...	06	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0–17	.8567	3.2	4.9
191 ...	07	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W CC	4.3141	11.1	14.9
192 ...	07	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC	1.6937	5.6	7.1
193 ...	07	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W CC.	3.2686	10.6	12.9
194 ...	07	SURG	BILIARY TRACT PROC EXCEPT ONLY CHOLECYST W OR W/O C.D.E. W/O CC.	1.6529	5.9	7.4
195 ...	07	SURG	CHOLECYSTECTOMY W C.D.E. W CC	2.7190	8.2	9.8
196 ...	07	SURG	CHOLECYSTECTOMY W C.D.E. W/O CC	1.6123	5.5	6.3
197 ...	07	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W CC	2.3145	7.2	8.7
198 ...	07	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC.	1.1753	4.1	4.7
199 ...	07	SURG	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	2.3537	7.9	10.7
200 ...	07	SURG	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR NON–MALIGNANCY.	3.0792	7.6	11.4
201 ...	07	SURG	OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES	3.3934	11.0	15.0
202 ...	07	MED	CIRRHOSIS & ALCOHOLIC HEPATITIS	1.3281	5.3	7.1
203 ...	07	MED	MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS	1.2603	5.2	7.2
204 ...	07	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	1.2126	4.9	6.4
205 ...	07	MED	DISORDERS OF LIVER EXCEPT MALIG, CIRR, ALC HEPA W CC	1.2165	5.0	6.8
206 ...	07	MED	DISORDERS OF LIVER EXCEPT MALIG, CIRR, ALC HEPA W/O CC	.6588	3.2	4.2
207 ...	07	MED	DISORDERS OF THE BILIARY TRACT W CC	1.0526	4.1	5.4
208 ...	07	MED	DISORDERS OF THE BILIARY TRACT W/O CC	.6065	2.4	3.0
209 ...	08	SURG	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF LOWER EXTREMITY.	2.2348	5.3	5.9
210 ...	08	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W CC	1.8260	6.5	7.6
211 ...	08	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC.	1.2523	5.0	5.6
212 ...	08	SURG	*HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0–17	1.1668	11.1	11.1
213 ...	08	SURG	AMPUTATION FOR MUSCULOSKELETAL SYSTEM & CONN TISSUE DISORDERS.	1.6483	6.3	8.7
214 ...	08	SURG	NO LONGER VALID	.0000	.0	.0
215 ...	08	SURG	NO LONGER VALID	.0000	.0	.0
216 ...	08	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE.	2.0988	7.4	10.3
217 ...	08	SURG	WND DEBRID & SKN GRFT EXCEPT HAND, FOR MUSCSKELET & CONN TISS DIS.	2.7938	9.2	13.7
218 ...	08	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W CC.	1.4542	4.4	5.6
219 ...	08	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE >17 W/O CC.	.9619	2.9	3.4

TABLE 5.—LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC AND ARITHMETIC MEAN LENGTH—Continued

				Relative weights	Geometric mean LOS	Arithmetic mean LOS
220 ...	08	SURG	*LOWER EXTREM & HUMER PROC EXCEPT HIP, FOOT, FEMUR AGE 0–17.	.5796	5.3	5.3
221 ...	08	SURG	NO LONGER VALID	.0000	.0	.0
222 ...	08	SURG	NO LONGER VALID	.0000	.0	.0
223 ...	08	SURG	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC W CC.	.9015	2.1	2.7
224 ...	08	SURG	SHOULDER, ELBOW OR FOREARM PROC, EXC MAJOR JOINT PROC, W/O CC.	.7474	1.8	2.1
225 ...	08	SURG	FOOT PROCEDURES	1.0149	3.1	4.6
226 ...	08	SURG	SOFT TISSUE PROCEDURES W CC	1.4061	4.1	6.3
227 ...	08	SURG	SOFT TISSUE PROCEDURES W/O CC	.7715	2.2	2.9
228 ...	08	SURG	MAJOR THUMB OR JOINT PROC, OR OTH HAND OR WRIST PROC W CC.	.9539	2.3	3.5
229 ...	08	SURG	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC	.6695	1.8	2.4
230 ...	08	SURG	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR.	1.1279	3.3	5.0
231 ...	08	SURG	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES EXCEPT HIP & FEMUR.	1.2689	3.1	4.8
232 ...	08	SURG	ARTHROSCOPY	1.0599	2.5	4.2
233 ...	08	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W CC.	2.0155	5.7	8.3
234 ...	08	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC.	1.1072	2.9	3.9
235 ...	08	MED	FRACTURES OF FEMUR	.7709	4.2	5.9
236 ...	08	MED	FRACTURES OF HIP & PELVIS	.7341	4.3	5.7
237 ...	08	MED	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	.5909	3.2	4.2
238 ...	08	MED	OSTEOMYELITIS	1.3362	7.0	9.4
239 ...	08	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN TISS MALIGNANCY.	.9851	5.3	7.0
240 ...	08	MED	CONNECTIVE TISSUE DISORDERS W CC	1.2071	5.1	7.0
241 ...	08	MED	CONNECTIVE TISSUE DISORDERS W/O CC	.5873	3.3	4.2
242 ...	08	MED	SEPTIC ARTHRITIS	1.0548	5.5	7.2
243 ...	08	MED	MEDICAL BACK PROBLEMS	.7157	4.0	5.1
244 ...	08	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W CC	.7167	4.0	5.4
245 ...	08	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W/O CC	.5014	3.0	4.0
246 ...	08	MED	NON–SPECIFIC ARTHROPATHIES	.5737	3.4	4.3
247 ...	08	MED	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE.	.5575	2.8	3.7
248 ...	08	MED	TENDONITIS, MYOSITIS & BURSITIS	.7414	3.7	5.0
249 ...	08	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	.6524	2.7	3.9
250 ...	08	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W CC	.6984	3.4	4.7
251 ...	08	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC.	.4527	2.3	3.0
252 ...	08	MED	*FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE 0–17	.2518	1.8	1.8
253 ...	08	MED	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 W CC.	.7245	3.9	5.3
254 ...	08	MED	FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE >17 W/O CC.	.4343	2.8	3.5
255 ...	08	MED	*FX, SPRN, STRN & DISL OF UPARM, LOWLEG EX FOOT AGE 0–17	.2932	2.9	2.9
256 ...	08	MED	OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES.	.7779	3.9	5.7
257 ...	09	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W CC	.9273	2.6	3.2
258 ...	09	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC	.7158	2.0	2.3
259 ...	09	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W CC	.8870	2.1	3.2
260 ...	09	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC	.6083	1.4	1.7
261 ...	09	SURG	BREAST PROC FOR NON–MALIGNANCY EXCEPT BIOPSY & LOCAL EXCISION.	.8980	1.8	2.2
262 ...	09	SURG	BREAST BIOPSY & LOCAL EXCISION FOR NON–MALIGNANCY	.7883	2.6	4.0
263 ...	09	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W CC	2.0240	8.9	12.5
264 ...	09	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC.	1.0809	5.4	7.3
265 ...	09	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W CC.	1.4947	4.6	7.1
266 ...	09	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC.	.7880	2.6	3.6
267 ...	09	SURG	PERIANAL & PILONIDAL PROCEDURES	.8551	2.7	4.2
268 ...	09	SURG	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES	1.0173	2.4	3.6
269 ...	09	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W CC	1.5805	5.9	8.5
270 ...	09	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W/O CC	.7083	2.2	3.2
271 ...	09	MED	SKIN ULCERS	1.0344	6.0	7.7

TABLE 5.—LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC AND ARITHMETIC MEAN LENGTH—Continued

				Relative weights	Geometric mean LOS	Arithmetic mean LOS
272 ...	09	MED	MAJOR SKIN DISORDERS W CC	.9940	5.1	6.7
273 ...	09	MED	MAJOR SKIN DISORDERS W/O CC	.6713	4.0	5.4
274 ...	09	MED	MALIGNANT BREAST DISORDERS W CC	1.1158	4.9	7.2
275 ...	09	MED	MALIGNANT BREAST DISORDERS W/O CC	.5823	2.4	3.8
276 ...	09	MED	NON–MALIGANT BREAST DISORDERS	.6170	3.8	4.7
277 ...	09	MED	CELLULITIS AGE >17 W CC	.8374	5.1	6.2
278 ...	09	MED	CELLULITIS AGE >17 W/O CC	.5629	4.0	4.8
279 ...	09	MED	*CELLULITIS AGE 0–17	.7304	4.2	4.2
280 ...	09	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W CC	.6748	3.5	4.7
281 ...	09	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	.4539	2.5	3.4
282 ...	09	MED	*TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE 0–17	.2549	2.2	2.2
283 ...	09	MED	MINOR SKIN DISORDERS W CC	.6927	3.8	5.0
284 ...	09	MED	MINOR SKIN DISORDERS W/O CC	.4355	2.7	3.5
285 ...	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE, NUTRIT, & METABOL DISORDERS.	2.1559	8.8	12.1
286 ...	10	SURG	ADRENAL & PITUITARY PROCEDURES	2.2472	5.7	7.2
287 ...	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DISORDERS.	1.8821	8.6	12.1
288 ...	10	SURG	O.R. PROCEDURES FOR OBESITY	1.9792	4.8	5.9
289 ...	10	SURG	PARATHYROID PROCEDURES	.9793	2.4	3.5
290 ...	10	SURG	THYROID PROCEDURES	.8990	2.0	2.6
291 ...	10	SURG	THYROGLOSSAL PROCEDURES	.7362	1.7	2.2
292 ...	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W CC	2.5540	7.6	11.2
293 ...	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC	1.2228	4.0	5.9
294 ...	10	MED	DIABETES AGE >35	.7562	4.0	5.3
295 ...	10	MED	DIABETES AGE 0–35	.7347	3.2	4.1
296 ...	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W CC	.8655	4.3	5.8
297 ...	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W/O CC	.5200	3.0	3.9
298 ...	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0–17	.4116	2.0	2.5
299 ...	10	MED	INBORN ERRORS OF METABOLISM	.8645	3.9	5.5
300 ...	10	MED	ENDOCRINE DISORDERS W CC	1.0787	5.1	6.6
301 ...	10	MED	ENDOCRINE DISORDERS W/O CC	.5928	3.1	4.4
302 ...	11	SURG	KIDNEY TRANSPLANT	3.7056	9.2	11.0
303 ...	11	SURG	KIDNEY, URETER & MAJOR BLADDER PROCEDURES FOR NEOPLASM.	2.6067	7.8	9.5
304 ...	11	SURG	KIDNEY, URETER & MAJOR BLADDER PROC FOR NON–NEOPL W CC.	2.3912	6.9	9.6
305 ...	11	SURG	KIDNEY, URETER & MAJOR BLADDER PROC FOR NON–NEOPL W/O CC.	1.1690	3.4	4.3
306 ...	11	SURG	PROSTATECTOMY W CC	1.2212	4.0	5.8
307 ...	11	SURG	PROSTATECTOMY W/O CC	.6495	2.1	2.5
308 ...	11	SURG	MINOR BLADDER PROCEDURES W CC	1.5142	4.3	6.4
309 ...	11	SURG	MINOR BLADDER PROCEDURES W/O CC	.8733	2.1	2.6
310 ...	11	SURG	TRANSURETHRAL PROCEDURES W CC	1.0253	3.0	4.3
311 ...	11	SURG	TRANSURETHRAL PROCEDURES W/O CC	.5867	1.7	2.1
312 ...	11	SURG	URETHRAL PROCEDURES, AGE >17 W CC	.9770	3.1	4.7
313 ...	11	SURG	URETHRAL PROCEDURES, AGE >17 W/O CC	.5799	1.8	2.3
314 ...	11	SURG	*URETHRAL PROCEDURES, AGE 0–17	.4912	2.3	2.3
315 ...	11	SURG	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	2.0639	4.9	8.6
316 ...	11	MED	RENAL FAILURE	1.3100	5.1	7.1
317 ...	11	MED	ADMIT FOR RENAL DIALYSIS	.5551	2.0	2.9
318 ...	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W CC	1.1589	4.7	6.7
319 ...	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W/O CC	.5851	2.0	2.8
320 ...	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W CC	.8796	4.7	5.9
321 ...	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W/O CC	.5864	3.6	4.3
322 ...	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE 0–17	.5236	3.3	4.1
323 ...	11	MED	URINARY STONES W CC, &/OR ESW LITHOTRIPSY	.7559	2.5	3.4
324 ...	11	MED	URINARY STONES W/O CC	.4306	1.7	2.0
325 ...	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W CC	.6224	3.1	4.2
326 ...	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC	.4206	2.3	2.9
327 ...	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0–17	.3394	2.3	3.5
328 ...	11	MED	URETHRAL STRICTURE AGE >17 W CC	.6891	2.9	3.9
329 ...	11	MED	URETHRAL STRICTURE AGE >17 W/O CC	.5050	1.9	2.3
330 ...	11	MED	*URETHRAL STRICTURE AGE 0–17	.3164	1.6	1.6
331 ...	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W CC	.9985	4.4	5.9
332 ...	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W/O CC	.5845	2.6	3.5
333 ...	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0–17	.8999	4.0	5.7
334 ...	12	SURG	MAJOR MALE PELVIC PROCEDURES W CC	1.6387	4.8	5.4
335 ...	12	SURG	MAJOR MALE PELVIC PROCEDURES W/O CC	1.2197	3.7	4.1
336 ...	12	SURG	TRANSURETHRAL PROSTATECTOMY W CC	.8893	2.9	3.8

TABLE 5.—LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC AND ARITHMETIC MEAN LENGTH—Continued

				Relative weights	Geometric mean LOS	Arithmetic mean LOS
337 ...	12	SURG	TRANSURETHRAL PROSTATECTOMY W/O CC	.6159	2.1	2.4
338 ...	12	SURG	TESTES PROCEDURES, FOR MALIGNANCY	1.0997	3.3	5.1
339 ...	12	SURG	TESTES PROCEDURES, NON–MALIGNANCY AGE >17	1.0073	3.1	4.6
340 ...	12	SURG	*TESTES PROCEDURES, NON–MALIGNANCY AGE 0–17	.2813	2.4	2.4
341 ...	12	SURG	PENIS PROCEDURES	1.1129	2.2	3.1
342 ...	12	SURG	CIRCUMCISION AGE >17	.8680	3.0	4.2
343 ...	12	SURG	*CIRCUMCISION AGE 0–17	.1528	1.7	1.7
344 ...	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY.	1.0265	2.1	3.1
345 ...	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY.	.8547	2.7	3.8
346 ...	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W CC	.9554	4.5	6.3
347 ...	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC	.4682	2.2	3.0
348 ...	12	MED	BENIGN PROSTATIC HYPERTROPHY W CC	.6954	3.3	4.5
349 ...	12	MED	BENIGN PROSTATIC HYPERTROPHY W/O CC	.4196	2.1	2.7
350 ...	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	.6801	3.8	4.6
351 ...	12	MED	*STERILIZATION, MALE	.2345	1.3	1.3
352 ...	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	.6210	2.8	3.9
353 ...	13	SURG	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY.	2.1041	6.4	8.3
354 ...	13	SURG	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W CC.	1.4944	5.0	6.0
355 ...	13	SURG	UTERINE, ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC.	.9167	3.4	3.6
356 ...	13	SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES.	.7715	2.5	2.8
357 ...	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY.	2.4197	7.6	9.3
358 ...	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W CC	1.2028	3.8	4.5
359 ...	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	.8469	2.9	3.1
360 ...	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES	.8713	2.7	3.3
361 ...	13	SURG	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	1.1804	2.6	3.7
362 ...	13	SURG	*ENDOSCOPIC TUBAL INTERRUPTION	.2998	1.4	1.4
363 ...	13	SURG	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	.7470	2.6	3.5
364 ...	13	SURG	D&C, CONIZATION EXCEPT FOR MALIGNANCY	.7020	2.5	3.5
365 ...	13	SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1.7123	4.7	7.2
366 ...	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W CC	1.1898	4.9	7.1
367 ...	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	.5347	2.1	2.9
368 ...	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	.9733	5.0	6.3
369 ...	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS.	.5386	2.5	3.4
370 ...	14	SURG	CESAREAN SECTION W CC	1.0660	4.3	5.6
371 ...	14	SURG	CESAREAN SECTION W/O CC	.7057	3.3	3.6
372 ...	14	MED	VAGINAL DELIVERY W COMPLICATING DIAGNOSES	.5552	2.4	3.1
373 ...	14	MED	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	.3954	1.7	2.0
374 ...	14	SURG	VAGINAL DELIVERY W STERILIZATION &/OR D&C	.7814	2.3	2.9
375 ...	14	SURG	*VAGINAL DELIVERY W O.R. PROC EXCEPT STERIL &/OR D&C	.6804	4.4	4.4
376 ...	14	MED	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE.	.4882	2.4	3.3
377 ...	14	SURG	POSTPARTUM & POST ABORTION DIAGNOSES W O.R. PROCEDURE.	1.0654	2.6	4.1
378 ...	14	MED	ECTOPIC PREGNANCY	.8186	2.3	2.7
379 ...	14	MED	THREATENED ABORTION	.4021	2.1	3.0
380 ...	14	MED	ABORTION W/O D&C	.3424	1.5	1.8
381 ...	14	SURG	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	.4595	1.6	2.2
382 ...	14	MED	FALSE LABOR	.2107	1.2	1.3
383 ...	14	MED	OTHER ANTEPARTUM DIAGNOSES W MEDICAL COMPLICATIONS	.4596	2.8	3.8
384 ...	14	MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	.3659	2.0	2.9
385 ...	15		*NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY.	1.3655	1.8	1.8
386 ...	15		*EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE.	4.5029	17.9	17.9
387 ...	15		*PREMATURITY W MAJOR PROBLEMS	3.0754	13.3	13.3
388 ...	15		*PREMATURITY W/O MAJOR PROBLEMS	1.8556	8.6	8.6
389 ...	15		FULL TERM NEONATE W MAJOR PROBLEMS	1.4625	5.1	6.3
390 ...	15		*NEONATE W OTHER SIGNIFICANT PROBLEMS	1.3048	3.4	3.4
391 ...	15		* NORMAL NEWBORN	.1514	3.1	3.1
392 ...	16	SURG	SPLENECTOMY AGE >17	3.1584	8.1	10.6
393 ...	16	SURG	*SPLENECTOMY AGE 0–17	1.3376	9.1	9.1

TABLE 5.—LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC AND ARITHMETIC MEAN LENGTH—Continued

				Relative weights	Geometric mean LOS	Arithmetic mean LOS
394 ...	16	SURG	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS.	1.6297	4.5	7.4
395 ...	16	MED	RED BLOOD CELL DISORDERS AGE >17	.8191	3.6	5.0
396 ...	16	MED	RED BLOOD CELL DISORDERS AGE 0–17	.6302	2.7	4.1
397 ...	16	MED	COAGULATION DISORDERS	1.2694	4.2	5.8
398 ...	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W CC	1.2233	4.9	6.3
399 ...	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	.6859	3.2	4.0
400 ...	17	SURG	LYMPHOMA & LEUKEMIA W MAJOR O.R. PROCEDURE	2.6206	6.3	9.7
401 ...	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W CC	2.5614	8.1	11.7
402 ...	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA W OTHER O.R. PROC W/O CC.	1.0130	2.9	4.2
403 ...	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W CC	1.6930	6.0	8.6
404 ...	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	.7928	3.3	4.6
405 ...	17		*ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE 0–17	1.8964	4.9	4.9
406 ...	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W CC.	2.5952	7.2	10.0
407 ...	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W MAJ O.R. PROC W/O CC.	1.1430	3.5	4.4
408 ...	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL W OTHER O.R. PROC.	1.7314	4.8	7.7
409 ...	17	MED	RADIOTHERAPY	.9545	4.3	5.9
410 ...	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS.	.7957	2.6	3.4
411 ...	17	MED	HISTORY OF MALIGNANCY W/O ENDOSCOPY	.4403	1.8	2.3
412 ...	17	MED	HISTORY OF MALIGNANCY W ENDOSCOPY	.5176	2.4	3.4
413 ...	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W CC	1.3771	5.7	8.0
414 ...	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	.7072	3.2	4.6
415 ...	18	SURG	O.R. PROCEDURE FOR INFECTIOUS & PARASITIC DISEASES	3.5212	10.9	14.9
416 ...	18	MED	SEPTICEMIA AGE >17	1.4832	5.8	7.7
417 ...	18	MED	SEPTICEMIA AGE 0–17	.7530	3.3	4.4
418 ...	18	MED	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	.9666	5.0	6.3
419 ...	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W CC	.8810	4.1	5.3
420 ...	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC	.6040	3.2	4.0
421 ...	18	MED	VIRAL ILLNESS AGE >17	.7063	3.3	4.2
422 ...	18	MED	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0–17	.5308	2.7	3.9
423 ...	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	1.5656	5.8	7.9
424 ...	19	SURG	O.R. PROCEDURE W PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	2.4655	9.9	16.9
425 ...	19	MED	ACUTE ADJUST REACT & DISTURBANCES OF PSYCHOSOCIAL DYSFUNCTION.	.6861	3.2	4.4
426 ...	19	MED	DEPRESSIVE NEUROSES	.5648	3.7	5.2
427 ...	19	MED	NEUROSES EXCEPT DEPRESSIVE	.5805	3.6	5.3
428 ...	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	.6946	4.9	7.6
429 ...	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	.8713	5.4	7.9
430 ...	19	MED	PSYCHOSES	.8101	6.5	9.1
431 ...	19	MED	CHILDHOOD MENTAL DISORDERS	.8425	5.5	8.9
432 ...	19	MED	OTHER MENTAL DISORDER DIAGNOSES	.7654	3.7	5.8
433 ...	20		ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	.3037	2.4	3.3
434 ...	20		ALC/DRUG ABUSE OR DEPEND, DETOX OR OTH SYMPT TREAT W CC.	.6852	4.0	5.3
435 ...	20		ALC/DRUG ABUSE OR DEPEND, DETOX OR OTH SYMPT TREAT W/O CC.	.3987	3.6	4.5
436 ...	20		ALC/DRUG DEPENDENCE W REHABILITATION THERAPY	.8107	11.5	14.0
437 ...	20		ALC/DRUG DEPENDENCE, COMBINED REHAB & DETOX THERAPY	.7364	8.3	9.9
438 ...	.....		NO LONGER VALID	.0000	.0	.0
439 ...	21	SURG	SKIN GRAFTS FOR INJURIES	1.6308	5.4	8.5
440 ...	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES	1.8261	6.0	9.5
441 ...	21	SURG	HAND PROCEDURES FOR INJURIES	.9319	2.2	3.5
442 ...	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W CC	2.1794	5.4	8.3
443 ...	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W/O CC	.9109	2.5	3.4
444 ...	21	MED	TRAUMATIC INJURY AGE >17 W CC	.6988	3.7	4.8
445 ...	21	MED	TRAUMATIC INJURY AGE >17 W/O CC	.4849	2.6	3.7
446 ...	21	MED	*TRAUMATIC INJURY AGE 0–17	.2940	2.4	2.4
447 ...	21	MED	ALLERGIC REACTIONS AGE >17	.4932	2.0	2.6
448 ...	21	MED	ALLERGIC REACTIONS AGE 0–17	.0952	1.0	1.0
449 ...	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W CC	.7859	2.8	4.0
450 ...	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	.4416	1.7	2.3
451 ...	21	MED	*POISONING & TOXIC EFFECTS OF DRUGS AGE 0–17	.2611	2.1	2.1
452 ...	21	MED	COMPLICATIONS OF TREATMENT W CC	.9475	3.7	5.2
453 ...	21	MED	COMPLICATIONS OF TREATMENT W/O CC	.4946	2.3	3.1
454 ...	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W CC	.9026	3.3	5.2

TABLE 5.—LIST OF DIAGNOSIS RELATED GROUPS (DRGS), RELATIVE WEIGHTING FACTORS, GEOMETRIC AND ARITHMETIC MEAN LENGTH—Continued

				Relative weights	Geometric mean LOS	Arithmetic mean LOS
455 ...	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC	.4431	2.0	2.8
456 ...	22		BURNS, TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	1.7408	3.7	7.3
457 ...	22	MED	EXTENSIVE BURNS W/O O.R. PROCEDURE	1.5647	2.5	4.9
458 ...	22	SURG	NON–EXTENSIVE BURNS W SKIN GRAFT	3.5516	11.1	16.0
459 ...	22	SURG	NON–EXTENSIVE BURNS W WOUND DEBRIDEMENT OR OTHER O.R. PROC.	1.5555	6.5	9.3
460 ...	22	MED	NON–EXTENSIVE BURNS W/O O.R. PROCEDURE	.9464	4.4	6.3
461 ...	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT W HEALTH SERVICES.	1.0082	2.5	4.6
462 ...	23	MED	REHABILITATION	1.3997	10.5	13.1
463 ...	23	MED	SIGNS & SYMPTOMS W CC	.6904	3.6	4.8
464 ...	23	MED	SIGNS & SYMPTOMS W/O CC	.4855	2.7	3.4
465 ...	23	MED	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS.	.5882	2.2	3.8
466 ...	23	MED	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS.	.6265	2.6	4.7
467 ...	23	MED	OTHER FACTORS INFLUENCING HEALTH STATUS	.4641	2.3	4.2
468 ...	.....		EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS.	3.6128	9.9	14.1
469 ...	.....		**PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS	.0000	.0	.0
470 ...	.....		**UNGROUPABLE	.0000	.0	.0
471 ...	08	SURG	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY.	3.4694	5.8	6.7
472 ...	22	SURG	EXTENSIVE BURNS W O.R. PROCEDURE	10.2511	11.7	23.9
473 ...	17		ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE >17	3.4633	7.9	13.6
474 ...	.....		NO LONGER VALID.	0000	.0	.0
475 ...	04	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT	3.7349	8.2	11.6
476 ...	.....	SURG	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS.	2.2284	9.5	12.6
477 ...	.....	SURG	NON–EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS.	1.7434	5.5	8.6
478 ...	05	SURG	OTHER VASCULAR PROCEDURES W CC	2.3179	5.2	7.7
479 ...	05	SURG	OTHER VASCULAR PROCEDURES W/O CC	1.4148	3.2	4.2
480 ...	.....	SURG	LIVER TRANSPLANT	10.6265	18.7	24.2
481 ...	.....	SURG	BONE MARROW TRANSPLANT	11.1194	26.3	29.9
482 ...	.....	SURG	TRACHEOSTOMY FOR FACE, MOUTH & NECK DIAGNOSES	3.5738	10.5	13.5
483 ...	.....	SURG	TRACHEOSTOMY EXCEPT FOR FACE, MOUTH & NECK DIAGNOSES	15.9340	33.7	43.3
484 ...	24	SURG	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	5.7304	10.6	15.3
485 ...	24	SURG	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TR.	3.0798	8.2	10.4
486 ...	24	SURG	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	4.8508	8.8	13.4
487 ...	24	MED	OTHER MULTIPLE SIGNIFICANT TRAUMA	2.0089	5.9	8.3
488 ...	25	SURG	HIV W EXTENSIVE O.R. PROCEDURE	4.4739	12.0	17.8
489 ...	25	MED	HIV W MAJOR RELATED CONDITION	1.7916	6.7	9.8
490 ...	25	MED	HIV W OR W/O OTHER RELATED CONDITION	.9930	4.2	6.0
491 ...	08	SURG	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY.	1.6585	3.3	3.9
492 ...	17	MED	CHEMOTHERAPY W ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS.	4.6072	11.8	17.9
493 ...	07	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W CC	1.7593	4.1	5.7
494 ...	07	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	.9434	1.8	2.4
495 ...	.....	SURG	LUNG TRANSPLANT	9.0199	14.4	17.4
496 ...	08	SURG	COMBINED ANTERIOR/POSTERIOR SPINAL FUSION	5.4752	9.2	11.5
497 ...	08	SURG	SPINAL FUSION W CC	2.7641	5.3	6.8
498 ...	08	SURG	SPINAL FUSION W/O CC	1.6140	3.1	3.7
499 ...	08	SURG	BACK & NECK PROCS EXCEPT SPINAL FUSION W CC	1.4825	4.1	5.3
500 ...	08	SURG	BACK & NECK PROCS EXCEPT SPINAL FUSION W/O CC	.9704	2.6	3.1
501 ...	08	SURG	KNEE PROC W PRINCIPAL DIAGNOSIS OF INFECTION W CC	2.3780	8.1	10.4
502 ...	08	SURG	KNEE PROC W PRINCIPAL DIAGNOSIS OF INFECTION W/O CC	1.4616	4.1	5.3
503 ...	08	SURG	KNEE PROCEDURES W/O PRINCIPAL DIAGNOSIS OF INFECTION	.9891	2.7	3.4

*Medicare data have been supplemented by data from 19 states for low volume DRGs.
**DRGS 469 and 470 contain cases which could not be assigned to valid DRGs.
Note: Geometric mean is used only to determine payment for transfer cases.
Note: Arithmetic mean is used only to determine payment for outlier cases.
Note: Relative weights are based on Medicare patient data and may not be appropriate for other patients.

TABLE 6A.—NEW DIAGNOSIS CODES

Diagnosis code	Description	CC	MDC	DRG
007.4	Other protozoal intestinal diseases, cryptosporidiosis	N	6	182, 183, 184
031.2	Disease due to disseminated mycobacterium avium-intracellulare complex (DMAC).	N	18 25	423 489 [1]
038.10	Staphylococcal septicemia, unspecified	Y	15 18 25	387, 389 [2] 416, 417 489[1]
038.11	Staphylococcus aureus septicemia	Y	15 18 25	387, 389 [2] 416, 417 489[1]
038.19	Other staphylococcal septicemia	Y	15 18 25	387, 389 [2] 416,417 489[1]
275.40	Unspecified disorder of calcium metabolism	N	10	296, 297, 298
275.41	Hypocalcemia	N	10	296, 297, 298
275.42	Hypercalcemia	N	10	296, 297, 298
275.49	Other disorder of calcium metabolism	N	10	296, 297, 298
438.0	Late effect of cerebrovascular disease, cognitive deficits	N	1	12
438.10	Late effect of cerebrovascular disease, speech and language deficits, unspecified..	N	1	12
438.11	Late effect of cerebrovascular disease, speech and language deficits, aphasia.	N	1	12
438.12	Late effect of cerebrovascular disease, speech and language deficits, dysphasia.	N	1	12
438.19	Late effect of cerebrovascular disease, other speech and language deficits.	N	1	12
438.20	Late effect of cerebrovascular disease, hemiplegia affecting unspecified side.	N	1	12
438.21	Late effect of cerebrovascular disease, hemiplegia affecting dominant side.	N	1	12
438.22	Late effect of cerebrovascular disease, hemiplegia affecting nondominant side.	N	1	12
438.30	Late effect of cerebrovascular disease, monoplegia of upper limb affecting unspecified side.	N	1	12
438.31	Late effect of cerebrovascular disease, monoplegia of upper limb affecting dominant side.	N	1	12
438.32	Late effect of cerebrovascular disease, monoplegia of upper limb affecting nondominant side.	N	1	12
438.40	Late effect of cerebrovascular disease, monoplegia of lower limb affecting unspecified side.	N	1	12
438.41	Late effect of cerebrovascular disease, monoplegia of lower limb affecting dominant side.	N	1	12
438.42	Late effect of cerebrovascular disease, monoplegia of lower limb affecting nondominant side.	N	1	12
438.50	Late effect of cerebrovascular disease, other paralytic syndrome affecting unspecified side.	N	1	12
438.51	Late effect of cerebrovascular disease, other paralytic syndrome affecting dominant side.	N	1	12
438.52	Late effect of cerebrovascular disease, other paralytic syndrome affecting nondominant side.	N	1	12
438.81	Other late effect of cerebrovascular disease, apraxia	N	1	12
438.82	Other late effect of cerebrovascular disease, dysphagia	N	1	12
438.89	Other late effects of cerebrovascular disease	N	1	12
438.9	Unspecified late effects of cerebrovascular disease	N	1	12
458.8	Other specified hypotension	N	5	144, 145
474.00	Chronic tonsillitis	N	pre 3	482 68, 69, 70
474.01	Chronic adenoiditis	N	pre 3	482 68, 69, 70
474.02	Chronic tonsillitis and adenoiditis	N	pre 3	482 68, 69, 70
482.84	Legionnaires' disease	Y	4	79, 80, 81
518.6	Allergic bronchopulmonary aspergillosis	Y	4	92, 93
655.70	Decreased fetal movements unspecified as to episode of care or not applicable.	N	14	469
655.71	Decreased fetal movements delivered, with or without mention of antepartum condition.	N	14	370, 371, 372, 373, 374, 375
655.73	Decreased fetal movements antepartum condition or complication	N	14	383, 384
686.00	Other local infection of skin and subcutaneous tissue, pyoderma, unspecified.	N	9	277, 278, 279

TABLE 6A.—NEW DIAGNOSIS CODES—Continued

Diagnosis code	Description	CC	MDC	DRG
686.01	Other local infection of skin and subcutaneous tissue, pyoderma gangrenosum.	N	9	277, 278, 279
686.09	Other local infection of skin and subcutaneous tissue, other pyoderma	N	9	277, 278, 279
756.70	Congenital anomaly of abdominal wall, unspecified	N	6	188, 189, 190
756.71	Congenital anomaly of abdominal wall, prune belly syndrome	N	6	188, 189, 190
756.79	Other congenital anomalies of abdominal wall	N	6	188, 189, 190
780.31	Febrile convulsions	Y	1	24, 25, 26
			15	387, 389 [2]
780.39	Other convulsions	Y	1	24, 25, 26
			15	387, 389 [2]
790.94	Other nonspecific findings on examination of blood, euthyroid sick syndrome.	N	23	463, 464
796.5	Abnormal findings on antenatal screening	N	14	383, 384
959.01	Head injury, unspecified	N	pre	482
			21	444, 445, 446
			24	significant trauma list
959.09	Injury of face and neck	N	pre	482
			21	444, 445, 446
			24	significant trauma list
V02.60	Viral hepatitis carrier, unspecified	N	7	205, 206
V02.61	Hepatitis B carrier	N	7	205, 206
V02.62	Hepatitis C carrier	N	7	205, 206
V02.69	Other viral hepatitis carrier	N	7	205, 206
V12.40	Personal history of unspecified disorder of nervous system and sense organs.	N	23	467
V12.41	Personal history of benign neoplasm of the brain	N	23	467
V12.49	Personal history of other disorder of nervous system and sense organs	N	23	467
V16.40	Family history of malignant neoplasm of genital organ, unspecified	N	23	467
V16.41	Family history of malignant neoplasm of ovary	N	23	467
V16.42	Family history of malignant neoplasm of prostate	N	23	467
V16.43	Family history of malignant neoplasm of testis	N	23	467
V16.49	Family history of other malignant neoplasm	N	23	467
V28.6	Antenatal screening for streptococcus B	N	23	467
V42.81	Organ or tissue replaced by transplant, bone marrow	Y	16	398, 399
V42.82	Organ or tissue replaced by transplant, peripheral stem cells	Y	16	398, 399
V42.83	Organ or tissue replaced by transplant, pancreas	Y	7	467
V42.89	Other organ or tissue replaced by transplant	Y	23	467
V45.61	Cataract extraction status	N	23	467
V45.69	Other states following surgery of eye and adnexa	N	23	467
V45.71	Acquired absence of breast	N	23	467
V45.72	Acquired absence of intestine (large (small)	N	23	467
V45.73	Acquired absence of kidney	N	23	467
V53.01	Fitting and adjustment of cerebral ventricular (communicating) shunt	N	23	467
V53.02	Fitting and adjustment of neuropacemaker (brain) (peripheral nerve)(Spinal cord).	N	23	467
V53.09	Fitting and adjustment of other devices related to nervous system and special senses.	N	23	467
V64.4	Laparoscopic surgical procedure converted to open procedure	N	23	467
V76.10	Screening for malignant neoplasm, breast screening, unspecified	N	23	467
V76.11	Screening mammogram for high-risk patient, malignant neoplasm of breast.	N	23	467
V76.12	Other screening mammogram for malignant neoplasm of breast	N	23	467
V76.19	Other screening breast examination for malignant neoplasm	N	23	467

[1] HIV major related condition in this DRG.
[2] Classified as a ''major problem'' in these DRGs.
[3] Classified as a ''major complication'' in this DRG.

TABLE 6B.—NEW PROCEDURE CODES

Procedure code	Description	OR	MDC	DRG
37.35	Partial ventriculectomy	Y	5	108
41.05	Allogeneic hematopoietic stem cell transplant	Y	pre	481
41.06	Cord blood stem cell transplant	Y	pre	481

TABLE 6C.—INVALID DIAGNOSIS CODES

Diagnosis code	Description	CC	MDC	DRG
038.1	Staphylococcal septicemia	Y	15	387, 389 [1]
			18	416, 417
			25	489 [2]
275.4	Disorders of calcium metabolism	N	10	296, 297, 298
438	Late effects of cerebrovascular disease	N	1	12
474.0	Chronic tonsillitis and adenoiditis	N	pre	482
			3	68, 69, 70
686.0	Other local infections of skin and subcutaneous tissue, pyoderma	N	9	277, 278, 279
756.7	Other congenital anomalies of abdominal wall	N	6	188, 189, 190
780.3	Convulsions	Y	1	24, 25, 26
			15	387, 389 [1]
959.0	Injury, other and unspecified of head, face, and neck	N	pre	482
			21	444, 445, 446
			24	significant trauma list
V02.6	Carrier or suspected carrier of viral hepatitis	N	7	205, 206
V12.4	Personal history of disorders of nervous system and sense organs	N	23	467
V16.4	Family history of malignant neoplasm of genital organs	N	23	467
V42.8	Unspecified organ or tissue replaced by transplant	Y	7	205, 206
V45.6	Other postsurgical state following surgery of eye and adnexa	N	23	467
V53.0	Fitting and adjustment of devices related to nervous system and special senses.	N	23	467
V76.1	Special screening for malignant neoplasm of the breast	N	23	467

[1] Classified as a ''major problem'' in these DRGs.
[2] HIV major related condition in this DRG.

TABLE 6D.—REVISED DIAGNOSIS CODE TITLES

Diagnosis code	Description	CC	MDC	DRG
041.04	Streptococcus infection in conditions classified elsewhere and of unspecified site, Group D [Enterococcus].	N	18	423
474.0	Chronic tonsillitis and adenoiditis	N	3	68, 69, 70
959.0	Injury, other and unspecified of head, face, and neck	N	pre	482
			21	444, 445, 446
			24	significant trauma list

TABLE 6E.—ADDITIONS TO THE CC EXCLUSIONS LIST

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CCs that are added to the list are in Table 6E—Additions to the CC Exclusions List. Each of the principal diagnoses is shown with an asterisk, and the revisions to the CC Exclusions List are provided in an indented column immediately following the affected principal diagnosis.

*0031	48284	48284	48284	01176	01354	01643	01771
03810	*01140	*01186	*01795	01180	01355	01644	01772
03811	48284	48284	48284	01181	01356	01645	01773
03819	*01141	*01190	*01796	01182	01360	01646	01774
*0074	48284	48284	48284	01183	01361	01650	01775
00841	*01142	*01191	*0202	01184	01362	01651	01776
00842	48284	48284	03810	01185	01363	01652	01780
00843	*01143	*01192	03811	01186	01364	01653	01781
00844	48284	48284	03819	01190	01365	01654	01782
00845	*01144	*01193	*0212	01191	01366	01655	01783
00846	48284	48284	48284	01192	01380	01656	01784
00847	*01145	*01194	*0310	01193	01381	01660	01785
00849	48284	48284	48284	01194	01382	01661	01786
*01100	*01146	*01195	*0312	01195	01383	01662	01790
48284	48284	48284	01100	01196	01384	01663	01791
*01101	*01150	*01196	01101	01200	01385	01664	01792
48284	48284	48284	01102	01201	01386	01665	01793
*01102	*01151	*01200	01103	01202	01390	01666	01794
48284	48284	48284	01104	01203	01391	01670	01795
*01103	*01152	*01201	01105	01204	01392	01671	01796
48284	48284	48284	01106	01205	01393	01672	01800
*01104	*01153	*01202	01110	01206	01394	01673	01801
48284	48284	48284	01111	01210	01395	01674	01802
*01105	*01154	*01203	01112	01211	01396	01675	01803
48284	48284	48284	01113	01212	01400	01676	01804
*01106	*01155	*01204	01114	01213	01401	01690	01805
48284	48284	48284	01115	01214	01402	01691	01806
*01110	*01156	*01205	01116	01215	01403	01692	01880
48284	48284	48284	01120	01216	01404	01693	01881
*01111	*01160	*01206	01121	01300	01405	01694	01882
48284	48284	48284	01122	01301	01406	01695	01883
*01112	*01161	*01210	01123	01302	01480	01696	01884
48284	48284	48284	01124	01303	01482	01720	01885
*01113	*01162	*01211	01125	01304	01483	01721	01886
48284	48284	48284	01126	01305	01484	01722	01890
*01114	*01163	*01212	01130	01306	01485	01723	01891
48284	48284	48284	01131	01310	01486	01724	01892
*01115	*01164	*01213	01132	01311	01600	01725	01893
48284	48284	48284	01133	01312	01601	01726	01894
*01116	*01165	*01214	01134	01313	01602	01730	01895
48284	48284	48284	01135	01314	01603	01731	01896
*01120	*01166	*01215	01136	01315	01604	01732	0310
48284	48284	48284	01140	01316	01605	01733	*0362
*01121	*01170	*01216	01141	01320	01606	01734	03810
48284	48284	48284	01142	01321	01610	01735	03811
*01122	*01171	*01280	01143	01322	01611	01736	03819
48284	48284	48284	01144	01323	01612	01740	*0380
*01123	*01172	*01281	01145	01324	01613	01741	03810
48284	48284	48284	01146	01325	01614	01742	03811
*01124	*01173	*01282	01150	01326	01615	01743	03819
48284	48284	48284	01151	01330	01616	01744	*03810
*01125	*01174	*01283	01152	01331	01620	01745	0362
48284	48284	48284	01153	01332	01621	01746	0380
*01126	*01175	*01284	01154	01333	01622	01750	03810
48284	48284	48284	01155	01334	01623	01751	03811
*01130	*01176	*01285	01156	01335	01624	01752	03819
48284	48284	48284	01160	01336	01625	01753	0382
*01131	*01180	*01286	01161	01340	01626	01754	0383
48284	48284	48284	01162	01341	01630	01755	03840
*01132	*01181	*01790	01163	01342	01631	01756	03841
48284	48284	48284	01164	01343	01632	01760	03842
*01133	*01182	*01791	01165	01344	01633	01761	03843
48284	48284	48284	01170	01345	01634	01762	03844
*01134	*01183	*01792	01171	01346	01635	01763	03849
48284	48284	48284	01172	01350	01636	01764	0388
*01135	*01184	*01793	01173	01351	01640	01765	0389
48284	48284	48284	01174	01352	01641	01766	0545
*01136	*01185	*01794	01175	01353	01642	01770	*03811

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0362	*0391	03819	*34550	48284	01196	*4838	48284
0380	48284	*04182	78031	*48283	01200	48284	*5078
03810	*04089	03810	78039	48284	01201	*4841	48284
03811	03810	03811	*34551	*48284	01202	48284	*5080
03819	03811	03819	78031	01100	01203	*4843	48284
0382	03819	*04183	78039	01101	01204	48284	*5081
0383	*04100	03810	*34560	01102	01205	*4845	48284
03840	03810	03811	78031	01103	01206	48284	*5088
03841	03811	03819	78039	01104	01210	*4846	48284
03842	03819	*04184	*34561	01105	01211	48284	*5089
03843	*04101	03810	78031	01106	01212	*4847	48284
03844	03810	03811	78039	01110	01213	48284	*5171
03849	03811	03819	*34570	01111	01214	*4848	48284
0388	03819	*04185	78031	01112	01215	48284	*5178
0389	*04102	03810	78039	01113	01216	*485	48284
0545	03810	03811	*34571	01114	0310	48284	*5186
*03819	03811	03819	78031	01115	11505	*486	5186
0362	03819	*04186	78039	01116	11515	48284	*51889
0380	*04103	03810	*34580	01120	1304	*4870	48284
03810	03810	03811	78031	01121	1363	48284	*5198
03811	03811	03819	78039	01122	481	*4871	48284
03819	03819	*04189	*34581	01123	4820	48284	5186
0382	*04104	03810	78031	01124	4821	*494	*5199
0383	03810	03811	78039	01125	4822	48284	48284
03840	03811	03819	*34590	01126	48230	*4950	5186
03841	03819	*0419	78031	01130	48231	48284	*5990
03842	*04105	03810	78039	01131	48232	*4951	99664
03843	03810	03811	*34591	01132	48239	48284	*65570
03844	03811	03819	78031	01133	4824	*4952	66500
03849	03819	*0545	78039	01134	48281	48284	66501
0388	*04109	03810	*3488	01135	48282	*4953	66503
0389	03810	03811	78031	01136	48283	48284	66510
0545	03811	03819	78039	01140	48284	*4954	66511
*0382	03819	*11505	*3489	01141	48289	48284	*65571
03810	*04110	48284	78031	01142	4829	*4955	66500
03811	03810	*11515	78039	01143	4830	48284	66501
03819	03811	48284	*34989	01144	4831	*4956	66503
*0383	03819	*11595	78031	01145	4838	48284	66510
03810	*04111	48284	78039	01146	4841	*4957	66511
03811	03810	*1221	*3499	01150	4843	48284	*65573
03819	03811	48284	78031	01151	4845	*4958	66500
*03840	03819	*1304	78039	01152	4846	48284	66501
03810	*04119	48284	*4800	01153	4847	*4959	66503
03811	03810	*1363	48284	01154	4848	48284	66510
03819	03811	48284	*4801	01155	485	*496	66511
*03841	03819	*1398	48284	01156	486	48284	*68600
03810	*0412	03810	*4802	01160	4870	*500	6800
03811	03810	03811	48284	01161	4950	48284	6801
03819	03811	03819	*4808	01162	4951	*501	6802
*03842	03819	*34500	48284	01163	4952	48284	6803
03810	*0413	78031	*4809	01164	4953	*502	6804
03811	03810	78039	48284	01165	4954	48284	6805
03819	03811	*34501	*481	01166	4955	*503	6806
*03843	03819	78031	48284	01170	4956	48284	6807
03810	*0414	78039	*4820	01171	4957	*504	6808
03811	03810	*34510	48284	01172	4958	48284	6809
03819	03811	78031	*4821	01173	4959	*505	6820
*03844	03819	78039	48284	01174	5060	48284	6821
03810	*0415	*34511	*4822	01175	5061	*5060	6822
03811	03810	78031	48284	01176	5070	48284	6823
03819	03811	78039	*48230	01180	5071	*5061	6825
*03849	03819	*3452	48284	01181	5078	48284	6826
03810	*0416	78031	*48231	01182	5080	*5062	6827
03811	03810	78039	48284	01183	5081	48284	6828
03819	03811	*3453	*48232	01184	5171	*5063	6829
*0388	03819	78031	48284	01185	*48289	48284	684
03810	*0417	78039	*48239	01186	48284	*5064	*68601
03811	03810	*34540	48284	01190	*4829	48284	6800
03819	03811	78031	*4824	01191	48284	*5069	6801
*0389	03819	78039	48284	01192	*4830	48284	6802
03810	*04181	*34541	*48281	01193	48284	*5070	6803
03811	03810	78031	48284	01194	*4831	48284	6804
03819	03811	78039	*48282	01195	48284	*5071	6805

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6806	80019	80110	80220	80359	80450	85132	85223
6807	80020	80111	80221	80360	80451	85133	85224
6808	80021	80112	80222	80361	80452	85134	85225
6809	80022	80113	80223	80362	80453	85135	85226
6820	80023	80114	80224	80363	80454	85136	85229
6821	80024	80115	80225	80364	80455	85139	85230
6822	80025	80116	80226	80365	80456	85140	85231
6823	80026	80119	80227	80366	80459	85141	85232
6825	80029	80120	80228	80369	80460	85142	85233
6826	80030	80121	80229	80370	80461	85143	85234
6827	80031	80122	80230	80371	80462	85144	85235
6828	80032	80123	80231	80372	80463	85145	85236
6829	80033	80124	80232	80373	80464	85146	85239
684	80034	80125	80233	80374	80465	85149	85240
*68609	80035	80126	80234	80375	80466	85150	85241
6800	80036	80129	80235	80376	80469	85151	85242
6801	80039	80130	80236	80379	80470	85152	85243
6802	80040	80131	80237	80380	80471	85153	85244
6803	80041	80132	80238	80381	80472	85154	85245
6804	80042	80133	80239	80382	80473	85155	85246
6805	80043	80134	8024	80383	80474	85156	85249
6806	80044	80135	8025	80384	80475	85159	85250
6807	80045	80136	8026	80385	80476	85160	85251
6808	80046	80139	8027	80386	80479	85161	85252
6809	80049	80140	8028	80389	80480	85162	85253
6820	80050	80141	8029	80390	80481	85163	85254
6821	80051	80142	80300	80391	80482	85164	85255
6822	80052	80143	80301	80392	80483	85165	85256
6823	80053	80144	80302	80393	80484	85166	85259
6825	80054	80145	80303	80394	80485	85169	85300
6826	80055	80146	80304	80395	80486	85170	85301
6827	80056	80149	80305	80396	80489	85171	85302
6828	80059	80150	80306	80399	80490	85172	85303
6829	80060	80151	80309	80400	80491	85173	85304
684	80061	80152	80310	80401	80492	85174	85305
*74861	80062	80153	80311	80402	80493	85175	85306
48284	80063	80154	80312	80403	80494	85176	85309
*7790	80064	80155	80313	80404	80495	85179	85310
78031	80065	80156	80314	80405	80496	85180	85311
78039	80066	80159	80315	80406	80499	85181	85312
*7791	80069	80160	80316	80409	8500	85182	85313
78031	80070	80161	80319	80410	8501	85183	85314
78039	80071	80162	80320	80411	8502	85184	85315
*78031	80072	80163	80321	80412	8503	85185	85316
78031	80073	80164	80322	80413	8504	85186	85319
78039	80074	80165	80323	80414	8505	85189	85400
*78039	80075	80166	80324	80415	8509	85190	85401
78031	80076	80169	80325	80416	85100	85191	85402
78039	80079	80170	80326	80419	85101	85192	85403
*7809	80080	80171	80329	80420	85102	85193	85404
78031	80081	80172	80330	80421	85103	85194	85405
78039	80082	80173	80331	80422	85104	85195	85406
*79094	80083	80174	80332	80423	85105	85196	85409
7907	80084	80175	80333	80424	85106	85199	85410
*7998	80085	80176	80334	80425	85109	85200	85411
78031	80086	80179	80335	80426	85110	85201	85412
78039	80089	80180	80336	80429	85111	85202	85413
*95901	80090	80181	80339	80430	85112	85203	85414
80000	80091	80182	80340	80431	85113	85204	85415
80001	80092	80183	80341	80432	85114	85205	85416
80002	80093	80184	80342	80433	85115	85206	85419
80003	80094	80185	80343	80434	85116	85209	9251
80004	80095	80186	80344	80435	85119	85210	9252
80005	80096	80189	80345	80436	85120	85211	*95909
80006	80099	80190	80346	80439	85121	85212	80000
80009	80100	80191	80349	80440	85122	85213	80001
80010	80101	80192	80350	80441	85123	85214	80002
80011	80102	80193	80351	80442	85124	85215	80003
80012	80103	80194	80352	80443	85125	85216	80004
80013	80104	80195	80353	80444	85126	85219	80005
80014	80105	80196	80354	80445	85129	85220	80006
80015	80106	80199	80355	80446	85130	85221	80009
80016	80109	8021	80356	80449	85131	85222	80010

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80011	80102	80193	80351	80442	85124	85215	V4282
80012	80103	80194	80352	80443	85125	85216	V4283
80013	80104	80195	80353	80444	85126	85219	V4289
80014	80105	80196	80354	80445	85129	85220	*99685
80015	80106	80199	80355	80446	85130	85221	V4281
80016	80109	8021	80356	80449	85131	85222	*99686
80019	80110	80220	80359	80450	85132	85223	V4283
80020	80111	80221	80360	80451	85133	85224	*99689
80021	80112	80222	80361	80452	85134	85225	V4289
80022	80113	80223	80362	80453	85135	85226	*V090
80023	80114	80224	80363	80454	85136	85229	03810
80024	80115	80225	80364	80455	85139	85230	03811
80025	80116	80226	80365	80456	85140	85231	03819
80026	80119	80227	80366	80459	85141	85232	*V091
80029	80120	80228	80369	80460	85142	85233	03810
80030	80121	80229	80370	80461	85143	85234	03811
80031	80122	80230	80371	80462	85144	85235	03819
80032	80123	80231	80372	80463	85145	85236	*V092
80033	80124	80232	80373	80464	85146	85239	03810
80034	80125	80233	80374	80465	85149	85240	03811
80035	80126	80234	80375	80466	85150	85241	03819
80036	80129	80235	80376	80469	85151	85242	*V093
80039	80130	80236	80379	80470	85152	85243	03810
80040	80131	80237	80380	80471	85153	85244	03811
80041	80132	80238	80381	80472	85154	85245	03819
80042	80133	80239	80382	80473	85155	85246	*V094
80043	80134	8024	80383	80474	85156	85249	03810
80044	80135	8025	80384	80475	85159	85250	03811
80045	80136	8026	80385	80476	85160	85251	03819
80046	80139	8027	80386	80479	85161	85252	*V0950
80049	80140	8028	80389	80480	85162	85253	03810
80050	80141	8029	80390	80481	85163	85254	03811
80051	80142	80300	80391	80482	85164	85255	03819
80052	80143	80301	80392	80483	85165	85256	*V0951
80053	80144	80302	80393	80484	85166	85259	03810
80054	80145	80303	80394	80485	85169	85300	03811
80055	80146	80304	80395	80486	85170	85301	03819
80056	80149	80305	80396	80489	85171	85302	*V096
80059	80150	80306	80399	80490	85172	85303	03810
80060	80151	80309	80400	80491	85173	85304	03811
80061	80152	80310	80401	80492	85174	85305	03819
80062	80153	80311	80402	80493	85175	85306	*V0970
80063	80154	80312	80403	80494	85176	85309	03810
80064	80155	80313	80404	80495	85179	85310	03811
80065	80156	80314	80405	80496	85180	85311	03819
80066	80159	80315	80406	80499	85181	85312	*V0971
80069	80160	80316	80409	8500	85182	85313	03810
80070	80161	80319	80410	8501	85183	85314	03811
80071	80162	80320	80411	8502	85184	85315	03819
80072	80163	80321	80412	8503	85185	85316	*V0980
80073	80164	80322	80413	8504	85186	85319	03810
80074	80165	80323	80414	8505	85189	85400	03811
80075	80166	80324	80415	8509	85190	85401	03819
80076	80169	80325	80416	85100	85191	85402	*V0981
80079	80170	80326	80419	85101	85192	85403	03810
80080	80171	80329	80420	85102	85193	85404	03811
80081	80172	80330	80421	85103	85194	85405	03819
80082	80173	80331	80422	85104	85195	85406	*V0990
80083	80174	80332	80423	85105	85196	85409	03810
80084	80175	80333	80424	85106	85199	85410	03811
80085	80176	80334	80425	85109	85200	85411	03819
80086	80179	80335	80426	85110	85201	85412	*V0991
80089	80180	80336	80429	85111	85202	85413	03810
80090	80181	80339	80430	85112	85203	85414	03811
80091	80182	80340	80431	85113	85204	85415	03819
80092	80183	80341	80432	85114	85205	85416	*V4283
80093	80184	80342	80433	85115	85206	85419	V4283
80094	80185	80343	80434	85116	85209	9251	*V4289
80095	80186	80344	80435	85119	85210	9252	V420
80096	80189	80345	80436	85120	85211	*99664	V421
80099	80190	80346	80439	85121	85212	5990	V422
80100	80191	80349	80440	85122	85213	*99680	V426
80101	80192	80350	80441	85123	85214	V4281	V427

V4289
*V429
V4281
V4282
V4283
V4289

TABLE 6F.—DELETIONS TO THE CC EXCLUSIONS LIST
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CCs that are deleted from the list are in Table 6G—Deletions to the CC Exclusions List. Each of the principal diagnoses is shown with an asterisk, and the revisions to the CC Exclusions List are provided in an indented column immediately following the affected principal diagnosis.

*0031	0381	7803	80039	80123	80226	80360	80444
0381	*0414	*34989	80040	80124	80227	80361	80445
*0202	0381	7803	80041	80125	80228	80362	80446
0381	*0415	*3499	80042	80126	80229	80363	80449
*0362	0381	7803	80043	80129	80230	80364	80450
0381	*0416	*6860	80044	80130	80231	80365	80451
*0380	0381	6800	80045	80131	80232	80366	80452
0381	*0417	6801	80046	80132	80233	80369	80453
*0381	0381	6802	80049	80133	80234	80370	80454
0362	*04181	6803	80050	80134	80235	80371	80455
0380	0381	6804	80051	80135	80236	80372	80456
0381	*04182	6805	80052	80136	80237	80373	80459
0382	0381	6806	80053	80139	80238	80374	80460
0383	*04183	6807	80054	80140	80239	80375	80461
03840	0381	6808	80055	80141	8024	80376	80462
03841	*04184	6809	80056	80142	8025	80379	80463
03842	0381	6820	80059	80143	8026	80380	80464
03843	*04185	6821	80060	80144	8027	80381	80465
03844	0381	6822	80061	80145	8028	80382	80466
03849	*04186	6823	80062	80146	8029	80383	80469
0388	0381	6825	80063	80149	80300	80384	80470
0389	*04189	6826	80064	80150	80301	80385	80471
0545	0381	6827	80065	80151	80302	80386	80472
*0382	*0419	6828	80066	80152	80303	80389	80473
0381	0381	6829	80069	80153	80304	80390	80474
*0383	*0545	684	80070	80154	80305	80391	80475
0381	0381	*7790	80071	80155	80306	80392	80476
*03840	*1398	7803	80072	80156	80309	80393	80479
0381	0381	*7791	80073	80159	80310	80394	80480
*03841	*34500	7803	80074	80160	80311	80395	80481
0381	7803	*7803	80075	80161	80312	80396	80482
*03842	*34501	7803	80076	80162	80313	80399	80483
0381	7803	*7809	80079	80163	80314	80400	80484
*03843	*34510	7803	80080	80164	80315	80401	80485
0381	7803	*7998	80081	80165	80316	80402	80486
*03844	*34511	7803	80082	80166	80319	80403	80489
0381	7803	*9590	80083	80169	80320	80404	80490
*03849	*3452	80000	80084	80170	80321	80405	80491
0381	7803	80001	80085	80171	80322	80406	80492
*0388	*3453	80002	80086	80172	80323	80409	80493
0381	7803	80003	80089	80173	80324	80410	80494
*0389	*34540	80004	80090	80174	80325	80411	80495
0381	7803	80005	80091	80175	80326	80412	80496
*04089	*34541	80006	80092	80176	80329	80413	80499
0381	7803	80009	80093	80179	80330	80414	8500
*04100	*34550	80010	80094	80180	80331	80415	8501
0381	7803	80011	80095	80181	80332	80416	8502
*04101	*34551	80012	80096	80182	80333	80419	8503
0381	7803	80013	80099	80183	80334	80420	8504
*04102	*34560	80014	80100	80184	80335	80421	8505
0381	7803	80015	80101	80185	80336	80422	8509
*04103	*34561	80016	80102	80186	80339	80423	85100
0381	7803	80019	80103	80189	80340	80424	85101
*04104	*34570	80020	80104	80190	80341	80425	85102
0381	7803	80021	80105	80191	80342	80426	85103
*04105	*34571	80022	80106	80192	80343	80429	85104
0381	7803	80023	80109	80193	80344	80430	85105
*04109	*34580	80024	80110	80194	80345	80431	85106
0381	7803	80025	80111	80195	80346	80432	85109
*04110	*34581	80026	80112	80196	80349	80433	85110
0381	7803	80029	80113	80199	80350	80434	85111
*04111	*34590	80030	80114	8021	80351	80435	85112
0381	7803	80031	80115	80220	80352	80436	85113
*04119	*34591	80032	80116	80221	80353	80439	85114
0381	7803	80033	80119	80222	80354	80440	85115
*0412	*3488	80034	80120	80223	80355	80441	85116
0381	7803	80035	80121	80224	80356	80442	85119
*0413	*3489	80036	80122	80225	80359	80443	85120

85121	85212	V428
85122	85213	*99686
85123	85214	V428
85124	85215	*99689
85125	85216	V428
85126	85219	*V090
85129	85220	0381
85130	85221	*V091
85131	85222	0381
85132	85223	*V092
85133	85224	0381
85134	85225	*V093
85135	85226	0381
85136	85229	*V094
85139	85230	0381
85140	85231	*V0950
85141	85232	0381
85142	85233	*V0951
85143	85234	0381
85144	85235	*V096
85145	85236	0381
85146	85239	*V0970
85149	85240	0381
85150	85241	*V0971
85151	85242	0381
85152	85243	*V0980
85153	85244	0381
85154	85245	*V0981
85155	85246	0381
85156	85249	*V0990
85159	85250	0381
85160	85251	*V0991
85161	85252	0381
85162	85253	*V428
85163	85254	V420
85164	85255	V421
85165	85256	V422
85166	85259	V426
85169	85300	V427
85170	85301	V428
85171	85302	*V429
85172	85303	V428
85173	85304	
85174	85305	
85175	85306	
85176	85309	
85179	85310	
85180	85311	
85181	85312	
85182	85313	
85183	85314	
85184	85315	
85185	85316	
85186	85319	
85189	85400	
85190	85401	
85191	85402	
85192	85403	
85193	85404	
85194	85405	
85195	85406	
85196	85409	
85199	85410	
85200	85411	
85201	85412	
85202	85413	
85203	85414	
85204	85415	
85205	85416	
85206	85419	
85209	9251	
85210	9252	
85211	*99680	

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY

[FY96 MEDPAR Update 12/96 Grouper V14.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
1	36587	10.0378	2	4	7	13	21
2	6771	10.5860	3	5	8	13	21
3	1	1.0000	1	1	1	1	1
4	6231	8.4710	2	3	6	10	18
5	102519	3.9306	1	2	3	4	8
6	417	3.2590	1	1	2	4	7
7	11911	11.6376	3	5	8	13	22
8	2088	3.8410	1	1	3	5	8
9	1712	7.0596	1	3	5	9	14
10	20092	7.2703	2	3	5	9	15
11	2933	4.2636	1	2	3	6	9
12	25964	6.8386	2	3	5	8	13
13	6323	5.7745	2	3	5	7	10
14	374831	6.7444	2	3	5	8	13
15	145009	4.0646	1	2	3	5	7
16	13995	6.0974	2	3	5	7	11
17	3084	3.7036	1	2	3	5	7
18	24039	5.7935	2	3	4	7	11
19	6542	4.0880	1	2	3	5	8
20	8163	9.4084	2	4	7	12	19
21	1177	7.0935	2	3	5	9	14
22	2887	4.7645	2	2	4	6	9
23	6025	4.5610	1	2	3	6	9
24	57698	5.3362	1	2	4	6	10
25	22091	3.6103	1	2	3	4	7
26	40	5.2500	1	2	4	7	11
27	3743	5.5060	1	1	3	7	13
28	12494	6.3374	1	3	4	8	13
29	3906	3.7384	1	2	3	5	7
30	1	4.0000	4	4	4	4	4
31	3008	4.7822	1	2	3	6	9
32	1389	3.0756	1	1	2	3	6
34	18440	5.8049	1	3	4	7	11
35	3698	3.9227	1	2	3	5	7
36	6706	1.5406	1	1	1	2	2
37	1756	3.9169	1	1	3	4	8
38	195	2.7077	1	1	2	3	5
39	2545	2.0000	1	1	1	2	4
40	2629	3.4059	1	1	2	4	7
42	5378	1.9781	1	1	1	2	4
43	110	4.0182	1	2	3	5	7
44	1461	5.2005	2	3	4	6	9
45	2340	3.5949	1	2	3	5	7
46	2995	4.8417	1	2	4	6	9
47	1173	3.9599	1	1	3	4	7
49	2364	5.2563	1	2	4	6	10
50	3268	2.1068	1	1	2	2	3
51	348	2.8908	1	1	2	3	6
52	89	2.9213	1	1	2	4	7
53	3071	3.5988	1	1	2	4	8
54	2	5.0000	1	1	9	9	9
55	1876	2.9302	1	1	2	3	6
56	729	2.8299	1	1	2	3	6
57	652	3.9525	1	2	2	5	8
58	1	2.0000	2	2	2	2	2
59	103	3.1262	1	1	2	4	6
60	3	1.0000	1	1	1	1	1
61	241	4.5726	1	1	3	5	11
63	3732	4.6072	1	2	3	5	9
64	3341	6.6417	1	2	5	8	14
65	29312	3.1709	1	2	3	4	6
66	6560	3.4703	1	2	3	4	6
67	492	3.8049	1	2	3	5	7
68	10175	4.3277	2	2	4	5	8
69	2943	3.4709	1	2	3	4	6
70	40	3.3000	1	2	3	4	5
71	128	3.9297	1	2	3	5	7
72	705	3.4610	1	2	3	4	7
73	6206	4.6695	1	2	4	6	9
74	4	3.2500	1	1	2	3	7

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V14.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
75	40909	10.5411	4	5	8	13	20
76	41015	11.7119	3	6	9	14	22
77	2184	5.1108	1	2	4	7	10
78	30978	7.6317	3	5	7	9	13
79	237994	8.6320	3	4	7	11	16
80	8120	6.0765	2	3	5	7	11
81	20	10.7000	1	6	8	11	15
82	70673	7.3185	2	3	6	9	14
83	7304	5.8976	2	3	5	7	11
84	1473	3.4725	1	2	3	4	6
85	20682	6.8707	2	3	5	9	13
86	1372	4.0532	1	2	3	5	8
87	67342	6.4329	1	3	5	8	12
88	359001	5.6528	2	3	5	7	10
89	428753	6.5589	3	4	5	8	12
90	36813	4.6811	2	3	4	6	8
91	73	5.2466	2	3	4	7	9
92	13516	6.6268	2	3	5	8	12
93	1162	4.6145	1	2	4	6	8
94	13665	6.6447	2	3	5	8	13
95	1418	3.9810	1	2	3	5	7
96	58911	5.0549	2	3	4	6	9
97	23971	4.0015	1	2	3	5	7
98	28	2.8214	1	1	2	3	6
99	26524	3.1691	1	1	2	4	6
100	10188	2.2330	1	1	2	3	4
101	20391	4.7223	1	2	4	6	9
102	4493	2.8952	1	1	2	4	5
103	517	47.0406	9	15	32	71	104
104	26171	13.3430	5	8	11	16	24
105	22843	10.1949	5	6	8	12	18
106	106957	11.0507	6	7	9	13	18
107	68189	8.3054	5	6	7	9	13
108	7462	12.0893	4	7	10	15	23
110	63215	10.0803	3	6	8	12	19
111	5557	6.1074	2	4	6	7	9
112	218111	4.2393	1	2	3	6	8
113	47795	13.1200	4	6	9	16	26
114	9030	8.8270	2	4	7	11	17
115	11560	10.2985	4	6	8	13	18
116	86830	5.0237	1	2	4	6	10
117	3723	4.0285	1	1	3	5	9
118	6649	3.0284	1	1	2	4	7
119	1684	5.1081	1	1	3	7	11
120	39395	8.4464	1	2	5	11	19
121	165994	6.9292	2	4	6	9	12
122	90608	4.6367	1	2	4	6	8
123	45927	4.4682	1	1	2	6	11
124	152443	4.5925	1	2	4	6	9
125	60680	2.9371	1	1	2	4	6
126	5118	12.8009	4	6	10	16	26
127	705250	5.7994	2	3	5	7	11
128	18457	6.3457	3	4	6	7	10
129	4439	3.1683	1	1	1	3	7
130	99388	6.2962	2	4	5	8	11
131	25429	4.8527	1	3	5	6	8
132	164147	3.3158	1	2	3	4	6
133	6113	2.8050	1	1	2	3	5
134	29364	3.6008	1	2	3	4	7
135	8043	4.4405	1	2	3	5	8
136	1143	3.0604	1	1	2	4	6
137	5	6.6000	2	2	4	8	16
138	207475	4.1925	1	2	3	5	8
139	65356	2.7468	1	1	2	3	5
140	134319	3.1700	1	2	3	4	6
141	78035	4.0805	1	2	3	5	7
142	35460	2.9406	1	1	2	4	5
143	137083	2.3957	1	1	2	3	4
144	75930	5.3732	1	2	4	7	11
145	6310	2.9853	1	1	2	4	6

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V14.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
146	9811	10.5321	6	7	9	12	17
147	1664	6.9056	4	5	7	8	10
148	148674	12.6141	6	7	10	15	22
149	14218	7.1334	4	5	7	8	10
150	24389	11.1129	4	7	9	14	20
151	4232	6.1189	2	3	6	8	11
152	4675	8.4877	4	5	7	10	14
153	1644	5.7968	3	4	6	7	9
154	34909	14.0372	4	7	11	17	27
155	4509	5.0100	2	2	4	7	9
156	2	18.0000	5	5	31	31	31
157	9420	5.6036	1	2	4	7	11
158	4328	2.7872	1	1	2	4	6
159	18163	5.0726	1	2	4	6	10
160	9493	2.7740	1	1	2	4	5
161	14884	4.2139	1	2	3	5	9
162	7335	2.0923	1	1	1	3	4
163	11	4.4545	1	1	2	6	10
164	5335	8.7134	4	5	7	10	15
165	1586	5.4061	2	3	5	7	8
166	3342	5.4333	2	3	4	7	10
167	2247	2.9653	1	2	3	4	5
168	1853	4.7210	1	2	3	6	9
169	925	2.5459	1	1	2	3	5
170	12921	11.7454	2	5	9	15	23
171	1051	5.1246	1	2	4	6	10
172	32806	7.3996	2	3	5	9	15
173	2065	3.9467	1	2	3	5	8
174	238661	5.1466	2	3	4	6	9
175	21406	3.2356	1	2	3	4	6
176	17834	5.7615	2	3	4	7	11
177	11741	4.7286	2	3	4	6	8
178	3764	3.3547	1	2	3	4	6
179	12072	6.7301	2	3	5	8	13
180	88723	5.6566	2	3	4	7	11
181	21229	3.7030	1	2	3	5	7
182	237563	4.5654	1	2	4	6	8
183	69548	3.1791	1	2	3	4	6
184	86	3.7093	1	2	3	4	7
185	4055	4.8222	1	2	4	6	10
186	2	3.0000	2	2	4	4	4
187	869	3.9298	1	2	3	5	7
188	70414	5.7816	1	3	4	7	11
189	7871	3.3750	1	1	3	4	7
190	94	4.8830	1	2	3	6	11
191	11024	14.8159	4	7	11	18	29
192	775	7.1419	2	4	6	9	13
193	8299	12.8943	5	7	11	16	23
194	660	7.4379	2	4	6	9	13
195	8718	9.8580	4	6	8	12	17
196	624	6.3462	3	4	6	8	10
197	27165	8.6986	3	5	7	10	15
198	7036	4.7172	2	3	4	6	8
199	2147	10.6954	3	5	8	14	22
200	1533	11.3503	2	4	8	14	23
201	1536	14.8932	4	7	11	18	29
202	28316	7.0896	2	3	5	9	14
203	29341	7.1571	2	3	6	9	14
204	52859	6.3341	2	3	5	8	12
205	22935	6.7787	2	3	5	8	14
206	1652	4.2240	1	2	3	5	8
207	36747	5.2866	1	2	4	7	10
208	9886	3.0404	1	1	2	4	6
209	356581	5.8918	3	4	5	7	9
210	142712	7.6249	4	5	6	9	13
211	26185	5.6079	3	4	5	7	9
212	40	6.2250	3	4	5	7	9
213	7121	8.7182	2	4	7	11	17
214	57899	5.8874	2	3	5	7	11
215	45203	3.2816	1	2	3	4	6

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V14.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
216	6357	10.2902	2	4	8	13	21
217	20641	13.7099	3	5	9	17	29
218	24497	5.6195	2	3	4	7	10
219	18723	3.4439	1	2	3	4	6
220	4	4.7500	1	1	4	4	10
221	5113	7.1731	2	3	5	9	14
222	3453	3.8199	1	2	3	5	7
223	19460	2.7002	1	1	2	3	5
224	8049	2.1070	1	1	2	3	4
225	5842	4.6251	1	2	3	6	10
226	5513	6.2507	1	2	4	7	13
227	4322	2.8538	1	1	2	3	5
228	2967	3.4553	1	1	2	4	7
229	1216	2.3528	1	1	2	3	4
230	2473	4.9713	1	2	3	6	10
231	10932	4.7551	1	2	3	6	10
232	553	4.2405	1	1	2	5	10
233	4688	8.2445	2	3	6	10	16
234	2165	3.8859	1	2	3	5	8
235	5517	5.8182	1	3	4	6	11
236	39637	5.5891	2	3	4	7	10
237	1654	4.2019	1	2	3	5	8
238	7601	9.3428	3	4	7	11	17
239	60377	6.9698	2	3	5	8	13
240	13251	6.9282	2	3	5	8	14
241	2990	4.2331	1	2	3	5	8
242	2825	7.1487	2	3	5	9	14
243	80090	5.1221	2	3	4	6	9
244	12427	5.3968	1	3	4	6	10
245	4382	4.0895	1	2	3	5	7
246	1268	4.2437	1	2	3	5	8
247	11432	3.6810	1	2	3	5	7
248	7374	4.9761	1	2	4	6	9
249	10329	3.9287	1	1	3	5	8
250	3558	4.6501	1	2	3	5	9
251	2107	3.0019	1	1	2	4	5
253	18921	5.2431	1	3	4	6	10
254	9245	3.5230	1	2	3	4	6
255	1	6.0000	6	6	6	6	6
256	4394	5.6445	1	2	4	7	11
257	22632	3.2017	1	2	3	4	6
258	16954	2.2782	1	1	2	3	4
259	3995	3.1975	1	1	2	3	7
260	4550	1.6642	1	1	1	2	3
261	2213	2.2350	1	1	2	3	4
262	659	4.0030	1	1	3	5	8
263	29107	12.4970	3	5	9	15	24
264	3357	7.2848	2	3	6	9	14
265	4141	7.0995	1	2	5	8	14
266	2553	3.5719	1	1	2	5	7
267	223	4.1839	1	1	2	5	9
268	1177	3.7961	1	1	2	4	7
269	10062	8.5178	2	3	6	11	17
270	3072	3.2080	1	1	2	4	7
271	22910	7.7195	3	4	6	9	14
272	5988	6.6757	2	3	5	8	13
273	1387	5.3677	1	2	4	6	11
274	2619	7.1229	1	3	5	9	15
275	240	3.8042	1	1	2	5	8
276	939	4.7444	1	3	4	6	8
277	80070	6.2309	2	3	5	7	11
278	24752	4.8306	2	3	4	6	8
279	7	4.4286	2	2	4	6	6
280	13778	4.7052	1	2	3	6	9
281	5819	3.3805	1	1	3	4	6
282	5	12.0000	1	1	3	14	41
283	5280	5.0146	1	2	4	6	10
284	1748	3.5463	1	2	3	5	7
285	5591	12.0757	3	5	9	15	23
286	2071	7.2038	3	4	5	8	13

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V14.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
287	6659	12.2050	3	5	8	14	24
288	1201	5.8485	3	4	5	6	9
289	5476	3.4830	1	1	2	3	7
290	8792	2.5875	1	1	2	3	4
291	94	2.1596	1	1	2	3	4
292	5173	11.2101	2	4	8	14	22
293	271	5.8782	1	2	4	7	12
294	83801	5.2493	2	3	4	6	10
295	3650	4.1052	1	2	3	5	8
296	231553	5.7556	2	3	4	7	11
297	31811	3.8626	1	2	3	5	7
298	112	3.1786	1	1	2	4	7
299	1130	5.4823	1	2	4	7	11
300	15618	6.6234	2	3	5	8	13
301	1968	4.3664	1	2	3	5	8
302	7967	10.9728	5	6	8	13	19
303	19228	9.4496	4	5	8	11	17
304	13035	9.5744	2	4	7	11	19
305	2446	4.3385	1	2	4	5	8
306	11608	5.7505	1	2	4	7	12
307	2480	2.5375	1	1	2	3	4
308	9697	6.4016	1	2	4	8	13
309	3353	2.5577	1	1	2	3	5
310	27418	4.3367	1	2	3	5	9
311	8484	2.0532	1	1	2	2	4
312	1866	4.6833	1	2	3	6	10
313	659	2.2656	1	1	2	3	4
315	28342	8.5520	1	2	5	11	19
316	84578	6.9970	2	3	5	9	14
317	841	2.9441	1	1	2	3	6
318	6158	6.6325	1	3	5	8	13
319	422	2.8815	1	1	2	4	6
320	175874	5.8692	2	3	5	7	10
321	23491	4.2793	2	3	4	5	7
322	97	4.3196	2	2	3	5	8
323	17371	3.3739	1	1	2	4	7
324	7972	2.0066	1	1	2	2	4
325	6977	4.2005	1	2	3	5	8
326	2097	2.8994	1	1	2	4	5
327	15	3.1333	1	1	2	3	12
328	671	3.9091	1	2	3	5	8
329	107	2.4393	1	1	2	3	5
331	43921	5.8404	2	3	4	7	11
332	4398	3.5489	1	1	3	5	7
333	338	5.5621	1	2	4	7	11
334	19279	5.4196	3	4	5	6	8
335	9751	4.0561	2	3	4	5	6
336	59003	3.7602	1	2	3	4	7
337	34115	2.4160	1	2	2	3	4
338	3724	5.0709	1	2	3	6	11
339	2119	4.5880	1	2	3	6	10
340	1	1.0000	1	1	1	1	1
341	5932	3.1123	1	1	2	3	6
342	192	4.1927	1	2	3	6	8
344	3517	3.1137	1	1	2	3	6
345	1357	3.7900	1	1	3	5	8
346	5156	6.2853	1	3	5	8	12
347	372	2.9624	1	1	2	4	6
348	3204	4.4860	1	2	3	5	8
349	741	2.6815	1	1	2	3	5
350	6300	4.6057	2	3	4	6	8
351	2	2.5000	2	2	3	3	3
352	541	3.9279	1	1	3	5	8
353	2701	8.3425	3	4	6	9	16
354	9931	5.9823	3	3	5	7	10
355	5561	3.6306	2	3	3	4	5
356	29723	2.8078	1	2	3	3	4
357	6569	9.3230	4	5	7	11	17
358	28651	4.4698	2	3	4	5	7
359	28099	3.0940	2	2	3	4	4

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V14.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
360	18115	3.2832	1	2	3	4	5
361	671	3.6692	1	1	2	4	8
362	1	1.0000	1	1	1	1	1
363	3892	3.4740	1	2	2	3	7
364	1856	3.4984	1	1	2	4	7
365	2435	7.1647	1	2	4	9	16
366	4449	7.0094	1	3	5	9	15
367	541	2.9704	1	1	2	4	6
368	2377	6.2680	2	3	5	8	12
369	2363	3.4435	1	1	2	4	7
370	1170	5.5453	2	3	4	5	9
371	1054	3.5911	2	3	3	4	5
372	876	3.1199	1	2	2	3	5
373	3973	2.0194	1	1	2	2	3
374	152	2.9474	1	2	2	3	4
375	7	8.4286	1	2	5	9	15
376	214	3.2710	1	1	2	4	7
377	49	4.1224	1	1	2	4	9
378	187	2.6578	1	2	2	3	4
379	358	2.9609	1	1	2	3	5
380	96	1.8333	1	1	1	2	4
381	178	2.2022	1	1	1	2	4
382	47	1.3404	1	1	1	1	2
383	1583	3.8111	1	2	3	5	8
384	132	2.9318	1	1	2	3	6
385	5	4.6000	1	1	2	4	15
389	24	7.1667	3	3	5	10	13
390	13	5.3077	2	3	4	7	7
392	2532	10.5517	4	5	8	13	21
393	2	11.0000	7	7	15	15	15
394	1791	7.4199	1	2	5	8	16
395	67638	4.9800	1	2	4	6	10
396	19	4.2632	1	1	3	7	7
397	16823	5.7741	1	2	4	7	11
398	18282	6.2511	2	3	5	8	11
399	1299	4.0154	1	2	3	5	8
400	7810	9.7049	2	3	7	12	21
401	6739	11.6630	2	5	9	15	24
402	1499	4.2368	1	1	3	6	9
403	38891	8.5771	2	3	6	11	18
404	3799	4.6594	1	2	4	6	9
406	3452	10.0200	3	4	7	13	21
407	699	4.4120	1	2	4	6	8
408	2840	7.6835	1	2	5	9	18
409	5557	5.9152	2	3	4	6	12
410	74223	3.3541	1	2	3	4	5
411	33	2.3030	1	1	1	3	6
412	30	3.3667	1	1	2	5	7
413	8747	8.0088	2	3	6	10	16
414	727	4.5571	1	2	3	6	10
415	44505	14.8769	4	7	11	18	29
416	218588	7.6808	2	4	6	9	14
417	54	4.6111	1	2	4	6	9
418	20458	6.3064	2	3	5	8	12
419	14820	5.2356	2	3	4	6	10
420	2622	3.9714	1	2	3	5	7
421	10711	4.2451	1	2	3	5	8
422	84	3.9167	1	2	3	5	6
423	10805	7.9172	2	3	6	9	16
424	1925	16.6618	2	6	10	19	31
425	15459	4.3906	1	2	3	5	8
426	4692	5.2163	1	2	4	6	11
427	1679	5.2478	1	2	4	6	11
428	923	7.6111	1	3	5	9	16
429	42295	7.8371	2	3	5	9	15
430	55585	9.0191	2	4	7	11	18
431	218	8.9037	2	3	5	9	17
432	404	5.8292	1	2	3	7	12
433	8177	3.2849	1	1	2	4	7
434	22419	5.2813	2	3	4	6	10

TABLE 7A.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V14.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
435	16398	4.5144	1	2	4	5	8
436	3530	13.7382	4	8	13	20	26
437	15594	9.9086	4	6	9	13	18
439	1041	8.4476	1	3	6	10	18
440	4797	9.4951	2	3	6	11	20
441	604	3.4619	1	1	2	4	7
442	15541	8.2678	1	3	6	10	17
443	2981	3.3603	1	1	2	4	7
444	3303	4.7802	1	2	4	6	9
445	1229	3.7079	1	1	3	4	6
447	4148	2.6437	1	1	2	3	5
448	29	1.0000	1	1	1	1	1
449	28622	4.0140	1	1	3	5	8
450	6263	2.2531	1	1	1	3	4
451	4	3.0000	1	1	1	2	8
452	21359	5.1382	1	2	4	6	10
453	3599	3.0889	1	1	2	4	6
454	3919	5.1832	1	2	3	6	10
455	884	2.7805	1	1	2	3	6
456	214	7.3178	1	1	3	8	16
457	111	4.8649	1	1	2	6	14
458	1652	15.9994	3	6	12	21	33
459	567	9.3210	2	4	7	12	19
460	2285	6.3422	1	3	5	8	13
461	3199	4.5552	1	1	2	5	11
462	9980	12.9722	4	6	11	17	24
463	13387	4.7746	1	2	4	6	9
464	3180	3.4299	1	2	3	4	7
465	215	3.7767	1	1	2	4	7
466	1750	4.7080	1	1	2	5	10
467	1582	4.2061	1	1	2	4	8
468	62754	13.9856	3	6	11	18	28
471	11592	6.7331	3	4	5	8	11
472	198	23.9192	1	5	18	34	56
473	8660	13.2808	2	4	7	19	34
475	100258	11.4467	2	5	9	15	22
476	6588	12.6252	3	7	11	16	23
477	29950	8.0288	1	2	6	10	16
478	126594	7.6907	1	3	6	10	16
479	17890	4.1892	1	2	3	5	8
480	513	27.1598	9	12	19	34	58
481	150	33.5333	19	23	30	41	54
482	6981	13.4369	5	7	10	15	24
483	39458	42.8906	14	22	34	52	78
484	382	15.3822	3	7	11	20	30
485	3406	10.4055	4	5	8	12	20
486	2358	13.1768	1	5	10	17	27
487	4134	8.1265	2	3	6	10	16
488	1737	16.4531	4	7	12	20	32
489	18692	9.5287	2	4	7	12	20
490	5357	6.0062	1	2	4	7	12
491	10675	3.9154	2	2	3	4	7
492	2207	17.8691	4	5	14	28	37
493	56437	5.6673	1	2	4	7	11
494	24927	2.3773	1	1	2	3	5
495	117	17.1197	8	11	15	21	30
	11086740						

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY

[FY96 MEDPAR Update 12/96 Grouper V15.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
1	36587	10.0378	2	4	7	13	21
2	6771	10.5860	3	5	8	13	21
3	1	1.0000	1	1	1	1	1
4	6231	8.4710	2	3	6	10	18

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V15.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
5	102519	3.9306	1	2	3	4	8
6	417	3.2590	1	1	2	4	7
7	12033	11.5494	2	5	8	13	21
8	2346	3.5904	1	1	2	5	8
9	1716	7.0752	1	3	5	9	14
10	20105	7.2766	2	3	5	9	15
11	2931	4.2610	1	2	3	6	9
12	25980	6.8468	2	3	5	8	13
13	6321	5.7765	2	3	5	7	10
14	374962	6.7449	2	3	5	8	13
15	145044	4.0652	1	2	3	5	7
16	14000	6.0985	2	3	5	7	11
17	3087	3.7036	1	2	3	5	7
18	25611	5.8649	2	3	4	7	11
19	7093	4.1081	1	2	3	5	8
20	6049	10.5016	2	5	8	14	21
21	1178	7.0976	2	3	5	9	14
22	2888	4.7666	2	2	4	6	9
23	6027	4.5603	1	2	3	6	9
24	57786	5.3375	1	2	4	6	10
25	22109	3.6065	1	2	3	4	7
26	45	4.9111	1	2	4	6	11
27	3806	5.5008	1	1	3	7	13
28	12739	6.3365	1	3	4	8	13
29	4009	3.7381	1	2	3	5	7
31	3088	4.8374	1	2	3	6	9
32	1441	3.0743	1	1	2	3	6
34	18454	5.8051	1	3	4	7	11
35	3693	3.9163	1	2	3	5	7
36	6707	1.5408	1	1	1	2	2
37	1756	3.9169	1	1	3	4	8
38	196	2.7041	1	1	2	3	5
39	2546	2.0000	1	1	1	2	4
40	2520	3.3218	1	1	2	4	7
42	5401	1.9867	1	1	1	2	4
43	111	3.9910	1	2	3	5	7
44	1463	5.2160	2	3	4	7	9
45	2342	3.5956	1	2	3	5	7
46	3043	4.8478	1	2	4	6	9
47	1198	3.9307	1	1	3	4	7
49	2364	5.2563	1	2	4	6	10
50	3268	2.1068	1	1	2	2	3
51	348	2.8908	1	1	2	3	6
52	107	3.1589	1	1	2	3	7
53	3140	3.6080	1	1	2	4	8
54	2	5.0000	1	1	9	9	9
55	1876	2.9302	1	1	2	3	6
56	729	2.8299	1	1	2	3	6
57	620	3.9935	1	2	2	5	8
58	1	2.0000	2	2	2	2	2
59	103	3.1262	1	1	2	4	6
60	3	1.0000	1	1	1	1	1
61	241	4.5726	1	1	3	5	11
63	3732	4.6072	1	2	3	5	9
64	3341	6.6417	1	2	5	8	14
65	29330	3.1723	1	2	3	4	6
66	6560	3.4703	1	2	3	4	6
67	492	3.8049	1	2	3	5	7
68	10182	4.3274	2	2	4	5	8
69	2937	3.4705	1	2	3	4	6
70	40	3.3000	1	2	3	4	5
71	128	3.9297	1	2	3	5	7
72	734	3.4728	1	2	3	4	7
73	6210	4.6697	1	2	4	6	9
74	4	3.2500	1	1	2	3	7
75	40911	10.5412	4	5	8	13	20
76	41032	11.7128	3	6	9	14	22
77	2178	5.0987	1	2	4	7	10
78	30980	7.6317	3	5	7	9	13
79	238095	8.6329	3	4	7	11	16

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V15.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
80	8060	6.0504	2	3	5	7	11
81	6	6.8333	3	5	6	7	7
82	70681	7.3182	2	3	6	9	14
83	7334	5.8951	2	3	5	7	11
84	1480	3.4696	1	2	3	4	6
85	20681	6.8720	2	3	5	9	13
86	1375	4.0429	1	2	3	5	8
87	67349	6.4330	1	3	5	8	12
88	359037	5.6532	2	3	5	7	10
89	428964	6.5605	3	4	5	8	12
90	36711	4.6673	2	3	4	6	8
91	40	4.3750	2	3	4	5	9
92	13520	6.6271	2	3	5	8	12
93	1160	4.6147	1	2	4	6	8
94	13679	6.6439	2	3	5	8	13
95	1419	3.9831	1	2	3	5	7
96	58934	5.0552	2	3	4	6	9
97	23955	3.9986	1	2	3	5	7
98	22	3.8182	1	1	2	4	10
99	26526	3.1692	1	1	2	4	6
100	10188	2.2330	1	1	2	3	4
101	20410	4.7228	1	2	4	6	9
102	4491	2.8940	1	1	2	4	5
103	511	47.3190	9	15	32	71	104
104	26161	13.3467	5	8	11	16	24
105	22856	10.1918	5	6	8	12	18
106	106944	11.0508	6	7	9	13	18
107	68187	8.3051	5	6	7	9	13
108	7497	12.1122	4	7	10	15	23
110	63208	10.0765	3	6	8	12	19
111	5547	6.1031	2	4	6	7	9
112	142252	4.2152	1	2	3	6	8
113	47795	13.1200	4	6	9	16	26
114	9030	8.8270	2	4	7	11	17
115	13707	9.2228	2	4	8	12	18
116	160542	4.6957	1	2	4	6	9
117	3723	4.0285	1	1	3	5	9
118	6649	3.0284	1	1	2	4	7
119	1684	5.1081	1	1	3	7	11
120	39395	8.4464	1	2	5	11	19
121	170653	6.9325	2	4	6	9	12
122	85992	4.5068	1	2	4	6	8
123	45937	4.4685	1	1	2	6	11
124	152452	4.5929	1	2	4	6	9
125	60687	2.9374	1	1	2	4	6
126	5118	12.8009	4	6	10	16	26
127	705314	5.7996	2	3	5	7	11
128	18459	6.3467	3	4	6	7	10
129	4441	3.1678	1	1	1	3	7
130	99436	6.2969	2	4	5	8	11
131	25388	4.8483	1	3	5	6	8
132	164155	3.3160	1	2	3	4	6
133	6111	2.8053	1	1	2	3	5
134	29371	3.6005	1	2	3	4	7
135	8055	4.4431	1	2	3	5	8
136	1146	3.0689	1	1	2	4	6
137	3	9.0000	3	3	8	16	16
138	207593	4.1945	1	2	3	5	8
139	65375	2.7460	1	1	2	3	5
140	134325	3.1700	1	2	3	4	6
141	78304	4.0837	1	2	3	5	7
142	35576	2.9415	1	1	2	4	5
143	137087	2.3957	1	1	2	3	4
144	75955	5.3738	1	2	4	7	11
145	6306	2.9802	1	1	2	4	6
146	9812	10.5317	6	7	9	12	17
147	1663	6.9056	4	5	7	8	10
148	148695	12.6142	6	7	10	15	22
149	14197	7.1277	4	5	7	8	10
150	24394	11.1136	4	7	9	14	20

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V15.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
151	4227	6.1091	2	3	6	8	11
152	4685	8.4886	4	5	7	10	14
153	1634	5.7778	3	4	6	7	9
154	34916	14.0359	4	7	11	17	27
155	4502	5.0060	2	2	4	7	9
156	2	18.0000	5	5	31	31	31
157	9423	5.6030	1	2	4	7	11
158	4325	2.7866	1	1	2	4	6
159	18159	5.0739	1	2	4	6	10
160	9496	2.7724	1	1	2	4	5
161	14885	4.2146	1	2	3	5	9
162	7335	2.0907	1	1	1	3	4
163	10	4.7000	1	1	2	8	10
164	5342	8.7142	4	5	7	10	15
165	1579	5.3889	2	3	5	7	8
166	3344	5.4342	2	3	4	7	10
167	2245	2.9617	1	2	3	4	5
168	1816	4.7015	1	2	3	6	9
169	907	2.5480	1	1	2	3	5
170	12921	11.7454	2	5	9	15	23
171	1051	5.1246	1	2	4	6	10
172	32809	7.3996	2	3	5	9	15
173	2065	3.9467	1	2	3	5	8
174	238825	5.1461	2	3	4	6	9
175	21268	3.2303	1	2	3	4	6
176	17835	5.7613	2	3	4	7	11
177	11794	4.7272	2	3	4	6	8
178	3711	3.3393	1	2	3	4	6
179	12071	6.7278	2	3	5	8	13
180	88763	5.6576	2	3	4	7	11
181	21194	3.6978	1	2	3	5	7
182	237775	4.5664	1	2	4	6	8
183	69353	3.1731	1	2	3	4	6
184	84	3.6548	1	2	3	4	7
185	4091	4.8238	1	2	4	6	10
186	2	3.0000	2	2	4	4	4
187	869	3.9298	1	2	3	5	7
188	70432	5.7809	1	3	4	7	11
189	7853	3.3748	1	1	3	4	7
190	93	4.9247	1	2	3	5	12
191	11046	14.8284	4	7	11	18	29
192	775	7.1381	2	4	6	9	13
193	8318	12.9221	5	7	11	16	23
194	657	7.4247	2	4	6	9	13
195	8720	9.8580	4	6	8	12	17
196	622	6.3344	3	4	6	8	10
197	27180	8.7010	3	5	7	10	15
198	7031	4.7165	2	3	4	6	8
199	2148	10.6909	3	5	8	14	22
200	1535	11.3759	2	4	8	14	23
201	1540	14.9247	4	7	11	18	29
202	28333	7.0992	2	3	5	9	14
203	29347	7.1592	2	3	6	9	14
204	52863	6.3342	2	3	5	8	12
205	22950	6.7923	2	3	5	8	14
206	1650	4.2218	1	2	3	5	8
207	36763	5.2874	1	2	4	7	10
208	9874	3.0353	1	1	2	4	6
209	356581	5.8918	3	4	5	7	9
210	142751	7.6248	4	5	6	9	13
211	26179	5.6064	3	4	5	7	9
212	9	5.5556	2	3	3	5	6
213	7121	8.7182	2	4	7	11	17
216	6357	10.2902	2	4	8	13	21
217	20641	13.7099	3	5	9	17	29
218	24494	5.6207	2	3	4	7	10
219	18726	3.4427	1	2	3	4	6
220	5	4.2000	1	1	4	4	10
223	19460	2.7002	1	1	2	3	5
224	8049	2.1070	1	1	2	3	4

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V15.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
225	5842	4.6251	1	2	3	6	10
226	5512	6.2509	1	2	4	7	13
227	4323	2.8543	1	1	2	3	5
228	2967	3.4553	1	1	2	4	7
229	1216	2.3528	1	1	2	3	4
230	2473	4.9713	1	2	3	6	10
231	10931	4.7553	1	2	3	6	10
232	553	4.2405	1	1	2	5	10
233	4689	8.2457	2	3	6	10	16
234	2164	3.8812	1	2	3	5	8
235	5523	5.8175	1	3	4	6	11
236	39703	5.5917	2	3	4	7	10
237	1658	4.1978	1	2	3	5	8
238	7601	9.3428	3	4	7	11	17
239	60382	6.9698	2	3	5	8	13
240	13253	6.9292	2	3	5	8	14
241	2987	4.2266	1	2	3	5	8
242	2825	7.1487	2	3	5	9	14
243	80144	5.1231	2	3	4	6	9
244	12434	5.3963	1	3	4	6	10
245	4379	4.0877	1	2	3	5	7
246	1267	4.2447	1	2	3	5	8
247	11435	3.6810	1	2	3	5	7
248	7377	4.9753	1	2	4	6	9
249	10332	3.9334	1	1	3	5	8
250	3605	4.6624	1	2	3	5	9
251	2135	3.0070	1	1	2	4	5
253	19016	5.2421	1	3	4	6	10
254	9279	3.5245	1	2	3	4	6
256	4420	5.6344	1	2	4	7	11
257	22633	3.2019	1	2	3	4	6
258	16953	2.2778	1	1	2	3	4
259	3995	3.1975	1	1	2	3	7
260	4550	1.6642	1	1	1	2	3
261	2214	2.2344	1	1	2	3	4
262	659	4.0030	1	1	3	5	8
263	29116	12.4972	3	5	9	15	24
264	3348	7.2694	2	3	6	9	14
265	4140	7.1005	1	2	5	8	14
266	2554	3.5717	1	1	2	5	7
267	223	4.1839	1	1	2	5	9
268	936	3.5716	1	1	2	4	7
269	10077	8.5158	2	3	6	11	17
270	3072	3.1953	1	1	2	4	7
271	22910	7.7195	3	4	6	9	14
272	5990	6.6751	2	3	5	8	13
273	1385	5.3682	1	2	4	6	11
274	2618	7.1176	1	3	5	9	15
275	240	3.8042	1	1	2	5	8
276	939	4.7444	1	3	4	6	8
277	80128	6.2324	2	3	5	7	11
278	24698	4.8226	2	3	4	6	8
279	4	4.5000	2	2	2	6	8
280	13930	4.7090	1	2	3	6	9
281	5886	3.3819	1	1	3	4	6
282	1	1.0000	1	1	1	1	1
283	5284	5.0157	1	2	4	6	10
284	1745	3.5415	1	2	3	5	7
285	5591	12.0757	3	5	9	15	23
286	2071	7.2038	3	4	5	8	13
287	6659	12.2050	3	5	8	14	24
288	1201	5.8485	3	4	5	6	9
289	5476	3.4830	1	1	2	3	7
290	8792	2.5875	1	1	2	3	4
291	94	2.1596	1	1	2	3	4
292	5173	11.2101	2	4	8	14	22
293	271	5.8782	1	2	4	7	12
294	83789	5.2505	2	3	4	6	10
295	3687	4.0966	1	2	3	5	8
296	231836	5.7562	2	3	4	7	11

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V15.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
297	31640	3.8523	1	2	3	5	7
298	95	2.5263	1	1	2	3	5
299	1130	5.4823	1	2	4	7	11
300	15620	6.6238	2	3	5	8	13
301	1968	4.3664	1	2	3	5	8
302	7967	10.9728	5	6	8	13	19
303	19228	9.4496	4	5	8	11	17
304	13039	9.5748	2	4	7	11	19
305	2442	4.3276	1	2	4	5	8
306	11607	5.7509	1	2	4	7	12
307	2482	2.5363	1	1	2	3	4
308	9610	6.4318	1	2	4	8	13
309	3296	2.5713	1	1	2	3	5
310	27425	4.3364	1	2	3	5	9
311	8487	2.0526	1	1	2	2	4
312	1870	4.6904	1	2	3	6	10
313	664	2.2651	1	1	2	3	4
315	28343	8.5525	1	2	5	11	19
316	84582	6.9972	2	3	5	9	14
317	841	2.9441	1	1	2	3	6
318	6162	6.6386	1	3	5	8	13
319	421	2.8005	1	1	2	4	6
320	175993	5.8700	2	3	5	7	10
321	23410	4.2695	2	3	4	5	7
322	88	4.1023	2	2	3	4	7
323	17373	3.3754	1	1	2	4	7
324	7970	2.0041	1	1	2	2	4
325	7001	4.1964	1	2	3	5	8
326	2116	2.8767	1	1	2	3	5
327	15	3.4667	1	1	2	3	12
328	674	3.9139	1	2	3	5	8
329	106	2.3491	1	1	2	3	5
331	43957	5.8366	2	3	4	7	11
332	4414	3.5353	1	1	3	5	7
333	352	5.6733	1	2	4	7	12
334	19282	5.4196	3	4	5	6	8
335	9747	4.0557	2	3	4	5	6
336	59009	3.7607	1	2	3	4	7
337	34107	2.4150	1	2	2	3	4
338	3724	5.0709	1	2	3	6	11
339	2118	4.5892	1	2	3	6	10
340	2	1.5000	1	1	2	2	2
341	5932	3.1123	1	1	2	3	6
342	192	4.1927	1	2	3	6	8
344	3517	3.1137	1	1	2	3	6
345	1357	3.7900	1	1	3	5	8
346	5156	6.2853	1	3	5	8	12
347	372	2.9624	1	1	2	4	6
348	3204	4.4978	1	2	3	5	8
349	741	2.6815	1	1	2	3	5
350	6300	4.6057	2	3	4	6	8
351	2	2.5000	2	2	3	3	3
352	541	3.9279	1	1	3	5	8
353	2701	8.3425	3	4	6	9	16
354	9927	5.9853	3	3	5	7	10
355	5565	3.6270	2	3	3	4	5
356	29685	2.8084	1	2	3	3	4
357	6569	9.3230	4	5	7	11	17
358	28653	4.4708	2	3	4	5	7
359	28097	3.0930	2	2	3	4	4
360	18115	3.2832	1	2	3	4	5
361	671	3.6692	1	1	2	4	8
362	1	1.0000	1	1	1	1	1
363	3892	3.4740	1	2	2	3	7
364	1856	3.4984	1	1	2	4	7
365	2435	7.1647	1	2	4	9	16
366	4452	7.0106	1	3	5	9	15
367	538	2.9387	1	1	2	4	6
368	2377	6.2680	2	3	5	8	12
369	2399	3.4239	1	1	2	4	7

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V15.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
370	1171	5.5448	2	3	4	5	9
371	1053	3.5897	2	3	3	4	5
372	876	3.1199	1	2	2	3	5
373	3973	2.0194	1	1	2	2	3
374	152	2.9474	1	2	2	3	4
375	7	8.4286	1	2	5	9	15
376	214	3.2710	1	1	2	4	7
377	49	4.1224	1	1	2	4	9
378	187	2.6578	1	2	2	3	4
379	358	2.9609	1	1	2	3	5
380	96	1.8333	1	1	1	2	4
381	178	2.2022	1	1	1	2	4
382	47	1.3404	1	1	1	1	2
383	1583	3.8111	1	2	3	5	8
384	132	2.9318	1	1	2	3	6
385	3	6.6667	1	1	4	15	15
389	16	6.2500	3	3	5	7	12
390	8	5.1250	2	2	3	5	7
392	2532	10.5517	4	5	8	13	21
393	2	11.0000	7	7	15	15	15
394	1791	7.4199	1	2	5	8	16
395	67648	4.9800	1	2	4	6	10
396	17	4.1176	1	1	2	7	7
397	16824	5.7741	1	2	4	7	11
398	18292	6.2478	2	3	5	8	11
399	1293	4.0162	1	2	3	5	8
400	7808	9.6883	2	3	7	12	21
401	6732	11.6693	2	5	9	15	24
402	1499	4.2368	1	1	3	6	9
403	38817	8.5440	2	3	6	11	17
404	3788	4.6378	1	2	4	6	9
406	3452	10.0200	3	4	7	13	21
407	699	4.4120	1	2	4	6	8
408	2838	7.6688	1	2	5	9	18
409	5558	5.9171	2	3	4	6	12
410	74218	3.3531	1	2	3	4	5
411	33	2.3030	1	1	1	3	6
412	30	3.3667	1	1	2	5	7
413	8746	8.0082	2	3	6	10	16
414	727	4.5571	1	2	3	6	10
415	44472	14.8801	4	7	11	18	29
416	218625	7.6812	2	4	6	9	14
417	41	4.3171	1	2	4	6	8
418	20458	6.3064	2	3	5	8	12
419	14836	5.2358	2	3	4	6	10
420	2606	3.9643	1	2	3	5	7
421	10712	4.2451	1	2	3	5	8
422	84	3.8690	1	2	3	5	5
423	10806	7.9174	2	3	6	9	16
424	1855	16.8313	2	6	10	19	31
425	15463	4.3916	1	2	3	5	8
426	4693	5.2169	1	2	4	6	11
427	1680	5.2494	1	2	4	6	11
428	923	7.6111	1	3	5	9	16
429	42341	7.8410	2	3	5	9	15
430	55603	9.0212	2	4	7	11	18
431	218	8.9037	2	3	5	9	17
432	404	5.8292	1	2	3	7	12
433	8182	3.2840	1	1	2	4	7
434	22447	5.2816	2	3	4	6	10
435	16417	4.5130	1	2	4	5	8
436	3531	13.7366	4	8	13	20	26
437	15598	9.9085	4	6	9	13	18
439	1041	8.4476	1	3	6	10	18
440	4797	9.4951	2	3	6	11	20
441	604	3.4619	1	1	2	4	7
442	15505	8.2772	1	3	6	10	17
443	2968	3.3632	1	1	2	4	7
444	3308	4.7830	1	2	4	6	9
445	1229	3.6998	1	1	3	4	6

TABLE 7B.—MEDICARE PROSPECTIVE PAYMENT SYSTEM; SELECTED PERCENTILE LENGTHS OF STAY—Continued

[FY96 MEDPAR Update 12/96 Grouper V15.0]

DRG	Number discharges	Arithmetic mean LOS	10th percentile	25th percentile	50th percentile	75th percentile	90th percentile
447	4148	2.6437	1	1	2	3	5
448	29	1.0000	1	1	1	1	1
449	28641	4.0147	1	1	3	5	8
450	6265	2.2530	1	1	1	3	4
451	4	3.0000	1	1	1	2	8
452	21368	5.1393	1	2	4	6	10
453	3597	3.0770	1	1	2	4	6
454	3925	5.1827	1	2	3	6	10
455	892	2.7668	1	1	2	3	6
456	214	7.3178	1	1	3	8	16
457	111	4.8649	1	1	2	6	14
458	1652	15.9994	3	6	12	21	33
459	567	9.3210	2	4	7	12	19
460	2286	6.3408	1	3	5	8	13
461	3190	4.5564	1	1	2	5	11
462	9980	12.9722	4	6	11	17	24
463	13395	4.7779	1	2	4	6	9
464	3180	3.4145	1	2	3	4	7
465	215	3.7767	1	1	2	4	7
466	1751	4.7059	1	1	2	5	10
467	1583	4.2053	1	1	2	4	8
468	60012	14.0970	3	6	11	18	28
471	11592	6.7331	3	4	5	8	11
472	198	23.9192	1	5	18	34	56
473	8660	13.2826	2	4	7	19	34
475	100273	11.4470	2	5	9	15	22
476	6604	12.6364	3	7	11	16	23
477	29677	8.6003	1	3	6	11	18
478	126591	7.6914	1	3	6	10	16
479	17894	4.1872	1	2	3	5	8
480	388	24.2294	8	12	17	29	49
481	250	29.8760	17	21	26	36	50
482	6981	13.4369	5	7	10	15	24
483	39492	42.9069	14	22	34	52	78
484	382	15.3822	3	7	11	20	30
485	3406	10.4055	4	5	8	12	20
486	2298	13.2820	1	6	10	17	27
487	4186	8.1388	2	3	6	10	16
488	906	17.7770	4	7	13	22	37
489	19468	9.7616	2	4	7	12	20
490	5412	6.0458	1	2	4	7	12
491	10675	3.9154	2	2	3	4	7
492	2207	17.8691	4	5	14	28	37
493	56448	5.6678	1	2	4	7	11
494	24916	2.3746	1	1	2	3	5
495	87	17.3333	7	10	15	22	31
496	683	11.5344	4	6	9	13	22
497	19813	6.8081	2	4	5	8	12
498	10451	3.7528	1	2	3	5	7
499	37493	5.3005	2	3	4	6	10
500	34661	3.1298	1	2	3	4	6
501	2000	10.4195	4	5	8	12	19
502	3520	5.3301	2	3	4	6	10
503	3046	3.3700	1	2	3	4	6
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TABLE 8A.—STATEWIDE AVERAGE OPERATING COST-TO-CHARGE RATIOS FOR URBAN AND RURAL HOSPITALS (CASE WEIGHTED) APRIL 1997

State	Urban	Rural
ALABAMA	0.400	0.449
ALASKA	0.517	0.778
ARIZONA	0.397	0.559
ARKANSAS	0.541	0.491

TABLE 8A.—STATEWIDE AVERAGE OPERATING COST-TO-CHARGE RATIOS FOR URBAN AND RURAL HOSPITALS (CASE WEIGHTED) APRIL 1997—Continued

State	Urban	Rural
CALIFORNIA	0.388	0.500
COLORADO	0.486	0.609

TABLE 8A.—STATEWIDE AVERAGE OPERATING COST-TO-CHARGE RATIOS FOR URBAN AND RURAL HOSPITALS (CASE WEIGHTED) APRIL 1997—Continued

State	Urban	Rural
CONNECTICUT	0.551	0.555
DELAWARE	0.505	0.489

TABLE 8A.—STATEWIDE AVERAGE OPERATING COST-TO-CHARGE RATIOS FOR URBAN AND RURAL HOSPITALS (CASE WEIGHTED) APRIL 1997—Continued

State	Urban	Rural
DISTRICT OF COLUMBIA	0.521	.....
FLORIDA	0.397	0.397
GEORGIA	0.508	0.510
HAWAII	0.458	0.528
IDAHO	0.557	0.618
ILLINOIS	0.474	0.585
INDIANA	0.559	0.596
IOWA	0.529	0.665
KANSAS	0.447	0.652
KENTUCKY	0.503	0.529
LOUISIANA	0.469	0.531
MAINE	0.619	0.576
MARYLAND	0.764	0.815
MASSACHUSETTS	0.557	0.597
MICHIGAN	0.485	0.585
MINNESOTA	0.566	0.629
MISSISSIPPI	0.524	0.522
MISSOURI	0.445	0.531
MONTANA	0.485	0.602
NEBRASKA	0.495	0.660
NEVADA	0.339	0.516
NEW HAMPSHIRE	0.574	0.598
NEW JERSEY	0.458	.....
NEW MEXICO	0.466	0.537
NEW YORK	0.569	0.654
NORTH CAROLINA	0.534	0.475
NORTH DAKOTA	0.650	0.673
OHIO	0.551	0.593
OKLAHOMA	0.477	0.552
OREGON	0.585	0.638
PENNSYLVANIA	0.410	0.540
PUERTO RICO	0.477	0.521
RHODE ISLAND	0.577	.....
SOUTH CAROLINA	0.474	0.496
SOUTH DAKOTA	0.542	0.639
TENNESSEE	0.532	0.557
TEXAS	0.445	0.557
UTAH	0.596	0.639
VERMONT	0.610	0.566
VIRGINIA	0.494	0.510
WASHINGTON	0.663	0.666
WEST VIRGINIA	0.599	0.545
WISCONSIN	0.597	0.648
WYOMING	0.514	0.751

TABLE 8B.—STATEWIDE AVERAGE CAPITAL COST-TO-CHARGE RATIOS (CASE WEIGHTED) APRIL 1997

State	Ratio
ALABAMA	0.054
ALASKA	0.073
ARIZONA	0.047
ARKANSAS	0.055
CALIFORNIA	0.040
COLORADO	0.055
CONNECTICUT	0.039
DELAWARE	0.056
DISTRICT OF COLUMBIA	0.040
FLORIDA	0.047
GEORGIA	0.048
HAWAII	0.046
IDAHO	0.055
ILLINOIS	0.044
INDIANA	0.059

TABLE 8B.—STATEWIDE AVERAGE CAPITAL COST-TO-CHARGE RATIOS (CASE WEIGHTED) APRIL 1997—Continued

State	Ratio
IOWA	0.055
KANSAS	0.057
KENTUCKY	0.054
LOUISIANA	0.068
MAINE	0.045
MARYLAND	0.013
MASSACHUSETTS	0.063
MICHIGAN	0.048
MINNESOTA	0.057
MISSISSIPPI	0.055
MISSOURI	0.051
MONTANA	0.058
NEBRASKA	0.057
NEVADA	0.033
NEW HAMPSHIRE	0.067
NEW JERSEY	0.045
NEW MEXICO	0.053
NEW YORK	0.054
NORTH CAROLINA	0.049
NORTH DAKOTA	0.074
OHIO	0.055
OKLAHOMA	0.056
OREGON	0.054
PENNSYLVANIA	0.042
PUERTO RICO	0.090
RHODE ISLAND	0.038
SOUTH CAROLINA	0.055
SOUTH DAKOTA	0.061
TENNESSEE	0.056
TEXAS	0.053
UTAH	0.058
VERMONT	0.053
VIRGINIA	0.058
WASHINGTON	0.067
WEST VIRGINIA	0.055
WISCONSIN	0.048
WYOMING	0.065

Appendix A—Regulatory Impact Analysis

I. Introduction

We generally prepare a regulatory flexibility analysis that is consistent with the Regulatory Flexibility Act (RFA) (5 U.S.C. 601 through 612), unless we certify that a proposed rule would not have a significant economic impact on a substantial number of small entities. For purposes of the RFA, we consider all hospitals to be small entities.

Also, section 1102(b) of the Social Security Act requires us to prepare a regulatory impact analysis for any proposed rule that may have a significant impact on the operations of a substantial number of small rural hospitals. Such an analysis must conform to the provisions of section 603 of the RFA. With the exception of hospitals located in certain New England counties, for purposes of section 1102(b) of the Act, we define a small rural hospital as a hospital with fewer than 100 beds that is located outside of a Metropolitan Statistical Area (MSA) or New England County Metropolitan Area (NECMA). Section 601(g) of the Social Security Amendments of 1983 (Pub. L. 98–21) designated hospitals in certain New England counties as belonging to the adjacent NECMA. Thus, for purposes of the prospective payment system, we classify these hospitals as urban hospitals.

It is clear that the changes being proposed in this document would affect both a substantial number of small rural hospitals as well as other classes of hospitals, and the effects on some may be significant. Therefore, the discussion below, in combination with the rest of this proposed rule, constitutes a combined regulatory impact analysis and regulatory flexibility analysis.

In accordance with the provisions of Executive Order 12866, this proposed rule was reviewed by the Office of Management and Budget.

II. Objectives

The primary objective of the prospective payment system is to create incentives for hospitals to operate efficiently and minimize unnecessary costs while at the same time ensuring that payments are sufficient to adequately compensate hospitals for their legitimate costs. In addition, we share national goals of deficit reduction and restraints on government spending in general.

We believe the proposed changes would further each of these goals while maintaining the financial viability of the hospital industry and ensuring access to high quality health care for Medicare beneficiaries. We expect that these proposed changes would ensure that the outcomes of this payment system are reasonable and equitable while avoiding or minimizing unintended adverse consequences.

III. Limitations of Our Analysis

As has been the case in previously published regulatory impact analyses, the following quantitative analysis presents the projected effects of our proposed policy changes, as well as statutory changes effective for FY 1998, on various hospital groups. We estimate the effects of individual policy changes by estimating payments per case while holding all other payment policies constant. We use the best data available, but we do not attempt to predict behavioral responses to our policy changes, and we do not make adjustments for future changes in such variables as admissions, lengths of stay, or case mix. As we have done in previous proposed rules, we are soliciting comments and information about the anticipated effects of these changes on hospitals and our methodology for estimating them.

IV. Hospitals Included In and Excluded From the Prospective Payment System

The prospective payment systems for hospital inpatient operating and capital-related costs encompass nearly all general, short-term, acute care hospitals that participate in the Medicare program. There were 45 Indian Health Service hospitals in our database, which we excluded from the analysis due to the special characteristics of the prospective payment method for these hospitals. Among other short-term, acute care hospitals, only the 50 such hospitals in Maryland remain excluded from the prospective payment system under the waiver at section 1814(b)(3) of the Act. Thus, as of April 1997, we have included 5,087

hospitals in our analysis. This represents about 82 percent of all Medicare-participating hospitals. The majority of this impact analysis focuses on this set of hospitals.

The remaining 18 percent are specialty hospitals that are excluded from the prospective payment system and continue to be paid on the basis of their reasonable costs (subject to a rate-of-increase ceiling on their inpatient operating costs per discharge). These hospitals include psychiatric, rehabilitation, long-term care, children's, and cancer hospitals. The impacts of our proposed policy changes on these hospitals are discussed below.

V. Impact on Excluded Hospitals and Units

As of April 1997, there were 1,118 specialty hospitals excluded from the prospective payment system and instead paid on a reasonable cost basis subject to the rate-of-increase ceiling under § 413.40. In addition, there were 2,346 psychiatric and rehabilitation units in hospitals otherwise subject to the prospective payment system. These excluded units are also paid in accordance with § 413.40.

In accordance with section 1886(b)(3)(B) of the Act, the update factor applicable to the rate-of-increase limit for excluded hospitals and units for FY 1998 would be 2.8 percent (the excluded hospital market basket).

The impact on excluded hospitals and units of the proposed update in the rate-of-increase limit depends on the cumulative cost increases experienced by each excluded hospital or unit since its applicable base period. For excluded hospitals and units that have maintained their cost increases at a level below the percentage increases in the rate-of-increase limits since their base period, the major effect will be on the level of incentive payments these hospitals and units receive. Conversely, for excluded hospitals and units with per-case cost increases above the cumulative update in their rate-of-increase limits, the major effect will be the amount of excess costs that would not be reimbursed.

In this context, we note that, under § 413.40(d)(3), an excluded hospital or unit whose costs exceed the rate-of-increase limit is allowed to receive its rate-of-increase limit plus 50 percent of reasonable costs in excess of the limit, not to exceed 110 percent of its limit. In addition, under the various provisions set forth in § 413.40, excluded hospitals and units can obtain payment adjustments for justifiable increases in operating costs that exceed the limit. At the same time, however, by generally limiting payment increases, we continue to provide an incentive for excluded hospitals and units to restrain the growth in their spending for patient services.

We are proposing to extend certain exclusion criteria that currently apply only to long-term care hospitals to all other categories of excluded facilities. These criteria define a minimum level of independence and separate control that a facility must have in order to be excluded as a ''hospital within a hospital.'' We expect that this provision will result in a very small decrease in aggregate payment levels (other things being equal) by, for example, preventing new hospital units from inappropriately qualifying for the exemption from the-rate-of-increase ceiling that is available only to new hospitals. To our knowledge, there are fewer than 50 facilities that would be affected by this proposal. We welcome comments on this aspect of the impact analysis.

VI. Quantitative Impact Analysis of the Proposed Policy Changes Under the Prospective Payment System for Operating Costs

A. Basis and Methodology of Estimates

In this proposed rule, we are announcing policy changes and payment rate updates for the prospective payment systems for operating and capital-related costs. We have prepared separate analyses of the proposed changes to each system. This section deals with changes to the operating prospective payment system.

The data used in developing the quantitative analyses presented below are taken from the FY 1996 MedPAR file and the most current provider-specific file that is used for payment purposes. Although the analyses of the changes to the operating prospective payment system do not incorporate cost data, the most recently available hospital cost report data were used to create some of the variables by which hospitals are categorized. Our analysis has several qualifications. First, we do not make adjustments for behavioral changes that hospitals may adopt in response to these proposed policy changes. Second, due to the interdependent nature of the prospective payment system, it is very difficult to precisely quantify the impact associated with each proposed change. Third, we draw upon various sources for the data used to categorize hospitals in the tables. In some cases, particularly the number of beds, there is a fair degree of variation in the data from different sources. We have attempted to construct these variables with the best available source overall. For individual hospitals, however, some miscategorizations are possible.

Using cases in the FY 1996 MedPAR file, we simulated payments under the operating prospective payment system given various combinations of payment parameters. Any short-term, acute care hospitals not paid under the general prospective payment systems (Indian Health Service hospitals and hospitals in Maryland) are excluded from the simulations. Payments under the capital prospective payment system, or payments for costs other than inpatient operating costs, are not analyzed here. Estimated payment impacts of proposed FY 1998 changes to the capital prospective payment system are discussed below in section VII of this Appendix.

The proposed changes discussed separately below are the following:

- The effects of the annual reclassification of diagnoses and procedures and the recalibration of the DRG relative weights required by section 1886(d)(4)(C) of the Act.
- The effects of changes in hospitals' wage index values reflecting the wage index update (FY 1994 data).
- The effects of implementing the Puerto Rico-specific wage index to be applied to the Puerto Rico standardized amounts.
- The effects of completing the phase-out of payments for extraordinarily lengthy cases (day outlier cases) with a corresponding increase in payments for extraordinarily costly cases (cost outliers), in accordance with section 1886(d)(5)(A)(v) of the Act.
- The effects of geographic reclassifications by the MGCRB that will be effective in FY 1998.
- The total change in payments based on FY 1998 policies relative to payments based on FY 1997 policies.

To illustrate the impacts of the FY 1998 proposed changes, our analysis begins with a FY 1998 baseline simulation model using: the FY 1997 GROUPER (version 14.0); the FY 1997 wage index; national wage index values applied to the Puerto Rico standardized amounts; FY 1997 outlier policy (75 percent phase-out of day outlier payments); and no MGCRB reclassifications. Outlier payments are set at 5.1 percent of total DRG payments.

Each proposed and statutory policy change is then added incrementally to this baseline model, finally arriving at an FY 1998 model incorporating all of the changes. This allows us to isolate the effects of each change.

Our final comparison illustrates the percent change in payments per case from FY 1997 to FY 1998. Three factors have significant impacts here. First is the update to the standardized amounts. In accordance with section 1886(d)(3)(A)(iv) of the Act, we are proposing to update the large urban and the other areas average standardized amounts for FY 1998 using the most recently forecasted hospital market basket increase for FY 1998 of 2.8 percent. Similarly, section 1886(b)(3)(C)(ii) of the Act provides that the update factor applicable to the hospital-specific rates for sole community hospitals (SCHs) and essential access community hospitals (EACHs) (which are treated as SCHs for payment purposes) is equal to the market basket increase of 2.8 percent.

A second significant factor impacting changes in hospitals' payments per case from FY 1997 to FY 1998 is a change in MGCRB reclassification status from one year to the next. That is, hospitals reclassified in FY 1997 that are no longer reclassified in FY 1998 may have a negative payment impact going from FY 1997 to FY 1998; conversely, hospitals not reclassified in FY 1997 that are reclassified in FY 1998 may have a positive impact. In some cases these impacts can be quite substantial, so if a relatively small number of hospitals in a particular category lose their reclassification status, the percentage increase in payments for the category may be below the national mean.

A third significant factor is that we currently estimate actual outlier payments during FY 1997 will be 4.9 percent of actual total DRG payments. When the FY 1997 final rule was published, we projected FY 1997 outlier payments would be 5.1 percent of total DRG payments, and the standardized amounts were reduced correspondingly. The effects of the slightly lower than expected outlier payments during FY 1997 (as discussed in the Addendum to this proposed rule) are reflected in the analyses below

comparing our current estimates of FY 1997 payments per case to estimated FY 1998 payments per case.

Table I demonstrates the results of our analysis. The table categorizes hospitals by various geographic and special payment consideration groups to illustrate the varying impacts on different types of hospitals. The top row of the table shows the overall impact on the 5,087 hospitals included in the analysis. This is 42 fewer hospitals than were included in the impact analysis in the FY 1997 final rule (61 FR 46305). Data for 82 hospitals that were included in last year's analysis were not available for analysis this year; however, data were available this year for 40 hospitals for which data were not available last year.

The next four rows of Table I contain hospitals categorized according to their geographic location (all urban, which is further divided into large urban and other urban, or rural). There are 2,857 hospitals located in urban areas (MSAs or NECMAs) included in our analysis. Among these, there are 1,580 hospitals located in large urban areas (populations over 1 million), and 1,277 hospitals in other urban areas (populations of 1 million or fewer). In addition, there are 2,230 hospitals in rural areas. The next two groupings are by bed-size categories, shown separately for urban and rural hospitals. The final groupings by geographic location are by census divisions, also shown separately for urban and rural hospitals.

The second part of Table I shows hospital groups based on hospitals' FY 1998 payment classifications, including any reclassifications under section 1886(d)(10) of the Act. For example, the rows labeled urban, large urban, other urban, and rural show the numbers of hospitals being paid based on these categorizations (after consideration of geographic reclassifications) are 2,949, 1,733, 1,216, and 2,138, respectively.

The next three groupings examine the impacts of the proposed changes on hospitals grouped by whether or not they have residency programs (teaching hospitals that receive an IME adjustment), receive DSH payments, or some combination of these two adjustments. There are 3,996 nonteaching hospitals in our analysis, 849 teaching hospitals with fewer than 100 residents, and 242 teaching hospitals with 100 or more residents.

In the DSH categories, hospitals are grouped according to their DSH payment status, and whether they are considered urban or rural after MGCRB reclassifications. Hospitals in the rural DSH categories, therefore, represent hospitals that were not reclassified for purposes of the standardized amount. (They may, however, have been reclassified for purposes of the wage index.) The next category groups hospitals considered urban after geographic reclassification, in terms of whether they receive the IME adjustment, the DSH adjustment, both, or neither.

The next four rows examine the impacts of the proposed changes on rural hospitals by special payment groups (SCHs, rural referral centers (RRCs), and EACHs), as well as rural hospitals not receiving a special payment designation. The RRCs (95), SCH/EACHs (651), and SCH/EACH and RRCs (41) shown here were not reclassified for purposes of the standardized amount. There are four SCHs that will be reclassified for the standardized amount in FY 1998 that, therefore, are not included in these rows. There are eight EACHs included in our analysis and five EACH/RRCs.

The next two groupings are based on type of ownership and the hospital's Medicare utilization expressed as a percent of total patient days. These data are taken primarily from the FY 1995 Medicare cost report files, if available (otherwise FY 1994 data are used). Data needed to determine ownership status or Medicare utilization percentages were unavailable for 138 hospitals. For the most part, these are either new hospitals or hospitals filing manual cost reports that are not yet entered into the database.

The next series of groupings concern the geographic reclassification status of hospitals. The first three groupings display hospitals that were reclassified by the MGCRB for both FY 1997 and FY 1998, or for either of those 2 years, by urban/rural status. The next rows illustrate the overall number of FY 1998 reclassifications, as well as the numbers of reclassified hospitals grouped by urban and rural location. The final row in Table I contains hospitals located in rural counties but deemed to be urban under section 1886(d)(8)(B) of the Act.

TABLE I.—IMPACT ANALYSIS OF CHANGES FOR FY 1998 OPERATING PROSPECTIVE PAYMENT SYSTEM

[Percent changes in payments per case]

	Number of hospitals [1]	DRG recalibration [2]	New wage data [3]	Combined wage & recalibration [4]	Puerto Rico-specific wage index [5]	Day outlier phaseout [6]	MGCRB reclassification [7]	All FY 98 changes [8]
	(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(By Geographic Location)								
ALL HOSPITALS	5,087	0.1	0.1	0.0	0.0	0.0	0.0	3.0
URBAN HOSPITALS	2,857	0.1	0.1	0.0	0.0	−0.1	−0.4	3.0
LARGE URBAN	1,580	0.1	0.1	0.0	0.0	−0.2	−0.4	3.0
OTHER URBAN	1,277	0.1	0.1	0.1	0.0	0.1	−0.3	3.1
RURAL HOSPITALS	2,230	−0.2	0.4	0.0	0.0	0.2	2.1	3.2
BED SIZE (URBAN):								
0–99 BEDS	720	−0.2	−0.1	−0.4	0.1	0.2	−0.4	2.9
100–199 BEDS	948	−0.1	0.0	−0.3	0.1	0.1	−0.4	3.0
200–299 BEDS	568	0.1	0.1	0.0	0.0	0.1	−0.4	3.1
300–499 BEDS	460	0.2	0.1	0.1	0.0	−0.1	−0.4	2.9
500 OR MORE BEDS	161	0.3	0.2	0.4	0.0	−0.3	−0.2	3.1
BED SIZE (RURAL):								
0–49 BEDS	1,173	−0.4	0.4	−0.2	0.0	0.1	0.1	3.1
50–99 BEDS	654	−0.3	0.4	−0.1	0.0	0.2	1.2	3.2
100–149 BEDS	237	−0.2	0.5	0.1	0.0	0.2	2.9	3.1
150–199 BEDS	90	−0.1	0.4	0.2	0.0	0.2	2.7	3.5
200 OR MORE BEDS	76	0.0	0.3	0.2	0.0	0.2	4.0	2.9
URBAN BY CENSUS DIVISION:								
NEW ENGLAND	159	0.1	−0.4	−0.5	0.0	0.0	−0.3	2.4
MIDDLE ATLANTIC	431	0.1	0.7	0.6	0.0	−1.0	−0.4	2.7
SOUTH ATLANTIC	419	0.2	−0.4	−0.4	0.0	0.1	−0.4	2.7
EAST NORTH CENTRAL	474	0.1	0.3	0.3	0.0	0.2	−0.3	3.4

TABLE I.—IMPACT ANALYSIS OF CHANGES FOR FY 1998 OPERATING PROSPECTIVE PAYMENT SYSTEM—Continued

[Percent changes in payments per case]

	Number of hospitals [1]	DRG recalibration [2]	New wage data [3]	Combined wage & recalibration [4]	Puerto Rico-specific wage index [5]	Day outlier phaseout [6]	MGCRB reclassification [7]	All FY 98 changes [8]
	(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
EAST SOUTH CENTRAL	164	0.2	0.8	0.8	0.0	0.2	−0.3	4.1
WEST NORTH CENTRAL	191	0.2	0.1	0.1	0.0	0.2	−0.4	3.5
WEST SOUTH CENTRAL	367	0.2	−0.4	−0.4	0.0	0.2	−0.4	2.8
MOUNTAIN	129	0.3	−0.5	−0.4	0.0	0.2	−0.3	3.0
PACIFIC	475	0.1	−0.2	−0.3	0.0	0.2	−0.3	2.9
PUERTO RICO	48	0.0	0.5	0.3	5.9	−0.3	−0.3	9.4
RURAL BY CENSUS DIVISION:								
NEW ENGLAND	53	−0.2	0.7	0.3	0.0	0.2	2.0	3.5
MIDDLE ATLANTIC	85	−0.2	−0.3	−0.7	0.0	0.0	1.1	2.7
SOUTH ATLANTIC	298	−0.2	0.4	0.1	0.0	0.2	2.3	2.7
EAST NORTH CENTRAL	302	−0.1	0.6	0.3	0.0	0.2	1.2	2.9
EAST SOUTH CENTRAL	275	−0.2	0.6	0.3	0.0	0.2	2.5	3.6
WEST NORTH CENTRAL	512	−0.3	0.3	−0.1	0.0	0.2	2.4	3.3
WEST SOUTH CENTRAL	347	−0.2	0.1	−0.3	0.0	0.2	3.2	3.2
MOUNTAIN	212	−0.2	0.0	−0.4	0.0	0.1	1.6	3.5
PACIFIC	141	−0.2	1.1	0.8	0.0	0.1	2.1	3.7
PUERTO RICO	5	−0.4	−1.4	−2.0	7.2	0.0	3.9	8.6
(By Payment Categories)								
URBAN HOSPITALS	2,949	0.1	0.1	0.1	0.0	−0.1	−0.3	3.0
LARGE URBAN	1,733	0.1	0.2	0.1	0.0	−0.2	−0.3	3.0
OTHER URBAN	1,216	0.1	0.0	−0.1	0.0	0.1	−0.4	3.1
RURAL HOSPITALS	2,138	−0.2	0.3	0.0	0.0	0.2	1.9	3.1
TEACHING STATUS:								
NON-TEACHING	3,996	0.0	0.1	–0.1	0.0	0.2	0.2	3.1
FEWER THAN 100 RESIDENTS	849	0.1	0.1	0.1	0.0	0.0	–0.4	3.1
100 OR MORE RESIDENTS	242	0.2	0.3	0.3	0.0	–0.6	–0.1	2.9
DISPROPORTIONATE SHARE HOSPITALS (DSH):								
NON-DSH	3,186	0.0	0.1	0.0	0.0	0.2	0.2	3.2
URBAN DSH:								
100 BEDS OR MORE	1,403	0.1	0.1	0.1	0.0	–0.2	–0.3	2.9
FEWER THAN 100 BEDS	91	–0.3	0.0	–0.5	0.0	0.2	–0.2	2.9
RURAL DSH:								
SOLE COMMUNITY (SCH)	153	–0.3	0.2	–0.3	0.0	0.0	0.1	2.9
REFERRAL CENTERS (RRC)	35	–0.1	0.5	0.3	0.0	0.1	3.6	3.4
OTHER RURAL DSH:								
100 BEDS OR MORE	79	–0.1	0.6	0.3	0.0	0.3	2.5	2.8
FEWER THAN 100 BEDS	140	–0.4	0.6	0.1	0.0	0.1	0.8	3.8
URBAN TEACHING AND DSH:								
BOTH TEACHING AND DSH	703	0.2	0.2	0.2	0.0	–0.3	–0.4	2.9
TEACHING AND NO DSH	333	0.2	0.2	0.3	0.0	0.1	–0.2	3.3
NO TEACHING AND DSH	791	0.0	0.0	–0.2	0.0	0.1	–0.2	3.0

TABLE I.—IMPACT ANALYSIS OF CHANGES FOR FY 1998 OPERATING PROSPECTIVE PAYMENT SYSTEM—Continued

[Percent changes in payments per case]

	Number of hospitals [1]	DRG recalibration [2]	New wage data [3]	Combined wage & recalibration [4]	Puerto Rico-specific wage index [5]	Day outlier phaseout [6]	MGCRB reclassification [7]	All FY 98 changes [8]
	(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
NO TEACHING AND NO DSH	1,122	0.0	0.0	–0.2	0.1	0.2	–0.3	3.1
RURAL HOSPITAL TYPES:								
NONSPECIAL STATUS HOSPITALS	1,351	–0.2	0.4	0.0	0.0	0.2	1.6	3.0
RRC	95	0.0	0.5	0.3	0.0	0.2	5.1	3.8
SCH/EACH	651	–0.3	0.1	–0.3	0.0	0.1	0.4	2.8
SCH/EACH AND RRC	41	–0.1	0.2	–0.1	0.0	0.0	1.3	2.7
TYPE OF OWNERSHIP:								
VOLUNTARY	2,915	0.1	0.1	0.1	0.0	−0.1	−0.1	3.0
PROPRIETARY	688	0.0	−0.2	−0.3	0.1	0.2	0.1	2.8
GOVERNMENT	1,346	0.0	0.3	0.1	0.0	0.0	0.2	3.3
UNKNOWN	138	0.1	0.0	−0.1	0.3	−1.6	−0.2	2.1
MEDICARE UTILIZATION AS A PERCENT OF INPATIENT DAYS:								
0–25	266	0.0	−0.4	−0.5	0.0	−0.2	−0.2	2.5
25–50	1,300	0.2	0.0	0.1	0.0	−0.1	−0.2	3.0
50–65	1,985	0.1	0.3	0.2	0.0	0.0	0.1	3.2
OVER 65	1,397	−0.1	0.1	−0.1	0.0	0.1	0.0	2.9
UNKNOWN	138	0.1	0.0	−0.1	0.3	−1.6	−0.2	2.1
Hospitals Reclassified by the Medicare Geographic Review Board								
RECLASSIFICATION STATUS DURING FY 97 AND FY 98:								
RECLASSIFIED DURING BOTH FY 97 AND FY 98	340	0.0	1.1	0.9	0.0	0.2	5.5	3.3
URBAN	102	0.1	1.4	1.4	0.0	0.1	2.9	3.6
RURAL	238	0.0	0.6	0.4	0.0	0.3	8.5	3.1
RECLASSIFIED DURING FY 98 ONLY:	92	0.2	0.6	0.7	0.1	0.1	3.6	9.0
URBAN	15	0.5	0.9	1.2	0.2	0.1	1.0	7.4
RURAL	77	−0.2	0.3	0.0	0.0	0.2	7.1	11.0
RECLASSIFIED DURING FY 97 ONLY	203	0.0	0.3	0.2	0.0	0.0	−0.8	−0.3
URBAN	88	0.1	0.3	0.2	0.0	−0.1	−1.1	0.1
RURAL	115	−0.2	0.3	0.0	0.0	0.2	−0.1	−1.0
FY 98 RECLASSIFICATIONS:								
ALL RECLASSIFIED HOSPITALS	433	0.1	1.0	0.9	0.0	0.2	5.2	4.2
STANDARD AMOUNT ONLY	96	0.0	1.8	1.7	0.1	0.1	−0.2	3.3
WAGE INDEX ONLY	284	0.1	0.4	0.3	0.0	0.2	7.8	4.5
BOTH	53	0.0	1.8	1.7	0.0	0.2	3.7	4.6
NONRECLASSIFIED	4,627	0.1	0.1	0.0	0.0	−0.1	−0.5	2.9
ALL URBAN RECLASSIFIED	117	0.2	1.3	1.3	0.0	0.1	2.5	4.2
STANDARD AMOUNT ONLY	45	0.1	1.8	1.7	0.1	0.0	−0.9	3.3
WAGE INDEX ONLY	33	0.3	0.5	0.7	0.0	0.0	6.4	5.1
BOTH	39	0.1	1.8	1.7	0.0	0.2	1.8	4.2
NONRECLASSIFIED	2,740	0.1	0.0	0.0	0.0	−0.1	−0.5	3.0

TABLE I.—IMPACT ANALYSIS OF CHANGES FOR FY 1998 OPERATING PROSPECTIVE PAYMENT SYSTEM—Continued

[Percent changes in payments per case]

	Number of hospitals [1]	DRG recalibration [2]	New wage data [3]	Combined wage & recalibration [4]	Puerto Rico-specific wage index [5]	Day outlier phaseout [6]	MGCRB reclassification [7]	All FY 98 changes [8]
	(0)	(1)	(2)	(3)	(4)	(5)	(6)	(7)
ALL RURAL RECLASSIFIED	316	−0.1	0.6	0.4	0.0	0.2	8.3	4.3
STANDARD AMOUNT ONLY	51	−0.2	1.9	1.6	0.0	0.4	2.5	3.2
WAGE INDEX ONLY	251	−0.1	0.4	0.1	0.0	0.2	8.6	4.2
BOTH	14	−0.1	1.8	1.6	0.0	0.5	14.7	6.5
NONRECLASSIFIED	1,887	−0.2	0.3	−0.1	0.0	0.1	−0.3	2.7
OTHER RECLASSIFIED:								
HOSPITALS (SECTION 1886(d)(8)(B))	27	−0.2	0.2	−0.1	0.0	0.2	0.8	3.4

[1] Because data necessary to classify some hospitals by category were missing, the total number of hospitals in each category may not equal the national total. Discharge data are from FY 1996, and hospital cost report data are from reporting periods beginning in FY 1994 and FY 1995.

[2] This column displays the payment impacts of the recalibration of the DRG weights, based on FY 1996 MedPAR data and the DRG classification changes, in accordance with section 1886(d)(4)(C) of the Act.

[3] This column shows the payment effects of updating the data used to calculate the wage index with data from the FY 1994 cost reports.

[4] This column displays the combined impacts of the reclassification and recalibration of the DRGs, the updated wage data used to calculate the wage index, and the budget neutrality adjustment factor for these two changes, in accordance with sections 1886(d)(4)(C)(iii) and 1886(d)(3)(E) of the Act. Thus, it represents the combined impacts shown in columns 1 and 2, and the FY 1998 budget neutrality factor of 0.998400.

[5] This column illustrates the payment impacts of the Puerto Rico-specific wage index, applied to the Puerto Rico standardized amounts.

[6] This column illustrates the payment impacts of completing the phase-out of day outlier payments, and increasing cost outlier payments, in accordance with section 1886(d)(5) of the Act.

[7] Shown here are the combined effects of geographic reclassification by the Medicare Geographic Classification Review Board (MGCRB). The effects shown here demonstrate the FY 1998 payment impacts of going from no reclassifications to the reclassifications scheduled to be in effect for FY 1998. Reclassification for prior years has no bearing on the payment impacts shown here.

[8] This column shows changes in payments from FY 1997 to FY 1998. It incorporates all of the changes displayed in columns 3 through 6 (the changes displayed in columns 1 and 2 are included in column 3). It also displays the impacts of the updates to the FY 1998 standardized amounts and the hospital-specific rates, changes in hospitals' reclassification status in FY 1998 compared to FY 1997, and the difference in outlier payments from FY 1997 to FY 1998. The sum of columns 3 through 6 plus these effects may be different from the percentage changes shown here due to rounding and interactive effects.

B. Impact of the Proposed Changes to the DRG Classifications and Relative Weights (Column 1)

In column 1 of Table I, we present the combined effects of the DRG reclassifications and recalibration, as discussed in section II. of the preamble to this proposed rule. Section 1886(d)(4)(C)(i) of the Act requires us each year to make appropriate classification changes and to recalibrate the DRG weights in order to reflect changes in treatment patterns, technology, and any other factors that may change the relative use of hospital resources.

We compared aggregate payments using the FY 1997 DRG relative weights (GROUPER version 14) to aggregate payments using the proposed FY 1998 DRG relative weights (GROUPER version 15). Overall, payments increase by 0.1 percent due to the DRG changes, although this is prior to applying the budget neutrality factor for DRG and wage index changes (see column 3). Consistent with the minor changes we are proposing for the FY 1998 GROUPER, the redistributional impacts of DRG reclassifications and recalibration across hospital groups are very small (a 0.1 percent increase for large and other urban hospitals; a 0.2 percent decrease among rural hospitals). Within hospital categories, the net effects for urban hospitals are small positive changes for larger hospitals (200 or more beds), and slightly negative changes for urban hospitals with fewer than 200 beds. Among rural hospitals, the smallest rural hospitals (fewer than 50 beds) experience a decrease of 0.4 percent. For other rural bed size categories, slight negative impacts prevail. Only the largest rural hospitals (200 or more beds) avoid any negative impact from the changes.

The breakdowns by urban census division show that the increase among urban hospitals is spread across all census categories, with the largest increase (0.3 percent) for hospitals in the Mountain census division. For rural hospitals, the largest decrease is 0.4 percent for the five rural hospitals in Puerto Rico. The next largest decrease is 0.3 percent in the West North Central census division. This pattern of negative impacts upon small and rural hospitals is also apparent when examining the effects of DRG changes on hospitals according to special payment categories, with the largest decrease (0.4 percent) among rural DSH hospitals with fewer than 100 beds.

Overall, we attribute the changes associated with DRG recalibration to the increasing gap between the relative weights for medical, diagnostic, and less complicated surgical DRGs and the weights for the more complicated surgical DRGs. Since the cases associated with the former DRGs tend to be treated more often in smaller hospitals with fewer resources available, lower relative weights associated with those cases would disproportionately affect these hospitals. In general, small hospitals that serve a disproportionate share of low-income patients fit this definition. In contrast, larger hospitals in both urban and rural areas, which tend to treat the latter group of DRGs, would experience small payment increases. Teaching hospitals, which also treat the more complicated cases, experience similar effects. We note, however, that both the positive and negative impacts are relatively minor.

C. Impact of Updating the Wage Data (Column 2)

Section 1886(d)(3)(E) of the Act requires that, beginning October 1, 1993, we annually update the wage data used to calculate the wage index. In accordance with this requirement, the proposed wage index for FY

1998 is based on data submitted for hospital cost reporting periods beginning on or after October 1, 1993 and before October 1, 1994. As with the previous column, the impact of the new data on hospital payments is isolated by holding the other payment parameters constant in the two simulations. That is, column 2 shows the percentage changes in payments when going from a model using the FY 1997 wage index based on FY 1993 wage data before geographic reclassifications to a model using the FY 1998 prereclassification wage index based on FY 1994 wage data.

The results indicate that the new wage data have a 0.1 percent increase overall impact on hospital payments (prior to applying the budget neutrality factor, see column 3). Rural hospitals generally appear to benefit from the update. Payments increase for rural hospitals by 0.4 percent. These increases are attributable to relatively large increases in the wage index values for the rural areas of particular States (although all but one changed by less than 5 percent). Urban hospitals as a group are not significantly affected by the updated wage data (0.1 percent increases), although some particular categories of urban hospitals exhibit sizeable changes.

Some of the largest changes are found among both urban and rural hospitals grouped by census division. In almost all cases, payments change by less than 1 percent. Our review of the wage data indicates that these changes were attributable to improved reporting, as well as relative changes in labor costs.

Among the urban census division categories, the East South Central and the Middle Atlantic census divisions experience the largest increases (0.8 and 0.7 percent, respectively). In the East South Central, the increase stems largely from wage index increases of 6.0 percent in the Mobile, Alabama labor market area, and an increase of 5.2 percent in the Memphis, Tennessee labor market area. In the Middle Atlantic division, New York City's wage index rises by almost 1.4 percent, and Philadelphia's wage index increases by 1.3 percent. The largest decrease among urban hospitals occurs in the Mountain census division with a decline of 0.5 percent. This decrease is primarily due to a 3.7 percent decrease in the wage index for Phoenix, Arizona.

Among the rural hospitals, all census divisions experience increases except for the Middle Atlantic (and Puerto Rico, discussed separately below) census division, which experiences a slight decrease of 0.3 percent. The largest increase (1.1 percent) occurs in the Pacific census division. Here, Oregon's rural wage index rises by 3.3 percent, and Washington's rural index increases by 2.9 percent. The second largest increase (0.7 percent) occurs in the New England census division. In this census division, the Vermont index increases by 4.5 percent, and the Maine index increases by 1.9 percent.

In Puerto Rico, payments increase by 0.5 percent for the urban hospitals and decrease by 1.4 percent for the five rural hospitals. Although column 4 shows the isolated effects of introducing the Puerto Rico-specific wage index, it is also included in the payment simulations here showing the impacts of the new wage data. Of the six urban areas in Puerto Rico, two experience increases in their national and Puerto Rico-specific wage index values, including the San Juan-Bayamon area (4.4 percent national, and 2.0 percent Puerto Rico-specific), which contains the majority of the urban Puerto Rico hospitals (29 of 48), and the Mayaguez area (6.4 percent national, and 4.0 Puerto Rico-specific).

The following chart compares the shifts in wage index values for labor market areas for FY 1998 with those from FY 1997. The majority of labor market areas (336) experience less than a 5 percent change. A total of 31 labor market areas experience a change between 5 and 10 percent; 14 of those experience increases. Still fewer labor markets experience a change of more than 10 percent; one experiences an increase, and two experience decreases. We reviewed the data for any area that experienced a wage index change of 5 percent or more to determine the reason for the fluctuation.

Percentage change in area wage index values	Number of labor market areas	
	FY 1997	FY 1998
Increase more than 10 percent	1	1
Increase between 5 and 10 percent (inclusive)	10	14
Increase or decrease less than 5 percent (inclusive)	334	336
Decrease between 5 and 10 percent	9	17
Decrease more than 10 percent	3	2

Under the proposed FY 1998 wage index, 94.2 percent of urban hospitals and 99.9 percent of rural hospitals would experience a change in their wage index of less than 5 percent. Among urban hospitals, 153 would experience a change of between 5 and 10 percent (66 increasing and 87 decreasing), while only 3 rural hospitals fall into this category, all decreasing. Ten urban hospitals and no rural hospitals would experience a change of more than 10 percent. The following chart shows the projected impact for urban and rural hospitals.

Percentage change in area wage index values	Number of hospitals	
	Urban	Rural
Increase more than 10 percent	4	0
Increase between 5 and 10 percent (inclusive)	66	0
Increase or decrease less than 5 percent	2663	2217
Decrease between 5 and 10 percent (inclusive)	87	3
Decrease more than 10 percent	6	0

D. Combined Impact of DRG and Wage Index Changes—Including Budget Neutrality Adjustment (Column 3)

The impact of DRG reclassifications and recalibration on aggregate payments is required by section 1886(d)(4)(C)(iii) of the Act to be budget neutral. In addition, section 1886(d)(3)(E) of the Act specifies that any updates or adjustments to the wage index are to be budget neutral. As pointed out in the Addendum to this proposed rule, we compared aggregate payments using the FY 1997 DRG relative weights and wage index to aggregate payments using the FY 1998 DRG relative weights and wage index. Based on this comparison, we computed a wage and recalibration budget neutrality factor of 0.998400. In Table I, the combined overall impacts of the effects of both the DRG reclassifications and recalibration and the updated wage index are shown in column 3. The 0.0 percent impact for All Hospitals demonstrates that these changes, in combination with the budget neutrality factor, are budget neutral.

For the most part, the changes in this column are the sum of the changes in columns 1 and 2, minus the approximately 0.2 percent decrease attributable to the budget neutrality factor. There may, of course, be some variation of plus or minus 0.1 percent due to rounding. In calculating the total changes shown in column 7, readers should begin with this column and add across, excluding the impacts shown in columns 1 and 2.

E. Puerto Rico-Specific Wage Index (Column 4)

As described in section III. of the preamble to this proposed rule, we are proposing to adopt a Puerto Rico-specific wage index for FY 1998. These wage index values would be applied to the Puerto Rico standardized amounts. Column 4 shows the effect of implementing this proposed change results in no payment impact for the All Hospitals row. In Puerto Rico, payments increase by 5.9 percent among urban hospitals, and 7.2 percent among rural hospitals. As shown in Table 4F of the Addendum, the Puerto Rico-specific wage index values are considerably higher than Puerto Rico's national wage indexes (shown in Table 4A of the Addendum). This results in the increases shown in this column.

As indicated above, this change is shown in isolation here for ease in reading Table I. To actually calculate the national DRG and wage index budget neutrality factors, the Puerto Rico-specific wage index was included. As described in the Addendum, we also computed a DRG reclassification and recalibration budget neutrality adjustment for the Puerto Rico standardized amounts equal to 0.999224.

F. Outlier Changes (Column 5)

Currently, Medicare provides extra payment in addition to the basic DRG payment amount for extremely costly or extraordinarily lengthy cases (cost outliers and day outliers, respectively). Beginning with FY 1995, section 1886(d)(5)(A) of the Act requires the Secretary to phase-out payments for day outliers. Under the

requirements of section 1886(d)(5)(A)(v), the proportion of day outlier payments to total outlier payments is reduced from FY 1994 levels as follows: 75 percent of FY 1994 levels in FY 1995, 50 percent of FY 1994 levels in FY 1996, and 25 percent of FY 1994 levels in FY 1997. For discharges occurring after September 30, 1997, the Secretary will no longer pay for day outliers under the provisions of section 1886(d)(5)(A)(I) of the Act. This reduction in day outlier payments will be offset by an increase in cost outlier payments.

As discussed in the Addendum, for FY 1998, we are proposing that a case would receive cost outlier payments if its costs exceed the DRG amount plus $7,600. We are also proposing to maintain the marginal cost factor for cost outliers at 80 percent.

The payment impacts of these changes are minimal. Hospital categories negatively affected by phasing-out day outliers are consistent with the categories negatively affected in previous years: urban Middle Atlantic census division (1.0 percent decline); urban hospitals with 500 or more beds (0.3 percent decline); teaching hospitals with 100 or more residents (0.6 percent decline); and hospitals for which data were unavailable to calculate Medicare utilization rates (1.5 percent decline). This last category contains a number of New York City public hospitals that file manual cost reports. Because the changes to the outlier policy result in a shift in payments from cases paid as day outliers to cases paid as cost outliers, this indicates that these categories have higher percentages of day outliers.

G. Impact of MGCRB Reclassifications (Column 6)

Our impact analysis to this point has assumed hospitals are paid on the basis of their actual geographic location (with the exception of ongoing policies that provide that certain hospitals receive payments on bases other than where they are geographically located, such as hospitals in rural counties that are deemed urban under section 1886(d)(8)(B) of the Act). The changes in column 6 reflect the per case payment impact of moving from this baseline to a simulation incorporating the MGCRB decisions for FY 1998. As noted below, these decisions affect hospitals' standardized amount and wage index area assignments. In addition, rural hospitals reclassified for purposes of the standardized amount qualify to be treated as urban for purposes of the DSH adjustment.

By March 30 of each year, the MGCRB makes reclassification determinations that will be effective for the next fiscal year, which begins on October 1. The MGCRB may approve a hospital's reclassification request for the purpose of using the other area's standardized amount, wage index value, or both. Effective FY 1997, rural hospitals can no longer be reclassified to an other urban area for purposes of the standardized amount under section 1886(d)(10) of the Act.

The proposed FY 1998 wage index values incorporate all of the MGCRB's reclassification decisions for FY 1998. The wage index values also reflect any decisions made by the HCFA Administrator through the appeals and review process for MGCRB decisions as of March 29, 1997. Additional changes that result from the Administrator's review of MGCRB decisions or a request by a hospital to withdraw its application will be reflected in the final rule for FY 1998.

The overall effect of geographic reclassification is required to be budget neutral by section 1886(d)(8)(D) of the Act. Therefore, we applied an adjustment of 0.995127 to ensure that the effects of reclassification are budget neutral. (See section II.A.4 of the Addendum to this proposed rule.)

As a group, rural hospitals benefit from geographic reclassification. Their payments rise 2.1 percent, while payments to urban hospitals decline 0.4 percent. Large urban hospitals lose 0.4 percent because, as a group, they have the smallest percentage of hospitals that are reclassified (fewer than 2 percent of large urban hospitals are reclassified). There are enough hospitals in other urban areas that are reclassified to limit the decrease in payments to urban hospitals stemming from the budget neutrality offset to 0.3 percent. Among urban hospital groups generally (that is, bed size, census division, and special payment status), payments generally fall between 0.3 and 0.4 percent. Urban hospitals with 500 or more beds have the lowest decline, only 0.2 percent, owing to the reclassification of 9 hospitals within this category.

A positive impact is evident among all rural hospital groups. The smallest effect among the rural census divisions is 1.1 percent for the Middle Atlantic division. The largest impacts are in rural Puerto Rico and the West South Central, with increases of 3.9 percent and 3.2 percent, respectively.

Among rural hospitals designated as RRCs, 45 hospitals are reclassified for purposes of the wage index only, leading to the 5.1 percent increase in payments among RRCs overall. This positive impact on RRCs is also reflected in the category of rural hospitals with 200 or more beds, which has a 4.0 percent increase in payments.

Rural hospitals reclassified for FY 1997 and FY 1998 experience an 8.5 percent increase in payments. This may be due to the fact that these hospitals have the most to gain from reclassification and have been reclassified for a period of years. Rural hospitals reclassified for FY 1998 only experience a 7.1 percent increase in payments, while rural hospitals reclassified for FY 1997 only experience a 0.1 decrease in payments. Urban hospitals reclassified for FY 1997 but not FY 1998 experience a 1.1 percent decline in payments overall. This appears to be due to the combined impacts of the budget neutrality adjustment, and a number of Bergen-Passaic, New Jersey hospitals in this category that experience a 4.5 percent drop in their wage index after reclassification. Urban hospitals reclassified for FY 1998 but not for FY 1997 experience a 1.0 percent increase in payments.

The FY 1998 Reclassification rows of Table I show the changes in payments per case for all FY 1998 reclassified and nonreclassified hospitals in urban and rural locations for each of the three reclassification categories (standardized amount only, wage index only, or both). The table illustrates that the largest impact for reclassified rural hospitals is for those hospitals reclassified for both the standardized amount and the wage index. These hospitals receive a 14.7 percent increase in payments. In addition, rural hospitals reclassified just for the wage index receive an 8.6 percent payment increase. The overall impact on reclassified hospitals is to increase their payments per case by an average of 5.2 percent for FY 1998.

Among the 27 rural hospitals deemed to be urban under section 1886(d)(8)(B) of the Act, payments increase 0.8 percent due to MGCRB reclassification. This is because, although these hospitals are treated as being attached to an urban area in our baseline (their redesignation is ongoing, rather than annual like the MGCRB reclassifications), they are eligible for MGCRB reclassification. For FY 1998, one hospital in this category reclassified to a large urban area.

The reclassification of hospitals primarily affects payment to nonreclassified hospitals through changes in the wage index and the geographic reclassification budget neutrality adjustment required by section 1886(d)(8)(D) of the Act. Among hospitals that are not reclassified, the overall impact of hospital reclassifications is an average decrease in payments per case of about 0.5 percent, which corresponds closely with the geographic reclassification budget neutrality factor. Rural nonreclassified hospitals decrease slightly less, experiencing a 0.3 percent decrease. This occurs because the wage index values in some rural areas increase after reclassified hospitals are excluded from the calculation of those indexes.

The number of reclassifications for purposes of the standardized amount, or for both the standardized amount and the wage index, has declined from 210 in FY 1997 to 149 in FY 1998. The number of wage index only reclassifications increased slightly from 274 in FY 1997 to 284 in FY 1998.

The foregoing analysis was based on MGCRB and HCFA Administrator decisions made by March 29 of this year. As previously noted, there may be changes to some MGCRB decisions through the appeals, review, and applicant withdrawal process. The outcome of these cases will be reflected in the analysis presented in the final rule.

H. All Changes (Column 7)

Column 7 compares our estimate of payments per case, incorporating all changes reflected in this proposed rule for FY 1998 (including statutory changes), to our estimate of payments per case in FY 1997. It includes the effects of the 2.8 percent update to the standardized amounts and the hospital-specific rates for SCHs and EACHs, and reflects the 0.2 percentage point difference between the projected outlier payments in FY 1998 (5.1 percent of total DRG payments) and the current estimate of the percentage of actual outlier payments in FY 1997 (4.9 percent), as described in the introduction to this Appendix and the Addendum.

We also note that column 7 includes the impacts of FY 1998 MGCRB reclassifications compared to the payment impacts of FY 1997 reclassifications. Column 6, however, shows

the impact of going from no MGCRB reclassifications to the FY 1998 reclassifications. Therefore, when comparing FY 1998 payments to FY 1997, the percent changes due to FY 1998 reclassifications shown in column 6 need to be offset by the effects of reclassification on hospitals' FY 1997 payments (column 4 of Table 1, September 1, 1996 final rule; 61 FR 46306). For example, the impact of MGCRB reclassifications on rural hospitals' FY 1997 payments was approximately a 2.3 percent increase, offsetting the 2.1 percent increase in column 6. Therefore, the net change in FY 1998 payments due to reclassification for rural hospitals is actually closer to a decrease of 0.2 percent relative to FY 1997. However, last year's analysis contained a somewhat different set of hospitals, so this might affect the numbers slightly.

There might also be interactive effects among the various factors comprising the payment system that we are not able to isolate. For these reasons, the values in column 7 may not equal the sum of the changes in columns 3 through 6, plus the other impacts that we are able to identify.

The overall payment increase from FY 1998 to FY 1997 for all hospitals is a 3.0 percent increase. This reflects the 0.0 percent net change in total payments due to the proposed changes for FY 1998 shown in columns 3 through 6, the 2.8 percent update for FY 1998, and the 0.2 percent higher outlier payments in FY 1998 compared to FY 1997, as discussed above.

Hospitals in urban areas experience a 3.0 percent rise in payments per case over FY 1997. Similar to all hospitals nationally, this is primarily due to the factors discussed above: the 2.8 percent update and a 0.2 percent higher level of outlier payments estimated for FY 1998. Urban hospitals lose 0.1 percent due to the phase-out of the day outlier policy. Their 0.4 negative impact in FY 1998 due to reclassification is offset by a similar impact from FY 1997 reclassifications. Hospitals in large and other urban areas experience 3.0 percent and 3.1 percent increases, respectively.

Hospitals in rural areas experience a 3.2 percent increase. This larger increase for rural hospitals appears to be primarily attributable to RRCs experiencing a 3.8 percent increase in payments overall for FY 1998. The 45 RRCs that were reclassified for the wage index experience a 4.7 percent overall increase in payments from FY 1997 to FY 1998. Although a small number, they tend to be large hospitals and therefore have a disproportionate impact in the rural category. In fact, these 45 hospitals represented 7 percent of all rural discharges during FY 1996 (2 percent of all rural hospitals).

Puerto Rico stands out as having large payment increases for FY 1998, with urban Puerto Rico hospitals' payments increasing by 9.4 percent, and rural Puerto Rico hospitals' payments increasing by 8.6 percent. As noted earlier, this is largely due to the proposed implementation of the Puerto Rico-specific wage index during FY 1998.

Among other census divisions, urban East South Central displays the largest increase, 4.1 percent. This is related to the 0.8 percent increase due to the new wage data. Similarly, rural Pacific and rural East South Central display above average increases, 3.6 and 3.5 percent respectively. The smallest increase, on the other hand, occurs in urban New England, with a 2.4 percent payment increase. This also appears to be due to the updated wage data (the Boston wage index value declines by 1.5 percent).

The only hospital groups with negative payment impacts from FY 1997 to FY 1998 are hospitals that were reclassified for FY 1997 and are not reclassified for FY 1998. Overall, these hospitals lose 0.3 percent. The urban hospitals in this category actually experience slight payment increases over FY 1997 (0.1 percent), while the rural hospitals lose 1.0 percent. On the other hand, hospitals reclassified for FY 1998 that were not reclassified for FY 1997 would experience the greatest payment increases: 11.0 percent for 77 rural hospitals in this category and 7.4 percent for 15 urban hospitals.

Reclassification appears to be a significant factor influencing the payment increases for a number of rural hospital groups with above average overall payment increases in column 7. This impact is illustrated most clearly when one examines the rows categorizing hospitals by their reclassification status for FY 1998. All nonreclassified hospitals have an average payment increase of 2.9 percent. The average payment increase for all reclassified hospitals is 4.2 percent.

Among SCH/EACHs, the payment increase is 2.8 percent. The primary reason for this below average increase is that there is minimal impact upon these hospitals from the higher estimated FY 1998 outlier payments. Because this hospital group receives their hospital-specific rate if the hospitals exceed the applicable Federal amount (including outliers), and the hospital-specific rate is not adjusted for outliers, there is less of an impact due to changes in outlier payment levels.

TABLE II.—IMPACT ANALYSIS OF CHANGES FOR FY 1998 OPERATING PROSPECTIVE PAYMENT SYSTEM

[Payments per case]

	Number of hospitals [1] (1)	Average FY 1997 payment per case (2)	Average FY 1998 payment per case (3)	All changes (4)
(By Geographic Location)				
ALL HOSPITALS	5,087	6,759	6,965	3.0
URBAN HOSPITALS	2,857	7,332	7,554	3.0
LARGE URBAN	1,580	7,884	8,117	3.0
OTHER URBAN	1,277	6,624	6,831	3.1
RURAL HOSPITALS	2,230	4,454	4,594	3.2
BED SIZE (URBAN):				
0-99 BEDS	720	4,916	5,059	2.9
100–199 BEDS	948	6,170	6,354	3.0
200–299 BEDS	568	6,878	7,092	3.1
300–499 BEDS	460	7,827	8,055	2.9
500 OR MORE BEDS	161	9,573	9,873	3.1
BED SIZE (RURAL):				
0–49 BEDS	1,173	3,650	3,763	3.1
50-99 BEDS	654	4,169	4,302	3.2
100–149 BEDS	237	4,623	4,768	3.1
150–199 BEDS	90	4,803	4,972	3.5
200 OR MORE BEDS	76	5,576	5,740	2.9
URBAN BY CENSUS DIVISION:				
NEW ENGLAND	159	7,851	8,039	2.4
MIDDLE ATLANTIC	431	8,113	8,335	2.7
SOUTH ATLANTIC	419	7,002	7,190	2.7

TABLE II.—IMPACT ANALYSIS OF CHANGES FOR FY 1998 OPERATING PROSPECTIVE PAYMENT SYSTEM—Continued

[Payments per case]

	Number of hospitals [1]	Average FY 1997 payment per case	Average FY 1998 payment per case	All changes
	(1)	(2)	(3)	(4)
EAST NORTH CENTRAL	474	7,037	7,279	3.4
EAST SOUTH CENTRAL	164	6,537	6,807	4.1
WEST NORTH CENTRAL	191	6,945	7,186	3.5
WEST SOUTH CENTRAL	367	6,815	7,009	2.8
MOUNTAIN	129	7,101	7,315	3.0
PACIFIC	475	8,406	8,648	2.9
PUERTO RICO	48	2,692	2,946	9.4
RURAL BY CENSUS DIVISION:				
NEW ENGLAND	53	5,270	5,456	3.5
MIDDLE ATLANTIC	85	4,745	4,871	2.7
SOUTH ATLANTIC	298	4,636	4,761	2.7
EAST NORTH CENTRAL	302	4,501	4,634	2.9
EAST SOUTH CENTRAL	275	4,125	4,274	3.6
WEST NORTH CENTRAL	512	4,148	4,284	3.3
WEST SOUTH CENTRAL	347	4,004	4,133	3.2
MOUNTAIN	212	4,779	4,947	3.5
PACIFIC	141	5,578	5,783	3.7
PUERTO RICO	5	2,074	2,253	8.6
(By Payment Categories)				
URBAN HOSPITALS	2,949	7,294	7,515	3.0
LARGE URBAN	1,733	7,738	7,970	3.0
OTHER URBAN	1,216	6,634	6,839	3.1
RURAL HOSPITALS	2,138	4,433	4,570	3.1
TEACHING STATUS:				
NON-TEACHING	3,996	5,492	5,662	3.1
FEWER THAN 100 RESIDENTS	849	7,201	7,425	3.1
100 OR MORE RESIDENTS	242	11,006	11,321	2.9
DISPROPORTIONATE SHARE HOSPITALS (DSH):				
NON-DSH	3,186	5,806	5,991	3.2
URBAN DSH:				
100 BEDS OR MORE	1,403	7,970	8,203	2.9
FEWER THAN 100 BEDS	91	5,110	5,260	2.9
RURAL DSH:				
SOLE COMMUNITY (SCH)	153	4,386	4,513	2.9
REFERRAL CENTERS (RRC)	35	5,391	5,576	3.4
OTHER RURAL DSH:				
100 BEDS OR MORE	79	4,311	4,431	2.8
FEWER THAN 100 BEDS	140	3,592	3,730	3.8
	(1)	(2)	(3)	(4)
URBAN TEACHING AND DSH:				
BOTH TEACHING AND DSH	703	8,953	9,210	2.9
TEACHING AND NO DSH	333	7,395	7,641	3.3
NO TEACHING AND DSH	791	6,393	6,587	3.0
NO TEACHING AND NO DSH	1,122	5,675	5,853	3.1
RURAL HOSPITAL TYPES:				
NONSPECIAL STATUS HOSPITALS	1,351	4,001	4,121	3.0
RRC	95	5,382	5,586	3.8
SCH/EACH	651	4,555	4,683	2.8
SCH/EACH and RRC	41	5,463	5,609	2.7
TYPE OF OWNERSHIP:				
VOLUNTARY	2,915	6,932	7,143	3.0
PROPRIETARY	688	6,143	6,315	2.8
GOVERNMENT	1,346	6,283	6,490	3.3
UNKNOWN	138	7,582	7,743	2.1
MEDICARE UTILIZATION AS A PERCENT OF INPATIENT DAYS:				
0—25	266	8,849	9,066	2.5
25—50	1,300	8,227	8,475	3.0
50—65	1,985	6,183	6,382	3.2
OVER 65	1,397	5,251	5,402	2.9
UNKNOWN	138	7,582	7,743	2.1

TABLE II.—IMPACT ANALYSIS OF CHANGES FOR FY 1998 OPERATING PROSPECTIVE PAYMENT SYSTEM—Continued

[Payments per case]

	Number of hospitals [1]	Average FY 1997 payment per case	Average FY 1998 payment per case	All changes
	(1)	(2)	(3)	(4)
Hospitals Reclassified by the Medicare Geographic Review Board				
RECLASSIFICATION STATUS DURING FY 97 AND FY 98:				
RECLASSIFIED DURING BOTH FY 97 AND FY 98	340	6,123	6,328	3.3
URBAN	102	7,231	7,490	3.6
RURAL	238	5,248	5,410	3.1
RECLASSIFIED DURING FY 98 ONLY	92	5,843	6,372	9.0
URBAN	15	7,940	8,526	7.4
RURAL	77	4,384	4,872	11.1
RECLASSIFIED DURING FY 97 ONLY:				
URBAN	203	6,063	6,045	–0.3
RURAL	88	7,054	7,062	0.1
FY 98 RECLASSIFICATIONS	115	4,738	4,685	–1.1
ALL RECLASSIFIED HOSPITALS	433	6,077	6,334	4.2
STANDARD AMOUNT ONLY	96	5,927	6,120	3.3
WAGE INDEX ONLY	284	6,085	6,360	4.5
BOTH	53	6,251	6,539	4.6
NONRECLASSIFIED	4,627	6,836	7,037	2.9
ALL URBAN RECLASSIFIED	117	7,340	7,650	4.2
STANDARD AMOUNT ONLY	45	6,449	6,659	3.3
WAGE INDEX ONLY	33	9,513	9,996	5.1
BOTH	39	6,457	6,731	4.2
NONRECLASSIFIED	2,740	7,332	7,549	3.0
ALL RURAL RECLASSIFIED	316	5,100	5,317	4.3
STANDARD AMOUNT ONLY	51	4,505	4,651	3.2
WAGE INDEX ONLY	251	5,163	5,381	4.2
BOTH	14	5,337	5,683	6.5
NONRECLASSIFIED	1,887	4,216	4,329	2.7
OTHER RECLASSIFIED:				
HOSPITALS (SECTION 1886(d)(8)(B))	27	4,740	4,902	3.4

[1] These payment amounts per case do not reflect any estimates of annual case-mix increase.

Table II presents the projected impact of the proposed changes for FY 1998 for urban and rural hospitals and for the different categories of hospitals shown in Table I. It compares the projected payments per case for FY 1998 with the average estimated per case payments for FY 1997, as calculated under our models. Thus, this table presents, in terms of the average dollar amounts paid per discharge, the combined effects of the changes presented in Table I. The percentage changes shown in the last column of Table II equal the percentage changes in average payments from column 7 of Table I.

VII. Impact of Proposed Changes in the Capital Prospective Payment System

A. General Considerations

We now have data that were unavailable in previous impact analyses for the capital prospective payment system. Specifically, we have cost report data for the fourth year of the capital prospective payment system (cost reports beginning in FY 1995) available through the December 1996 update of the Health Care Provider Cost Report Information System (HCRIS). We also have updated information on the projected aggregate amount of obligated capital approved by the fiscal intermediaries. However, our impact analysis of payment changes for capital-related costs is still limited by the lack of hospital-specific data on several items. These are the hospital's projected new capital costs for each year, its projected old capital costs for each year, and the actual amounts of obligated capital that will be put in use for patient care and recognized as Medicare old capital costs in each year. The lack of this information affects our impact analysis in the following ways:

- Major investment in hospital capital assets (for example in building and major fixed equipment) occurs at irregular intervals. As a result, there can be significant variation in the growth rates of Medicare capital-related costs per case among hospitals. We do not have the necessary hospital-specific budget data to project the hospital capital growth rate for individual hospitals.
- Moreover, our policy of recognizing certain obligated capital as old capital makes it difficult to project future capital-related costs for individual hospitals. Under § 412.302(c), a hospital is required to notify its intermediary that it has obligated capital by the later of October 1, 1992, or 90 days after the beginning of the hospital's first cost reporting period under the capital prospective payment system. The intermediary must then notify the hospital of its determination whether the criteria for recognition of obligated capital have been met by the later of the end of the hospital's first cost reporting period subject to the capital prospective payment system or 9 months after the receipt of the hospital's notification. The amount that is recognized as old capital is limited to the lesser of the actual allowable costs when the asset is put in use for patient care or the estimated costs of the capital expenditure at the time it was obligated. We have substantial information regarding intermediary determinations of projected aggregate obligated capital amounts. However, we still do not know when these projects will actually be put into use for patient care, the actual amount that will be recognized as obligated capital when the project is put into use, or the Medicare share of the recognized costs. Therefore, we do not know actual obligated capital commitments for purposes of the FY 1998 capital cost projections. We discuss in Appendix B the assumptions and computations we employ to generate the amount of obligated capital commitments for use in the FY 1998 capital cost projections.

In Table III of this appendix, we present the redistributive effects that are expected to occur between ''hold-harmless'' hospitals and ''fully prospective'' hospitals in FY 1998. In addition, we have integrated sufficient hospital-specific information into our actuarial model to project the impact of the

proposed FY 1998 capital payment policies by the standard prospective payment system hospital groupings. We caution that while we now have actual information on the effects of the transition payment methodology and interim payments under the capital prospective payment system and cost report data for most hospitals, we need to randomly generate numbers for the change in old capital costs, new capital costs for each year, and obligated amounts that will be put in use for patient care services and recognized as old capital each year. We continue to be unable to predict accurately FY 1998 capital costs for individual hospitals, but with the more recent data on the experience to date under the capital prospective payment system, there is adequate information to estimate the aggregate impact on most hospital groupings.

We present the transition payment methodology by hospital grouping in Table IV. In Table V we present the results of the cross-sectional analysis using the results of our actuarial model. This table presents the aggregate impact of the FY 1998 payment policies.

B. Projected Impact Based on the Proposed FY 1998 Actuarial Model

1. Assumptions

In this impact analysis, we model dynamically the impact of the capital prospective payment system from FY 1997 to FY 1998 using a capital cost model. The FY 1998 model, described in Appendix B of this proposed rule, integrates actual data from individual hospitals with randomly generated capital cost amounts. We have capital cost data from cost reports beginning in FY 1989 through FY 1995 received through the December 1996 update of HCRIS, interim payment data for hospitals already receiving capital prospective payments through PRICER, and data reported by the intermediaries that include the hospital-specific rate determinations that have been made through January 1, 1997 in the provider-specific file. We used these data to determine the proposed FY 1998 capital rates. However, we do not have individual hospital data on old capital changes, new capital formation, and actual obligated capital costs. We have data on costs for capital in use in FY 1993, and we age that capital by a formula described in Appendix B. We therefore need to randomly generate only new capital acquisitions for any year after FY 1993. All Federal rate payment parameters are assigned to the applicable hospital.

Recently available cost report data indicate that old capital costs are declining faster than we previously projected. Consequently, for FY 1998 we are projecting faster declines in old capital. To make up for the larger declines in old capital, we are projecting faster growth in new capital. The combination of these two factors will make the 100-percent Federal rate higher than the hold-harmless rate for some hold-harmless hospitals. Therefore, we are now projecting that more hospitals will move to the 100-percent Federal rate than previously projected.

For purposes of this impact analysis, the FY 1998 actuarial model includes the following assumptions:

- Medicare inpatient capital costs per discharge will increase at the following rates during these periods:

Average percentage increase in capital costs per discharge

Fiscal year	Percentage increase
1996	3.84
1997	4.46
1998	4.50

- The Medicare case-mix index will increase by 1.0 percent in FY 1997 and FY 1998.
- The Federal capital rate and hospital-specific rate were updated in FY 1996 by an analytical framework that considers changes in the prices associated with capital-related costs, and adjustments to account for forecast error, changes in the case-mix index, allowable changes in intensity, and other factors. The proposed FY 1998 update for inflation is 1.10 percent (see section III of the Addendum).

2. Results

We have used the actuarial model to estimate the change in payment for capital-related costs from FY 1997 to FY 1998. Table III shows the effect of the capital prospective payment system on low capital cost hospitals and high capital cost hospitals. We consider a hospital to be a low capital cost hospital if, based on a comparison of its initial hospital-specific rate and the applicable Federal rate, it will be paid under the fully prospective payment methodology. A high capital cost hospital is a hospital that, based on its initial hospital-specific rate, will be paid under the hold-harmless payment methodology. Based on our actuarial model, the breakdown of hospitals is as follows:

CAPITAL TRANSITION PAYMENT METHODOLOGY

Type of hospital	Percent of hospitals	FY 1998 percent of discharges	FY 1998 percent of capital costs	FY 1998 percent of capital payments
Low Cost Hospital	66	62	58	59
High Cost Hospital	34	38	42	41

A low capital cost hospital may request to have its hospital-specific rate redetermined based on old capital costs in the current year, through the later of the hospital's cost reporting period beginning in FY 1994 or the first cost reporting period beginning after obligated capital comes into use (within the limits established in § 412.302(e) for putting obligated capital in use for patient care). If the redetermined hospital-specific rate is greater than the adjusted Federal rate, these hospitals will be paid under the hold-harmless payment methodology. Regardless of whether the hospital became a hold-harmless payment hospital as a result of a redetermination, we have continued to show these hospitals as low capital cost hospitals in Table III.

Assuming no behavioral changes in capital expenditures, Table III displays the percentage change in payments from FY 1997 to FY 1998 using the above described actuarial model. With the proposed Federal rate, we estimate aggregate Medicare capital payments will increase by 7.19 percent in FY 1998.

TABLE III.—IMPACT OF PROPOSED CHANGES FOR FY 1998 ON PAYMENTS PER DISCHARGE

[FY 1997 payments per discharge]

	Number of hospitals	Discharges	Adjusted Federal payment	Average Federal percent	Hospital specific payment	Hold harmless payment	Exceptions payment	Total payment
Low Cost Hospitals	3,330	6,844,215	$469.21	63.86	$134.59	$2.72	$56.19	$662.70
Fully Prospective	3,068	6,162,124	439.28	60.00	149.48	.....	60.85	649.61
100% Federal Rate	251	658,508	756.30	100.00	.....	.....	13.60	769.90
Hold Harmless	11	23,583	274.74	33.13	.....	789.18	27.68	1,091.61
High Cost Hospitals	1,684	4,194,629	745.99	98.04	.....	20.38	24.58	790.95

TABLE III.—IMPACT OF PROPOSED CHANGES FOR FY 1998 ON PAYMENTS PER DISCHARGE—Continued

[FY 1997 payments per discharge]

	Number of hospitals	Discharges	Adjusted Federal payment	Average Federal percent	Hospital specific payment	Hold harmless payment	Exceptions payment	Total payment
100% Federal Rate	1,590	4,037,189	760.08	100.00	.....	.....	24.02	784.10
Hold Harmless	94	157,441	384.62	49.19	.....	542.92	39.14	966.68
Total Hospitals	5,014	11,038,844	574.38	77.13	83.44	9.43	44.18	711.44

[FY 1998 payments per discharge]

	Number of hospitals	Discharges	Adjusted Federal payment	Average Federal percent	Hospital specific payment	Hold harmless payment	Exceptions payment	Total payment	Percent change
Low Cost Hospitals	3,330	7,007,946	$541.97	72.94	$101.16	$1.65	$63.03	$707.81	6.81
Fully Prospective	3,068	6,309,538	518.20	70.00	112.35	.....	67.55	698.11	7.47
100% Federal Rate	254	685,995	763.67	100.00	.....	.....	21.61	785.29	2.00
Hold Harmless	8	12,413	371.31	36.27	.....	931.58	56.43	1,359.32	24.52
High Cost Hospitals	1,684	4,294,976	767.03	99.15	.....	9.38	28.59	804.99	1.77
100% Federal Rate	1,618	4,201,847	775.10	100.00	.....	.....	28.26	803.36	2.46
Hold Harmless	66	93,129	402.78	57.09	.....	432.39	43.27	878.44	−9.13
Total Hospitals	5,014	11,302,922	627.49	83.15	62.72	4.59	49.94	744.74	4.68

We project that low capital cost hospitals paid under the fully prospective payment methodology will experience an average increase in payments per case of 6.81 percent, and high capital cost hospitals will experience an average increase of 1.77 percent.

For hospitals paid under the fully prospective payment methodology, the Federal rate payment percentage will increase from 60 percent to 70 percent and the hospital-specific rate payment percentage will decrease from 40 to 30 percent in FY 1998. The Federal rate payment percentage for hospitals paid under the hold-harmless payment methodology is based on the hospital's ratio of new capital costs to total capital costs. The average Federal rate payment percentage for high cost hospitals receiving a hold-harmless payment for old capital will increase from 49.19 percent to 57.09 percent. We estimate the percentage of hold-harmless hospitals paid based on 100 percent of the Federal rate will increase from 94.6 percent to 96.2 percent.

We expect that the average hospital-specific rate payment per discharge will decrease from $83.44 in FY 1997 to $62.72 in FY 1998. This is partly due to the decrease in the hospital-specific rate payment percentage from 40 percent in FY 1997 to 30 percent in FY 1998.

We are proposing no changes in our exceptions policies for FY 1998. As a result, the minimum payment levels would be:

- 90 percent for sole community hospitals;
- 80 percent for urban hospitals with 100 or more beds and a disproportionate share patient percentage of 20.2 percent or more; or,
- 70 percent for all other hospitals.

We estimate that exceptions payments will increase from 6.21 percent of total capital payments in FY 1997 to 6.71 percent of payments in FY 1998. The number and amount of exceptions payments is expected to increase throughout the transition period. The projected distribution of the payments is shown in the table below:

ESTIMATED FY 1998 EXCEPTIONS PAYMENTS

Type of hospital	No. of hospitals	Percent of exceptions payments
Low Capital Cost	332	78
High Capital Cost	183	22
Total	515	100

C. Cross-Sectional Comparison of Capital Prospective Payment Methodologies

Table IV presents a cross-sectional summary of hospital groupings by capital prospective payment methodology. This distribution is generated by our actuarial model.

TABLE IV.—DISTRIBUTION BY METHOD OF PAYMENT (HOLD-HARMLESS/FULLY PROSPECTIVE) OF HOSPITALS RECEIVING CAPITAL PAYMENTS

	(1) Total No. of hospitals	(2) Hold-harmless		(3) Percentage paid full Prospective rate
		Percentage paid hold-harmless (A)	Percentage paid full federal (B)	
By Geographic Location:				
All hospitals	5,014	1.5	37.3	61.2
Large urban areas (populations over 1 million)	1,543	1.7	45.4	52.9
Other urban areas (populations of 1 million or fewer)	1,254	1.6	45.7	52.7
Rural areas	2,217	1.3	27.0	71.8
Urban hospitals	2,797	1.6	45.5	52.8
0–99 beds	671	2.4	39.5	58.1
100–199 beds	938	2.3	52.1	45.5
200–299 beds	567	0.9	46.9	52.2
300–499 beds	460	0.4	40.9	58.7
500 or more beds	161	0.6	41.0	58.4
Rural hospitals	2,217	1.3	27.0	71.8
0–49 beds	1,162	1.2	18.9	79.9

TABLE IV.—DISTRIBUTION BY METHOD OF PAYMENT (HOLD-HARMLESS/FULLY PROSPECTIVE) OF HOSPITALS RECEIVING CAPITAL PAYMENTS—Continued

	(1) Total No. of hospitals	(2) Hold-harmless		(3) Percentage paid full Prospective rate
		Percentage paid hold-harmless (A)	Percentage paid full federal (B)	
50–99 beds	652	1.8	32.2	66.0
100–149 beds	237	0.8	42.2	57.0
150–199 beds	90	0.0	32.2	67.8
200 or more beds	76	0.0	51.3	48.7
By Region				
Urban by Region	2,797	1.6	45.5	52.8
New England	158	0.0	27.8	72.2
Middle Atlantic	426	1.4	38.0	60.6
South Atlantic	413	1.9	57.4	40.7
East North Central	471	0.6	36.7	62.6
East South Central	160	0.6	58.8	40.6
West North Central	188	1.6	41.0	57.4
West South Central	344	3.5	64.8	31.7
Mountain	123	3.3	52.0	44.7
Pacific	466	1.9	39.9	58.2
Puerto Rico	48	0.0	29.2	70.8
Rural by Region	2,217	1.3	27.0	71.8
New England	53	0.0	22.6	77.4
Middle Atlantic	84	2.4	28.6	69.0
South Atlantic	294	1.0	34.4	64.6
East North Central	301	0.0	23.3	76.7
East South Central	273	0.4	37.0	62.6
West North Central	511	1.0	19.8	79.3
West South Central	345	1.4	29.9	68.7
Mountain	211	5.2	21.8	73.0
Pacific	140	0.7	27.9	71.4
Large urban areas (populations over 1 million)	1,695	1.7	45.0	53.3
Other urban areas (populations of 1 million or fewer)	1,193	1.5	45.3	53.2
Rural areas	2,126	1.3	26.8	71.9
Teaching Status:				
Non-teaching	3,925	1.5	37.2	61.3
Fewer than 100 Residents	848	1.5	39.4	59.1
100 or more Residents	241	0.8	32.8	66.4
Disproportionate share hospitals (DSH):				
Non-DSH	3,128	1.6	33.7	64.7
Urban DSH:				
100 or more beds	1,397	1.1	47.7	51.2
Less than 100 beds	85	2.4	31.8	65.9
Rural DSH:				
Sole Community (SCH/EACH)	153	3.9	22.2	73.9
Referral Center (RRC/EACH)	35	0.0	51.4	48.6
Other Rural:				
100 or more beds	79	0.0	48.1	51.9
Less than 100 beds	137	0.0	26.3	73.7
Urban teaching and DSH:				
Both teaching and DSH	702	1.0	38.7	60.3
Teaching and no DSH	332	2.4	35.8	61.7
No teaching and DSH	780	1.4	54.0	44.6
No teaching and no DSH	1,074	1.9	45.7	52.4
Rural Hospital Types:				
Non special status hospitals	1,340	0.4	25.9	73.7
RRC/EACH	95	0.0	43.2	56.8
SCH/EACH	650	3.5	25.2	71.2
SCH, RRC and EACH	41	0.0	41.5	58.5
Type of Ownership:				
Voluntary.				
Voluntary	2,997	1.2	36.9	61.9
Proprietary	673	3.4	65.7	30.9
Government	1,344	1.0	24.1	74.9
Medicare Utilization as a Percent of Inpatient Days:				
0–25	254	3.1	33.9	63.0
25–50	1,293	1.9	44.4	53.7
50–65	1,980	1.2	37.9	61.0
Over 65	1,391	1.2	30.2	68.6

As we explain in Appendix B, we were not able to determine a hospital-specific rate for 73 of the 5,087 hospitals in our database. Consequently, the payment methodology distribution is based on 5,014 hospitals. These data should be fully representative of the payment methodologies that will be applicable to hospitals.

The cross-sectional distribution of hospital by payment methodology is presented by: (1) Geographic location, (2) region, and (3) payment classification. This provides an indication of the percentage of hospitals within a particular hospital grouping that will be paid under the fully prospective payment methodology and under the hold-harmless methodology.

The percentage of hospitals paid fully Federal (100 percent of the Federal rate) as hold-harmless hospitals is expected to increase to 37.3 percent in FY 1998.

Table IV indicates that 61.2 percent of hospitals will be paid under the fully prospective payment methodology. (This figure, unlike the figure of 66 percent for low cost capital hospitals in the previous section, takes account of the effects of redeterminations. In other words, this figure does not include low cost hospitals that, following a hospital-specific rate redetermination, are now paid under the hold-harmless methodology.) As expected, a relatively higher percentage of rural and governmental hospitals (71.8 percent and 74.9 percent, respectively by payment classification) are being paid under the fully prospective methodology. This is a reflection of their lower than average capital costs per case. In contrast, only 30.9 percent of proprietary hospitals are being paid under the fully prospective methodology. This is a reflection of their higher than average capital costs per case. (We found at the time of the August 30, 1991 final rule (56 FR 43430) that 62.7 percent of proprietary hospitals had a capital cost per case above the national average cost per case.)

D. Cross-Sectional Analysis of Changes in Aggregate Payments

We used our FY 1998 actuarial model to estimate the potential impact of our proposed changes for FY 1998 on total capital payments per case, using a universe of 5,014 hospitals. The individual hospital payment parameters are taken from the best available data, including: the January 1, 1997 update to the provider-specific file, cost report data, and audit information supplied by intermediaries. Table V presents estimates of payments per case under our model for FY 1997 and FY 1998 (columns 2 and 3). Column 4 shows the total percentage change in payments from FY 1997 to FY 1998. Column 5 presents the percentage change in payments that can be attributed to Federal rate changes alone.

Federal rate changes represented in Column 5 include the 0.11 percent decrease in the Federal rate, a 1.0 percent increase in case mix, changes in the adjustments to the Federal rate (for example, the effect of the new hospital wage index on the geographic adjustment factor), and reclassifications by the MGCRB. Column 4 includes the effects of the Federal rate changes represented in column 3. Column 4 also reflects the effects of all other changes, including: the change from 60 percent to 70 percent in the portion of the Federal rate for fully prospective hospitals, the hospital-specific rate update, changes in the proportion of new to total capital for hold-harmless hospitals, changes in old capital (for example, obligated capital put in use), hospital-specific rate redeterminations, and exceptions. The comparisons are provided by: (1) geographic location, (2) region, and (3) payment classification.

The simulation results show that, on average, capital payments per case can be expected to increase 4.7 percent in FY 1998. The results show that the effect of the Federal rate changes alone is to increase payments by 1.1 percent. In addition to the increase attributable to the Federal rate changes, a 3.6 percent increase is attributable to the effects of all other changes.

Our comparison by geographic location shows that capital payments per case to urban and rural hospitals experience similar rates of increase (4.7 percent and 4.4 percent, respectively). Payments per case for urban hospitals will increase at about the same rate as payments per case for rural hospitals (1.2 percent and 0.9 percent, respectively) from the Federal rate changes alone. Urban hospitals will gain the same as rural hospitals (3.5 percent) from the effects of all other changes.

By region, there is relatively little variation compared to some previous years. All regions are estimated to receive increases in total capital payments per case, partly due to the increased share of payments that is based on the Federal rate (from 60 to 70 percent). Changes by region vary from a low of 0.7 percent increase (Mountain urban region) to a high of 10.3 percent increase (rural hospitals of the Mountain region).

By type of ownership, government hospitals are projected to have the largest rate of increase (5.3 percent, 1.1 percent due to Federal rate changes and 4.2 percent from the effects of all other changes). Payments to voluntary hospitals will increase 4.9 percent (a 1.1 percent increase due to Federal rate changes and a 3.8 percent increase from the effects of all other changes) and payments to proprietary hospitals will increase 2.3 percent (a 1.2 percent increase due to Federal rate changes and a 1.1 percent increase from the effects of all other changes).

Section 1886(d)(10) of the Act established the MGCRB. Hospitals may apply for reclassification for purposes of the standardized amount, wage index, or both. Although the Federal capital rate is not affected, a hospital's geographic classification for purposes of the operating standardized amount does affect a hospital's capital payments as a result of the large urban adjustment factor and the disproportionate share adjustment for urban hospitals with 100 or more beds. Reclassification for wage index purposes affects the geographic adjustment factor since that factor is constructed from the hospital wage index.

To present the effects of the hospitals being reclassified for FY 1998 compared to the effects of reclassification for FY 1997, we show the average payment percentage increase for hospitals reclassified in each fiscal year and in total. For FY 1998 reclassifications, we indicate those hospitals reclassified for standardized amount purposes only, for wage index purposes only, and for both purposes. The reclassified groups are compared to all other nonreclassified hospitals. These categories are further identified by urban and rural designation.

Hospitals reclassified for FY 1998 as a whole are projected to experience a 5.3 percent increase in payments (a 2.0 percent increase attributable to Federal rate changes and a 3.3 percent increase attributable to the effects of all other changes). Payments to nonreclassified hospitals will increase slightly less (4.8 percent) than reclassified hospitals (5.3 percent) overall. Payments to nonreclassified hospitals will increase slightly less than reclassified hospitals from the Federal rate changes (1.2 percent compared to 2.0 percent), but they will gain about the same from the effects of all other changes (3.6 percent compared to 3.3 percent).

TABLE V.—COMPARISON OF TOTAL PAYMENTS PER CASE

[FY 1997 Payments Compared To FY 1998 Payments]

	Number of hospitals	Average FY 1997 payments/case	Average FY 1998 payments/case	All changes	Portion attributable to Federal rate change
By Geographic Location:					
All hospitals	5,014	711	745	4.7	1.1
Large urban areas (populations over 1 million)	1,543	798	835	4.6	1.1
Other urban areas (populations of 1 million or fewer)	1,254	682	716	5.0	1.2
Rural areas	2,217	567	592	4.4	0.9
Urban hospitals	2,797	747	782	4.7	1.2
0–99 beds	671	611	640	4.7	0.9

TABLE V.—COMPARISON OF TOTAL PAYMENTS PER CASE—Continued

[FY 1997 Payments Compared To FY 1998 Payments]

	Number of hospitals	Average FY 1997 payments/case	Average FY 1998 payments/case	All changes	Portion attributable to Federal rate change
100–199 beds	938	675	701	3.7	1.1
200–299 beds	567	723	753	4.2	1.2
300–499 beds	460	754	795	5.4	1.1
500 or more beds	161	914	963	5.5	1.4
Rural hospitals	2,217	567	592	4.4	0.9
0–49 beds	1,162	412	447	8.6	0.8
50–99 beds	652	438	461	5.2	1.2
100–149 beds	237	547	566	3.5	1.1
150–199 beds	90	494	518	5.0	1.5
200 or more beds	76	1,116	1,140	2.2	0.5
By Region:					
Urban by Region	2,797	747	782	4.7	1.2
New England	158	734	772	5.1	0.6
Middle Atlantic	426	821	861	4.8	0.9
South Atlantic	413	726	757	4.3	1.0
East North Central	471	690	725	5.1	1.3
East South Central	160	671	714	6.4	2.4
West North Central	188	774	824	6.4	1.4
West South Central	344	736	759	3.1	1.4
Mountain	123	827	832	0.7	0.9
Pacific	466	812	856	5.4	1.1
Puerto Rico	48	298	309	3.7	1.2
Rural by Region	2,217	567	592	4.4	0.9
New England	53	541	575	6.3	1.8
Middle Atlantic	84	481	494	2.9	0.6
South Atlantic	294	897	919	2.6	0.3
East North Central	301	462	491	6.1	1.0
East South Central	273	427	449	5.0	1.7
West North Central	511	536	556	3.8	1.1
West South Central	345	454	474	4.3	1.2
Mountain	211	554	611	10.3	1.7
Pacific	140	535	574	7.4	1.4
By Payment Classification:					
All hospitals	5,014	711	745	4.7	1.1
Large urban areas (populations over 1 million)	1,695	786	822	4.6	1.1
Other urban areas (populations of 1 million or fewer)	1,193	682	716	5.0	1.2
Rural areas	2,126	568	593	4.3	0.9
Teaching Status:					
Non-teaching	3,925	624	649	4.0	1.1
Fewer than 100 Residents	848	756	796	5.3	1.1
100 or more Residents	241	969	1,021	5.4	1.1
Urban DSH:					
100 or more beds	1,397	773	811	4.9	1.1
Less than 100 beds	85	579	626	8.2	1.2
Rural DSH:					
Sole Community (SCH/EACH)	153	421	448	6.3	0.7
Referral Center (RRC/EACH)	35	1,932	1,964	1.7	0.4
Other Rural:					
100 or more beds	79	462	474	2.6	1.1
Less than 100 beds	137	446	470	5.5	1.5
Urban teaching and DSH:					
Both teaching and DSH	702	838	882	5.2	1.1
Teaching and no DSH	332	792	837	5.7	1.2
No teaching and DSH	780	669	697	4.2	1.2
No teaching and no DSH	1,074	644	667	3.5	1.2
Rural Hospital Types:					
Non special status hospitals	1,340	431	451	4.6	0.9
RRC/EACH	95	664	693	4.5	1.2
SCH/EACH	650	465	499	7.4	1.1
SCH, RRC and EACH	41	1,868	1,888	1.1	0.4
Hospitals Reclassified by the Medicare Geographic Classification Review Board:					
Reclassification Status During FY97 and FY98:					
Reclassified During Both FY97 and FY98	340	673	704	4.5	1.2
Reclassified During FY98 Only	92	581	639	10.0	6.7
Reclassified During FY97 Only	172	618	622	0.6	−2.0
FY98 Reclassifications:					
All Reclassified Hospitals	432	658	693	5.3	2.0

TABLE V.—COMPARISON OF TOTAL PAYMENTS PER CASE—Continued

[FY 1997 Payments Compared To FY 1998 Payments]

	Number of hospitals	Average FY 1997 payments/case	Average FY 1998 payments/case	All changes	Portion attributable to Federal rate change
All Nonreclassified Hospitals	4,510	719	753	4.8	1.2
All Urban Reclassified Hospitals	117	726	764	5.2	1.8
Urban Nonreclassified Hospitals	2,680	748	783	4.7	1.1
All Reclassified Rural Hospitals	315	605	638	5.5	2.1
Rural Nonreclassified Hospitals	1,875	555	577	4.0	0.5
Other Reclassified Hospitals (Section 1886(D)(8)(B))	27	512	531	3.8	1.6
Type of Ownership:					
Voluntary	2,997	715	751	4.9	1.1
Proprietary	673	685	701	2.3	1.2
Government	1,344	712	749	5.3	1.1
Medicare Utilization as a percent of Inpatient Days:					
0–25	254	768	832	8.4	0.5
25–50	1,293	808	841	4.0	1.2
50–65	1,980	690	724	5.0	1.1
Over 65	1,391	593	617	4.2	1.0

Appendix B: Technical Appendix on the New Capital Cost Model and Required Adjustments

Under section 1886(g)(1)(A) of the Act, we set capital prospective payment rates for FY 1992 through FY 1995 so that aggregate prospective payments for capital costs were projected to be 10 percent lower than the amount that would have been payable on a reasonable cost basis for capital-related costs in that year. To implement this requirement, we developed the capital acquisition model to determine the budget neutrality adjustment factor. Even though the budget neutrality requirement expired effective with FY 1996, we must continue to determine the recalibration and geographic reclassification budget neutrality adjustment factor, and the reduction in the Federal and hospital-specific rates for exceptions payments. To determine these factors, we must continue to project capital costs and payments.

We have used the capital acquisition model since the start of prospective payments for capital costs. We now have 4 years of cost reports under the capital prospective payment system. Consequently, we have developed a new capital cost model to replace the capital acquisition model. This new model makes use of the data from these cost reports.

The following cost reports are used in the capital cost model for this proposed rule: the December 31, 1996 update of the cost reports for PPS–IX (cost reporting periods beginning in FY 1992), PPS–X (cost reporting periods beginning in FY 1993), PPS–XI (cost reporting periods beginning in FY 1994), and PPS–XII (cost reporting periods beginning in FY 1995). In addition to model payments, we use the January 1, 1997 update of the provider-specific file, and the March 1994 update of the intermediary audit file.

Since hospitals under alternative payment system waivers (that is, hospitals in Maryland) are currently excluded from the capital prospective payment system, we excluded these hospitals from our model.

We developed FY 1992, FY 1993, FY 1994, FY 1995, FY 1996, and FY 1997 hospital-specific rates using the provider-specific file and the intermediary audit file. (We used the cumulative provider-specific file, which includes all updates to each hospital's records, and chose the latest record for each fiscal year.) We checked the consistency between the provider-specific file and the intermediary audit file. We ensured that increases in the hospital-specific rates were at least as large as the published updates (increases) for the hospital-specific rates each year. We were able to match hospitals to the files as shown in the following table:

Source	Number of hospitals
Provider-Specific File Only	115
Provider-Specific and Audit File	4,972
Total	5,087

Ninety-six of the 5,087 hospitals had unusable or missing data or had no cost reports available. We determined from the cost reports that 23 of the 96 hospitals were paid under the hold-harmless methodology. Since the hospital-specific amount is not used to determine payments for these hospitals, we were able to include these 23 hospitals in the analysis. Seventy-three hospitals could not be used in the analysis because of insufficient information. They account for less than 0.3 percent of admissions so any effect should be minimal. Therefore, we used data from cost reports from 5,014 hospitals for the analysis.

We analyzed changes in capital-related costs (depreciation, interest, rent, leases, insurance, and taxes) reported in the cost reports. We found a wide variance among hospitals in the growth of these costs. For hospitals with more than 100 beds, the distribution and mean of these cost increases were different for large (greater than ±20 percent) changes in bed-size. We also analyzed changes in the growth in old capital and new capital for cost reports that provided this information. For old capital, we limited the analysis only for decreases in old capital. We did this since the opportunity for most hospitals to treat ''obligated'' capital put into service as old capital has expired. Old capital costs should, therefore, decrease as assets become fully depreciated, and interest costs decrease as the loan is amortized.

The new capital cost model separates the hospitals into three mutually exclusive groups. Hold-harmless hospitals with data on old capital were placed in the first group. Of the remaining hospitals, those hospitals with fewer than 100 beds comprise the second group. The third group consists of all hospitals that did not fit into either of the first two groups. Each of these groups displayed unique patterns of growth in capital costs. We found that the gamma distribution is useful in explaining and describing the patterns of increase in capital costs. A gamma distribution is a statistical distribution that can be used to describe patterns of growth rates, with greatest proportion of rates being at the low end. We use the gamma distribution to estimate individual hospital rates of increase.

(1) For hold-harmless hospitals, old capital cost changes were fitted to a truncated gamma distribution, that is, a gamma distribution covering only the distribution of cost decreases. New capital costs changes were fitted to the entire gamma distribution allowing for both decreases and increases.

(2) For hospitals with fewer than 100 beds (small), total capital cost changes were fitted to the gamma distribution allowing for both decreases and increases.

(3) Other (large) hospitals were further separated into three groups:

- Bed-size decreases over 20 percent (decrease)
- Bed-size increases over 20 percent (increase)
- Other (no-change).

Capital cost changes for large hospitals were fitted to gamma distributions for each bed-size change group, allowing for both decreases and increases in capital costs. We analyzed the probability distribution of increases and decreases in bed-size for large hospitals. We found the probability somewhat dependent on the prior year

change in bed-size and factored this dependence into the analysis. Probabilities of bed-size change were determined. Separate sets of probability factors were calculated to reflect the dependence on prior year change in bed-size (increase, decrease, and no change).

The gamma distributions were fitted to changes in aggregate capital costs for the entire hospital. We checked the relationship between aggregate costs and Medicare per discharge costs. For large hospitals, there was a small variance, but the variance was larger for small hospitals. Since costs are used only for the hold-harmless methodology and to determine exceptions, we decided to use the gamma distributions fitted to aggregate cost increases for estimating distributions of cost per discharge increases.

Capital costs per discharge calculated from the cost reports were increased by random numbers drawn from the gamma distribution to project costs in future years. Old and new capital were projected separately for hold-harmless hospitals. Aggregate capital per discharge costs were projected for all other hospitals. Because the distribution of increases in capital costs varies with changes in bed-size for large hospitals, we first projected changes in bed-size for large hospitals before drawing random numbers from the gamma distribution. Bed-size changes were drawn from the uniform distribution with the probabilities dependent on the previous year bed-size change. The gamma distribution has a shape parameter and a scaling parameter. (We used different parameters for each hospital group, and for old and new capital.) The average national capital cost per discharge generated by this model is the combined average of many randomly generated increases. This average must equal the projected average national capital cost per discharge, which we projected separately (outside this model). We adjusted the shape parameter of the gamma distributions so that the modeled average capital cost per discharge matches our projected capital cost per discharge. The shape parameter for old capital was not adjusted since we are modeling the aging of ''existing'' assets. This model provides a distribution of capital costs among hospitals that are consistent with our aggregate capital projections.

Once each hospital's capital-related costs are generated, the model projects capital payments. We use the actual payment parameters (for example, the case-mix index and the geographic adjustment factor) that are applicable to the specific hospital.

To project capital payments, the model first assigns the applicable payment methodology (fully prospective or hold-harmless) to the hospital as determined from the provider-specific file and the cost reports. The model simulates Federal rate payments using the assigned payment parameters and hospital-specific estimated outlier payments. The case-mix index for a hospital is derived from the FY 1996 MedPAR file using the FY 1998 DRG relative weights published in section V. of the Addendum of this proposed rule. The case-mix index is increased each year after FY 1996 based on analysis of past experiences in case-mix increases. Based on analysis of recent case-mix increases, we estimate that case-mix will increase 1.4 percent in FY 1997 and 1.0 percent in FY 1998. (Since we are using FY 1996 cases for our analysis, the FY 1996 increase in case mix has no effect on projected capital payments.)

Changes in geographic classification and revisions to the hospital wage data used to establish the hospital wage index affect the geographic adjustment factor. Changes in the DRG classification system and the relative weights affect the case-mix index.

Section 412.308(c)(4)(ii) requires that the estimated aggregate payments for the fiscal year, based on the Federal rate after any changes resulting from DRG reclassifications and recalibration and the geographic adjustment factor, equal the estimated aggregate payments based on the Federal rate that would have been made without such changes. For FY 1997, the budget neutrality adjustment factor was 1.00123. To determine the factor for FY 1998, we first determined the portion of the Federal rate that would be paid for each hospital in FY 1998 based on its applicable payment methodology. Using our model, we then compared estimated aggregate Federal rate payments based on the FY 1997 DRG relative weights and the FY 1997 geographic adjustment factor to estimated aggregate Federal rate payments based on the FY 1998 relative weights and the FY 1998 geographic adjustment factor. In making the comparison, we held the FY 1998 Federal rate portion constant and set the other budget neutrality adjustment factor and the exceptions reduction factor to 1.00. We determined that, to achieve budget neutrality for the changes in the geographic adjustment factor and DRG classifications and relative weights, an incremental budget neutrality adjustment of 1.00013 for FY 1998 should be applied to the previous cumulative FY 1997 adjustment of 1.00123, yielding a cumulative adjustment of 1.00136 through FY 1998. The following table summarizes the adjustment factors for each fiscal year:

BUDGET NEUTRALITY ADJUSTMENT FOR DRG RECLASSIFICATIONS AND RECALIBRATION AND THE GEOGRAPHIC ADJUSTMENT FACTOR

Fiscal year	Incremental adjustment	Cumulative adjustment
1992	—	1.00000
1993	0.99800	0.99800
1994	1.00531	1.00330
1995	0.99980	1.00310
1996	0.99940	1.00250
1997	0.99873	1.00123
1998	1.00013	1.00136

The methodology used to determine the recalibration and geographic (DRG/GAF) budget neutrality adjustment factor is similar to that used in establishing budget neutrality adjustments under the prospective payment system for operating costs. One difference is that, under the operating prospective payment system, the budget neutrality adjustments for the effect of geographic reclassifications are determined separately from the effects of other changes in the hospital wage index and the DRG relative weights. Under the capital prospective payment system, there is a single DRG/GAF budget neutrality adjustment factor for changes in the geographic adjustment factor (including geographic reclassification) and the DRG relative weights. In addition, there is no adjustment for the effects that geographic reclassification has on the other payment parameters, such as the payments for serving low-income patients or the large urban add-on payments.

In addition to computing the DRG/GAF budget neutrality adjustment factor, we used the model to simulate total payments under the prospective payment system.

Additional payments under the exceptions process are accounted for through a reduction in the Federal and hospital-specific rates. Therefore, we used the model to calculate the exceptions reduction factor. This exceptions reduction factor ensures that aggregate payments under the capital prospective payment system, including exceptions payments, are projected to equal the aggregate payments that would have been made under the capital prospective payment system without an exceptions process. Since changes in the level of the payment rates change the level of payments under the exceptions process, the exceptions reduction factor must be determined through iteration.

In the August 30, 1991 final rule (56 FR 43517), we indicated that we would publish each year the estimated payment factors generated by the model to determine payments for the next 5 years. The table below provides the actual factors for FY 1992, FY 1993, FY 1994, FY 1995, FY 1996, and FY 1997, the proposed FY 1998 factor, and the estimated factors that would be applicable through FY 2002. We caution that, except with respect to FY 1992, FY 1993, FY 1994, FY 1995, FY 1996 and FY 1997, these are estimates only, and are subject to revisions resulting from continued methodological refinements, more recent data, and any payment policy changes that may occur. In this regard, we note that in making these projections we have assumed that the cumulative DRG/GAF budget neutrality adjustment factor will remain at 1.0014 for FY 1998 and later because we do not have sufficient information to estimate the change that will occur in the factor for years after FY 1998.

The projections are as follows:

Fiscal year	Update factor	Exceptions reduction factor	Budget neutrality factor	DRG/GAF adjustment factor[1]	Outlier adjustment factor	Federal rate adjustment	Federal rate (after outlier reduction)
1992	N/A	0.9813	0.9602	.....	.9497	.....	415.59
1993	6.07	.9756	.9162	.9980	.9496	.....	417.29
1994	3.04	.9485	.8947	1.0053	.9454	[2].9260	378.34
1995	3.44	.9734	.8432	.9998	.9414	.....	376.83
1996	1.20	.9849	N/A	.9994	.9536	[3].9972	461.96
1997	0.70	.9358	N/A	.9987	.9481	.....	438.92
1998	1.10	.9276	N/A	1.0001	.9449	.....	438.43
1999	1.30	.9286	N/A	[4]1.0000	[4].9449	.....	444.61
2000	1.30	.9173	N/A	1.0000	.9449	.....	444.91
2001	1.30	.9070	N/A	1.0000	.9449	.....	445.63
2002	1.40	[5]1.0000	N/A	1.0000	.9449	.....	498.20

[1] **Note:** The incremental change over the previous year.
[2] **Note:** OBRA 1993 adjustment.
[3] **Note:** Adjustment for change in the transfer policy.
[4] **Note:** Future adjustments are, for purposes of this projection, assumed to remain at the same level.
[5] **Note:** We are unable to estimate exceptions payments for the year under the special exceptions provision (§ 412.348(g) of the regulations) because the regular exceptions provision (§ 412.348(e)) expires.

Appendix C: Revised Hospital Market Basket Data Sources

A. Introduction: Market Basket Relative Weights and Choice of Price Proxy Variables for the Operating Hospital Input Price Indexes

In the August 30, 1996 final rule (61 FR 46323), we discussed in detail the current 1992-based hospital market baskets, and noted that we would revise the hospital market baskets when new cost data for 1992 became available. This appendix describes the technical features of the revisions to the 1992-based indexes that we are proposing in this rule in section IV of the preamble. For both the prospective payment and excluded hospital market baskets, the differences between the proposed revised market basket and the current market basket are noted.

We present this description of the hospital operating market baskets in three steps:

- A synopsis of the differences between the current 1992-based market baskets and the proposed revisions to those market baskets.
- A description of the methodology used to develop the cost category weights in the proposed revised market baskets, making note of the differences from the methodology used to develop the 1992-based current market baskets.
- A description of the data sources used to measure price change for each component of the proposed revised market baskets, making note of the differences from the price proxies used in the 1992-based current hospital market baskets.

B. Synopsis of Differences

Two major differences exist between the 1992-based current hospital market baskets and the proposed hospital market baskets. The first major change is that the proposed revised hospital market baskets are based on additional hospital expenditure data—data not available until after the publication of the August 30, 1996 final rule. The 1992-based current market baskets were derived from hospital cost reports for cost reporting periods beginning on or after October 1, 1991 and before October 1, 1992, augmented by information from the latest available (1987) Input-Output Table for the hospital industry, produced by the Bureau of Economic Analysis, U.S. Department of Commerce. In addition to the data sources cited above, the proposed revised hospital market baskets use data from the 1992 Asset and Expenditure Survey, produced by the U.S. Department of Commerce, Economic and Statistics Administration, Bureau of the Census. These are more recent data made available after the publication of the FY 1997 final rule.

The second major difference is that some cost categories have been combined with other cost categories to better reflect the new data sources. Specifically, the Transportation Services category has been combined with All Other Non-labor Intensive Services; Business Services and Computer and Data Processing Services with All Other Labor Intensive Services; and part of Fuel Oil, Coal, etc. was combined with Natural Gas into Fuels, Nonhighway. The remainder of the Fuel Oil, Coal, etc. was combined with Miscellaneous Products. These category mergers reflect the Bureau of the Census categories in the Asset and Expenditure Survey and its information on services.

C. Methodology for Developing the Proposed Revised Cost Category Weights

Cost category weights for the proposed revised market baskets were developed in three stages. First, base weights for the six main categories (wages and salaries, employee benefits, pharmaceuticals, nonmedical professional fees, professional liability insurance, and all other expenses) were obtained from the 1992-based hospital market baskets. As the base year is not changing, these weights, developed last year from HCRIS data and the American Hospital Association (AHA) Annual Survey information, will not change. The weight for All Other Expenses was divided into subcategories using cost shares from the 1992 Asset and Expenditure Survey for Hospitals, U.S. Department of Commerce, Economics and Statistics Administration, Bureau of the Census. These subcategories were further divided using cost shares from the 1987 Input-Output Table for the hospital industry, produced by the U.S. Department of Commerce, Bureau of Economic Analysis (BEA), aged to 1992 using price changes.

A description of the source of the six main category weights is found in the August 30, 1996 final rule (61 FR 46323). The weight for the Utilities category, as well as those for the Electricity, Fuels Nonhighway, and Water and Sewerage Maintenance cost categories, was derived from the 1992 Asset and Expenditure Survey. The All Other Goods and Services category has more subcategories than any other market basket category. Goods found in this category include: direct service food, contract service food, pharmaceuticals, chemicals, medical instruments, photo supplies, rubber and plastics, paper products, apparel, machinery and equipment and miscellaneous products. Services found in this category include telephone services, postage, other labor-intensive services, and other nonlabor-intensive services. The share for pharmaceuticals was derived from the 1992 Medicare cost reports. Relative shares for the other subcategories were derived from the 1992 Asset and Expenditure Survey, augmented by data from the 1987 Input-Output Table produced by BEA for the hospital industry, aged forward to 1992 using price changes, and then standardized to be consistent with data from the Asset and Expenditure Survey.

D. Price Proxies Used to Measure Cost Category Growth

Descriptions of the price proxies used to measure cost category price growth in the current hospital market baskets are found in the August 30, 1996 final rule (61 FR 46324). The price proxies used for the proposed revised hospital market baskets are the same as those for the current market baskets. Four cost categories in the current hospital market baskets have been combined with other cost categories to better reflect new data sources.

For further discussion of the rationale for choosing specific price proxies, we refer the reader to the September 3, 1986 final rule (51 FR 31582).

Appendix D

May 27, 1997

The Honorable Albert Gore, Jr.
President of the Senate

Washington, D.C. 20510

Dear Mr. President: Section 1886(e)(3)(B) of the Social Security Act (the Act) requires me to report to Congress the initial estimate of the applicable percentage increase in inpatient hospital payment rates for fiscal year (FY) 1998 that I will recommend for hospitals subject to the Medicare prospective payment system (PPS) and for hospitals and units excluded from PPS. This submission constitutes the required report.

Current law mandates an update for all PPS hospitals equal to the market basket rate of increase. Based on the recent changes in delivery of hospital inpatient care, with an increasing reliance on hospital outpatient and postacute care services and a corresponding decrease in use of hospital inpatient services, we recommend an update for hospitals in both large urban and other areas of zero percent.

Sole community hospitals (SCHs) are the sole source of care in their area and are afforded special payment protection to maintain access to services for Medicare beneficiaries. SCHs are paid the higher of a hospital-specific rate or the Federal PPS rate. Current law mandates that the FY 1998 update to hospital-specific rates for SCHs equal the market basket rate of increase. We recommend an update to hospital-specific rates equal to our recommended increase for all PPS hospitals, zero percent.

Hospitals and distinct part hospital units excluded from PPS are paid based on their reasonable costs subject to a limit under the Tax Equity and Fiscal Responsibility Act (TEFRA) of 1982. Current law mandates an update for all hospitals and distinct part units excluded from PPS equal to the rate of increase in the excluded hospital market basket. Consistent with our recommendation for PPS hospitals, we recommend an increase in the TEFRA limit of zero percent.

A final recommendation on the appropriate percentage increases for FY 1998 will be made nearer the beginning of the new Federal fiscal year based on the most current data available at that time. The final recommendation will incorporate our analysis of the latest estimates of all relevant factors, including recommendations by ProPAC.

Section 1886(d)(4)(C)(iv) of the Act also requires that I include in my report recommendations with respect to adjustments to the diagnosis-related group (DRG) weighting factors. At this time I do not anticipate recommending any adjustment to the DRG weighting factors for FY 1998.

I am pleased to provide this recommendation to you. I am also sending a copy of this letter to the Speaker of the House of Representatives.

Sincerely,

Donna E. Shalala

May 27, 1997

The Honorable Newt Gingrich
Speaker of the House of Representatives
Washington, D.C. 20515

Dear Mr. Speaker: Section 1886(e)(3)(B) of the Social Security Act (the Act) requires me to report to Congress the initial estimate of the applicable percentage increase in inpatient hospital payment rates for fiscal year (FY) 1998 that I will recommend for hospitals subject to the Medicare prospective payment system (PPS) and for hospitals and units excluded from PPS. This submission constitutes the required report.

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Section 1886(d)(4)(C)(iv) of the Act also requires that I include in my report recommendations with respect to adjustments to the diagnosis-related group (DRG) weighting factors. At this time I do not anticipate recommending any adjustment to the DRG weighting factors for FY 1998.

I am pleased to provide this recommendation to you. I am also sending a copy of this letter to the President of the Senate.

Sincerely,

Donna E. Shalala

Appendix E: Recommendation of Update Factors for Operating Cost Rates of Payment for Inpatient Hospital Services

I. Background

Several provisions of the Act address the setting of update factors for inpatient services furnished in FY 1998 by hospitals subject to the prospective payment system and those excluded from the prospective payment system. Section 1886(b)(3)(B)(i)(XIII) of the Act sets the FY 1998 percentage increase in the operating cost standardized amounts equal to the rate of increase in the hospital market basket for prospective payment hospitals in all areas. Section 1886(b)(3)(B)(iv) of the Act sets the FY 1998 percentage increase in the hospital-specific rates applicable to sole community hospitals equal to the rate set forth in section 1886(b)(3)(B)(i) of the Act, that is, the same update factor as all other hospitals subject to the prospective payment system, or the rate of increase in the market basket. Section 1886(b)(3)(B)(ii) of the Act sets the FY 1998 percentage increase in the rate of increase limits for hospitals excluded from the prospective payment system equal to the rate of increase in the excluded hospital market basket.

In accordance with section 1886(d)(3)(A) of the Act, we are proposing to update the standardized amounts, the hospital-specific rates, and the rate-of-increase limits for hospitals excluded from the prospective payment system as provided in section 1886(b)(3)(B) of the Act. Based on the first quarter 1997 forecast of the FY 1998 revised market basket increase of 2.8 percent for hospitals subject to the prospective payment system, the proposed updates in the standardized amounts are 2.8 percent for hospitals in both large urban and other areas. The proposed update in the hospital-specific rate applicable to sole community hospitals is 2.8 percent (that is, the market basket rate of increase). The proposed update for hospitals excluded from the prospective payment system is the percentage increase in the excluded hospital market basket (currently estimated at 2.8 percent).

Sections 1886(e)(2)(A) and (3)(A) of the Act require that the Prospective Payment Assessment Commission (ProPAC) recommend to the Congress by March 1, 1997 an update factor that takes into account changes in the market basket rate of increase index, hospital productivity, technological and scientific advances, the quality of health care provided in hospitals, and long-term cost effectiveness in the provision of inpatient hospital services.

In its March 1, 1997 report, ProPAC recommended update factors to the standardized amounts equal to zero percentage points for hospitals in both large urban and other areas (Recommendation 2). ProPAC did not make a separate recommendation for the hospital-specific rates applicable to sole community hospitals. The components of ProPAC's update factor recommendations are described in detail in the ProPAC report, which is published as Appendix F to this document. We discuss ProPAC's recommendations concerning the update factors and our responses to these recommendations below.

Section 1886(e)(4) of the Act requires that the Secretary, taking into consideration the recommendations of ProPAC, recommend update factors for each fiscal year that take into account the amounts necessary for the efficient and effective delivery of medically appropriate and necessary care of high quality. Under section 1886(e)(5) of the Act, we are required to publish the update factors recommended under section 1886(e)(4) of the Act. Accordingly, this appendix provides the recommendations of appropriate update factors, the analysis underlying our recommendations, and our responses to the

ProPAC recommendations concerning the update factors.

II. Secretary's Recommendations

Under section 1886(e)(4) of the Act, we are recommending that an appropriate update factor for the standardized amounts is zero percentage points for hospitals located in large urban and other areas. We are also recommending an update of zero percentage points to the hospital-specific rate for sole community hospitals. We believe these recommended update factors would ensure that Medicare acts as a prudent purchaser and provide incentives to hospitals for increased efficiency, thereby contributing to the solvency of the Medicare Part A Trust Fund.

We recommend that hospitals excluded from the prospective payment system receive a zero update. This update is consistent with the updates provided to the prospective payment hospitals. We believe this update would ensure that Medicare acts as a prudent purchaser and would provide incentives to hospitals for increased efficiency, thereby contributing to the solvency of the Medicare Part A Trust Fund.

As required by section 1886(e)(4) of the Act, we have taken into consideration the recommendations of ProPAC in setting these recommended update factors. Our responses to the ProPAC recommendations concerning the update factors are discussed below.

III. ProPAC Recommendation for Updating the Prospective Payment System Standardized Amounts

For FY 1998, ProPAC's update framework would support an update between −0.6 percent and 1.4 percent. ProPAC notes the significant changes occurring in health care delivery, including the drop in hospital lengths of stay for Medicare beneficiaries since 1990 and the increase in beneficiaries' use of hospital outpatient services and postacute care. Because payment rates reflect care that is no longer furnished as part of the hospital stay, ProPAC recommends that hospitals in large urban and other areas receive an update of zero percent. However, it emphasizes that, because of uncertainty about the future and the extent of changes in productivity and service delivery, its recommendation applies for only one year.

Response: We agree with ProPAC's recommendation that the update for FY 1998 for prospective payment system hospitals located in large urban and other areas be equal to zero percentage point. Our recommendation is supported by the following analyses that measure changes in hospital productivity, scientific and technological advances, practice pattern changes, and changes in case mix:

• *Productivity:* Service level productivity is defined as the ratio of total service output to full-time equivalent employees (FTEs). While we recognize that productivity is a function of many variables (for example, labor, nonlabor material, and capital inputs), we use a labor productivity measure since this update framework applies to operating payment. To recognize that we are apportioning the short run output changes to the labor input and not considering the nonlabor inputs, we weight our productivity measure for operating costs by the share of direct labor services in the market basket rate of increase to determine the expected effect on cost per case.

Our recommendation for the service productivity component is based on historical trends in productivity and total output for both the hospital industry and the general economy, and projected levels of future hospital service output. ProPAC has also estimated cumulative service productivity growth to be 4.9 percent from 1985–1989, or 1.2 percent annually. At the same time, ProPAC estimates total output growth at 3.4 percent annually, implying a ratio of service productivity growth to output growth of 0.35. Our Medicare Provider Analysis and Review (MedPAR) file analysis indicates total Medicare service output (charges per admission, adjusted for CPI change) decreased 1.6 percent from 1987–1996, or an approximate average annual decrease of 0.2 percent. Since it is not possible at this time to develop a productivity measure specific to Medicare patients, we examined productivity (output per hour) and output (gross domestic product) for the economy. Depending on the exact time period, annual changes in productivity range from 0.3 to 0.35 percent of the change in output (that is, a 1.0 percent increase in output would be correlated with a 0.3 to 0.35 percent change in output per hour).

Under our framework, the recommended update is based in part on expected productivity—that is, projected service output during the year multiplied by the historical ratio of service productivity to total service output, multiplied by the share of labor in total operating inputs, as calculated in the hospital market basket rate of increase. This method estimates an expected labor productivity improvement in the same proportion to expected total service growth that has occurred in the past and assumes that, at a minimum, growth in FTEs changes proportionally to the growth in total service output. Thus, the recommendation allows for unit productivity to be smaller than the historical averages in years that output growth is relatively low and higher in years that output growth is larger than the historical trend. Based on the above estimates from both the hospital industry and the economy, we have chosen to employ the range of ratios of productivity change to output change of 0.30 to 0.35.

The expected change in total hospital service output is the product of projected growth in total admissions (adjusted for outpatient usage), projected real case-mix growth, and expected quality enhancing intensity growth, net of expected decline in intensity due to reduction of cost ineffective practice. Case-mix growth and intensity numbers for Medicare are used as proxies for those of the total hospital, since case-mix increases (used in the intensity measure as well) are unavailable for non-Medicare patients. Thus, expected output growth is simply the sum of the expected change in intensity (0.0 percent), projected admissions change (2.4 percent for FY 1998), and projected real case-mix growth (0.8 percent), or 3.2 percent. The share of direct labor services in the market basket rate of increase (consisting of wages, salaries, and employee benefits) is 61.4 percent. Multiplying the expected change in total hospital service output (3.2 percent) by the ratio of historical service productivity change to total service growth of 0.30 to 0.35 and by the direct labor share percentage (0.614) provides our productivity standard of 0.6 to 0.7 percent.

ProPAC also believes hospitals should be given an incentive for additional productivity improvement. ProPAC measures productivity as the ratio of hospital admissions (adjusted for case mix and outpatient services) per FTE employee (adjusted for changes in skill mix). ProPAC includes in its productivity measurement the effect of changes in practice patterns. We treat practice pattern changes as a portion of our intensity adjustment, described below. In the past, ProPAC has expected hospitals to achieve productivity gains ranging from 0.5 percent to 2.0 percent per year. This year, recognizing changes in lengths of stay and sites of service, ProPAC believes a productivity adjustment in the range of −3.0 to −1.0 percentage points is required in fiscal year 1998. The adjustment is intended to share productivity equally between hospitals and Medicare.

• *Intensity:* We base our intensity standard on the combined effect of three separate factors: changes in the use of quality enhancing services, changes in the use of services due to shifts in within-DRG severity, and changes in the use of services due to reductions of cost-ineffective practices. For FY 1998, we recommend an adjustment of 0.0 percent. The basis of this recommendation is discussed below.

We have no empirical evidence that accurately gauges the level of quality-enhancing technology changes. Typically, a specific new technology increases cost in some uses and decreases cost in other uses. Concurrently, health status is improved in some situations while in other situations it may be unaffected or even worsened using the same technology. It is difficult to separate out the relative significance of each of the cost increasing effects for individual technologies and new technologies.

The quality enhancing technology component is intended to recognize the use of services that increase cost but whose value in terms of enhanced health-status is commensurate with these costs. Such services may result from technological change, or in some cases, increased use of existing technologies. The latter recognizes that as cost and medical effectiveness studies become available, some increased use of existing, as well as new, services may be warranted.

The component for reduction of cost-ineffective practice recognizes that some improvements in practice patterns could be made so that the intensity of services provided is more consistent with the efficient use of limited resources. That is, improvements could be made so that the number of services provided during an inpatient stay, and their complexity, produce an improvement in health status that is consistent with the cost of care. This component of our update recommendation is

intended to encourage both hospitals and physicians to more carefully consider the cost-effectiveness of medical care. This component of the framework also accounts for real within-DRG change, since that should be directly reflected in the CMI-adjusted growth in real charges per case.

Following methods developed by HCFA's Office of the Actuary for deriving hospital output estimates from total hospital charges, we have developed Medicare-specific intensity measures based on a 5-year average using FY 1992–1996 MedPAR billing data. Case-mix constant intensity is calculated as the change in total Medicare charges per discharge adjusted for changes in the average charge per unit of service as measured by the Medical CPI hospital component and changes in real case mix. Thus, in order to measure changes in intensity, one must measure changes in real case mix.

In determining case-mix constant intensity, we found that observed case-mix increase was 1.8 percent in FY 1992, 0.9 percent in FY 1993, 0.8 percent in FY 1994, 1.7 percent in FY 1995, and 1.6 percent in FY 1996. For FY 1992, FY 1995, and FY 1996, we estimate that real case-mix increase was 1.0 to 1.4 percent each year. The estimate for those years is supported by past studies of case-mix change by the RAND Corporation. The most recent study was ''Has DRG Creep Crept Up? Decomposing the Case Mix Index Change Between 1987 and 1988'' by G.M. Carter, J.P. Newhouse, and D.A. Relles, R-4098-HCFA/ ProPAC (1991). The study suggested that real case-mix change was not dependent on total change, but was rather a fairly steady 1.0 to 1.5 percent per year. We use 1.4 percent as the upper bound because the RAND study did not take into account that hospitals may have induced doctors to document medical records more completely in order to improve payment. Following that study, we consider up to 1.4 percent of observed case-mix change as real for FY 1991 through FY 1994. Based on this analysis, we believe that all of the observed case-mix increase for FY 1993 and FY 1994 is real.

Given estimates of real case-mix increase of 1.0 percent for FY 1992, 0.9 percent for FY 1993, 0.8 percent for FY 1994, 1.0 percent for FY 1995, and 1.0 percent for FY 1996, we estimate that case-mix constant intensity declined by an average 1.4 percent during FY 1992 through FY 1996, for a cumulative decrease of 7.0 percent. If we assume that real case-mix increase was 1.4 percent for FY 1992, 0.9 percent for FY 1993, 0.8 percent for FY 1994, 1.4 percent for FY 1995, and 1.4 percent for FY 1996, we estimate that case-mix constant intensity declined by an average 1.6 percent during FY 1992 through FY 1996, for a cumulative decrease of 7.5 percent. Since we estimate that intensity has declined during that period, we are recommending a 0.0 percent intensity adjustment for FY 1998.

• *Quality Enhancing New Science and Technology:* For FY 1998, ProPAC has computed the adjustment for scientific and technological advances to be a future-oriented policy target intended to provide additional funds for hospitals to adopt quality-enhancing, cost increasing health care innovations. In the past, ProPAC has included an adjustment ranging from 0.3 to 1.0 percentage points. ProPAC believes that the cost-competitive environment now faced by hospitals may dampen the adoption of new technologies as they closely evaluate their relative costs and benefits. Therefore, ProPAC recommends an adjustment of 0.4 percentage points for the increase in operating costs due to scientific and technological advances.

• *Change in Case Mix:* Our analysis takes into account projected changes in case mix, adjusted for changes attributable to improved coding practices. For our FY 1998 update recommendation, we are projecting a 1.0 percent increase in the case-mix index. We define real case-mix increase as actual changes in the mix (and resource requirements) of Medicare patients as opposed to changes in coding behavior that result in assignment of cases to higher-weighted DRGs but do not reflect greater resource requirements. For FY 1998, we believe that real case-mix increase is equal to our projected change in case mix less 0.2 percent. We estimate that changes in coding behavior account for an increase of 0.2 percentage points in our projected case-mix change. Our net adjustment to case-mix change for FY 1998 is 0.2 percentage points.

The 0.0 percent figure used in the ProPAC framework represents ProPAC's projection for observed case-mix change. ProPAC's net adjustment for case mix is 0.0 percentage points.

• *Effect of FY 1996 DRG Reclassification and Recalibration:* We estimate that DRG reclassification and recalibration for FY 1996 resulted in a 0.0 percent increase in the case-mix index when compared with the case-mix index that would have resulted if we had not made the reclassification and recalibration changes to the GROUPER. ProPAC does not make an adjustment for DRG reclassification and recalibration in its update recommendation.

• *Correction for Market Basket Forecast Error:* The estimated market basket percentage increase used to update the FY 1996 payment rates was 3.5 percent. Our most recent data indicate the actual FY 1996 increase was 2.7 percent, primarily reflecting that the actual increase in wages, benefits, and chemical prices was lower than projected. The resulting forecast error in the FY 1996 market basket rate of increase is 0.8 percentage points. Under our update framework, we make a forecast error correction if our estimate is off by 0.25 percentage points or more. Therefore, we are recommending an adjustment of −0.8 percentage points to reflect this overestimation of the FY 1996 market basket rate of increase. The following is a summary of the update ranges supported by our analyses compared to ProPAC's framework.

TABLE 1.—COMPARISON OF FY 1998 UPDATE RECOMMENDATIONS

	HHS	ProPAC
Market Basket	MB	MB
Difference between HCFA & ProPAC Market Baskets	.....	0.0
Subtotal	MB	MB
Policy Adjustments Factors:		
Productivity	−0.6 to −0.7	−3.0 to −1.0
Intensity	0.0	.....
Science & Technology	.....	0.4
Practice Patterns	.....	(1)
Real Within DRG Change	.....	(2)
Subtotal	−0.6 to −0.7	−2.6 to −0.6
Case-Mix Adjustment Factors:		
Projected Case-Mix Change	−1.0	.....
Real Across DRG Change	0.8	.....
Real Within DRG Change	(3)	0.0
Subtotal	−0.2	0.0
Effect of 1996 Reclassification & Recalibration	0.0	.....
Forecast Error Correction	−0.8	−0.8

TABLE 1.—COMPARISON OF FY 1998 UPDATE RECOMMENDATIONS—Continued

	HHS	ProPAC
Total Recommended Update	MB −1.7 to MB −1.6	MB −3.4 to MB −1.4

(1) Included in ProPAC's Productivity Measure.
(2) Included in ProPAC's Case-Mix Adjustment.
(3) Included in HHS' Intensity Factor.

While the above analysis would support a recommendation that the update be no less than market basket minus 1.6 percentage points, we are recommending an update of zero percentage points. We believe that this update factor appropriately adjusts for changes occurring in health care delivery including the relative decrease in use of hospital inpatient services and the corresponding increase in use of hospital outpatient and postacute care services. We agree with ProPAC that a zero update for FY 1998 would not disadvantage the hospital industry nor harm Medicare beneficiaries. We also recommend that the hospital-specific rates applicable to sole community hospitals be increased by the same update, zero percentage points.

IV. ProPAC Recommendation for Updating the Rate-of-Increase Limits for Excluded Hospitals

ProPAC recommends an update factor equal to a 2.0 percent average increase in TEFRA target amounts for excluded hospitals and units (Recommendation 13). This reflects a reduction of 0.8 percentage points from HCFA's market basket increase forecast of 2.8 percent. The reduction consists of an adjustment of −0.7 percentage points to account for the forecast error in the FY 1996 market basket rate of increase, an adjustment of −0.1 percentage points for the difference between the forecasts for HCFA's and ProPAC's market baskets, and no allowance for new technology.

Response: We recommend that hospitals excluded from the prospective payment system also receive a zero update. This update is consistent with the updates provided to the prospective payment hospitals. We believe this update would ensure that Medicare acts as a prudent purchaser and would provide incentives to hospitals for increased efficiency, thereby contributing to the solvency of the Medicare Part A Trust Fund.

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Appendix F

PROSPECTIVE PAYMENT
ASSESSMENT COMMISSION

REPORT AND RECOMMENDATIONS TO THE CONGRESS

MARCH 1, 1997

PROSPECTIVE PAYMENT ASSESSMENT COMMISSION

Joseph P. Newhouse, Ph.D., *Chair*

Susan S. Bailis
Clay D. Edmands
Spencer Foreman, M.D.
Spencer Johnson
Clark E. Kerr
James R. Kimmey, M.D.
Judith R. Lave, Ph.D.
Hugh W. Long, Ph.D., J.D.
William A. MacBain
Robert J. Myers
Glenda Rosenbloom
Gerald M. Shea
Roxane B. Spitzer, Ph.D.
James R. Tallon, Jr.
Jae L. Wittlich

Staff and Consultants

Donald A. Young, M.D., *Executive Director*
Laura A. Dummit, *Deputy Executive Director*
Stuart Guterman, *Deputy Executive Director*

John L. Ashby
Andrew L. Cosgrove
Wylene Carlyle
Delores J. Curtis
Karen S. Fisher, J.D.
Timothy F. Greene
Dana K. Kelley
Annie W. Lee
Lynn L. Lewis
Craig K. Lisk
Ann-Marie Lynch
Stephanie Maxwell
Mary Anne Miles
Julian H. Pettengill
Molly Ryan
Sarah S. Thomas

Prospective Payment Assessment Commission

300 7th Street, S.W.
Suite 301B
Washington, D.C.
20024
Tel (202) 401-8986
Fax (202) 401-8739

March 1, 1997

The Honorable Al Gore, Jr.
President of the Senate
United States Senate
Washington, D.C. 20510

Dear Mr. President:

I am hereby transmitting to the Congress the annual report of the Prospective Payment Assessment Commission as required by Section 1886(e)(3) of the Social Security Act as amended by Public Law 101-508. This report presents 43 recommendations concerning Medicare payment policies. These include updates to Medicare's facility payment rates, modifications to acute and post-acute care provider payment methods, and improvements to Medicare's risk contracting program. The recommendations in this report represent the Commission's judgment on how the Medicare program should move forward in a changing health care environment.

Sincerely,

Joseph P. Newhouse, Ph.D.
Chairman

Enclosure

Prospective Payment Assessment Commission

300 7th Street, S.W.
Suite 301B
Washington, D.C.
20024
Tel (202) 401-8986
Fax (202) 401-8739

March 1, 1997

The Honorable Newt Gingrich
Speaker of the House
United States House of Representatives
Washington, D.C. 20515

Dear Mr. Speaker:

I am hereby transmitting to the Congress the annual report of the Prospective Payment Assessment Commission as required by Section 1886(e)(3) of the Social Security Act as amended by Public Law 101-508. This report presents 43 recommendations concerning Medicare payment policies. These include updates to Medicare's facility payment rates, modifications to acute and post-acute care provider payment methods, and improvements to Medicare's risk contracting program. The recommendations in this report represent the Commission's judgment on how the Medicare program should move forward in a changing health care environment.

Sincerely,

Joseph P. Newhouse, Ph.D.
Chairman

Enclosure

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Executive Summary

The Prospective Payment Assessment Commission (ProPAC) is presenting 43 recommendations on the Medicare program for fiscal year 1998. These recommendations fulfill the Commission's legislative mandate to advise the Congress on appropriate updates to hospital and other payment rates and on improvements to the Medicare program. In arriving at its recommendations, ProPAC considered the fiscal solvency of the Medicare Hospital Insurance Trust Fund and ongoing changes in health care financing and delivery. The Commission's recommendations are intended to ensure that the program pays appropriately for services and maintains quality health care for Medicare beneficiaries.

The recommendations in this report represent the collective judgment of ProPAC's 16 commissioners. They reflect the culmination of a policy and analytic agenda setting process, followed by empirical analysis and deliberation. Because of the nature of the issues at hand, the data often are inadequate to fully determine the effect of particular policies on the Medicare program, beneficiaries, and providers. Moreover, the complexities of health care delivery and the unprecedented changes now occurring mean that appropriate policies require difficult decisions. As a result, individual commissioners did not always agree with the majority opinion. The Commission's decision making process, however, accommodates differing views, and where appropriate, this report discusses alternative methods of achieving ProPAC's goals.

RECOMMENDATIONS FOR FISCAL YEAR 1998

The Commission's first recommendation, which is in the Prologue, pertains to maintaining quality health care in an era of delivery changes and constrained resources. The rest of the recommendations are provided in three chapters, which focus respectively on hospitals and ambulatory providers, post-acute care providers, and the Medicare risk contracting program. Congressionally mandated updates to the payment rates for hospitals under Medicare's prospective payment system (PPS) and payments for other hospitals and ambulatory care providers are discussed in Chapter 1. Recommendations on Medicare payments to teaching hospitals and to those serving a disproportionate share of poor patients, as well as other policies to improve the distribution of payments, are also presented. Post-acute care provider payment policy recommendations are in Chapter 2. They are designed to slow spending growth, to improve the information about service delivery and patients, and to better coordinate services across sites. Chapter 3 addresses the risk contracting program. The Commission believes Medicare needs to modify this option to achieve savings and to ensure payment equity across risk plans and between the fee-for-service and managed care options.

Recommendation 1: Ensuring Quality of Care

The Medicare program needs to be vigilant in monitoring and improving the quality of care delivered to its beneficiaries in both the fee-for-service and risk contracting options. ProPAC supports a comprehensive approach to quality assurance that includes both pattern analysis and systematic review of individual cases.

Recommendation 2: Updating PPS Operating Payment Rates

For fiscal year 1998, the update for PPS operating payment rates should be zero. This level reflects projected inflation in the prices of hospital inputs and the Commission's judgments about the likely effects of scientific and technological advances, productivity improvements and service changes, and changes in the mix of patients treated.

Recommendation 3: Setting Appropriate PPS Capital Payment Rates

Prospective capital payment rates for fiscal year 1998 should be set by revising the current payment rates and then applying an update factor. These revisions would correct for flaws in the data and the updating method applied in past years. As a result, the capital payment rates would be reduced by 15 percent to 17 percent.

4

Recommendation 4: Updating PPS Capital Payment Rates

For fiscal year 1998, the update for PPS capital payment rates should be zero. This update should be applied to appropriately revised base payment rates. The update reflects projected inflation in the prices of hospital capital inputs and the Commission's judgments about the likely effects of trends in long-term interest rates, scientific and technological advances, productivity improvements and service changes, and changes in the mix of patients treated.

Recommendation 5: Improving the Distribution of Medicare's Indirect Medical Education Payments

Medicare's IME payments should reflect the historical relationship between hospital costs and teaching intensity. Further, they should continue to be based on the hospital's volume of Medicare patients. These payments should no longer change in proportion to annual variations in the number of residents or beds. In addition, the payment method should be flexible enough to allow and support training in settings outside of the hospital.

Recommendation 6: Reducing the Level of Medicare's Indirect Medical Education Payments

The indirect medical education adjustment should be reduced from its current level of 7.7 percent to 7.0 percent in fiscal year 1998.

Recommendation 7: Improving Medicare's Payments for Direct Graduate Medical Education Costs

Medicare's payments to hospitals for the direct costs of GME programs should not change in proportion to annual variations in the number of residents trained. The method for determining the level and distribution of these payments should be as neutral as possible concerning the number and specialty mix of residents and the site of their training.

Recommendation 8: Establishing a Broader-Based Financing Mechanism for Graduate Medical Education and Teaching Hospitals

Explicit payments for graduate medical education and teaching hospital costs should not be limited to the Medicare program. Mechanisms to broaden financial support for training physicians in hospitals and other locations should be developed. The payments should reflect the reasonable costs of training at each facility and protect the access of beneficiaries and other populations to the services they provide.

Recommendation 9: Principles for Improving Medicare's Disproportionate Share Payment Adjustment

Medicare's DSH payments should be aimed at protecting access to hospital care for its beneficiaries. Payments should be distributed based on each hospital's share of low-income patient care and volume of Medicare cases. The low-income share measure should reflect the costs of services provided to low-income groups in both inpatient and outpatient settings. These groups include Medicare patients eligible for SSI, patients sponsored by Medicaid and local indigent care programs, and uninsured and underinsured patients as represented by uncompensated care.

Recommendation 10: Improving the Distribution of Disproportionate Share Payments

DSH payments should be concentrated among hospitals with the highest shares of poor patients. Therefore, a minimum threshold should be established for the low-income patient cost share. Hospitals falling just above the threshold should receive only a minimal per case payment, with the amount then increasing as low-income share rises. The same general approach for distributing payments should apply to all PPS hospitals.

Recommendation 11: Collecting Data to Support Disproportionate Share Payment Reform

The Secretary should collect the data necessary to implement a revised DSH payment mechanism.

Due to recent and planned changes in the Medicaid and SSI programs, the measure now used to distribute DSH payments is becoming increasingly untenable. Although several new data elements would be required, this need not substantially increase the current hospital reporting burden. Periodic audits of these data would also be necessary.

Recommendation 12: Making Teaching and Disproportionate Share Payments to Facilities That Treat Medicare Risk Plan Enrollees

Facilities that receive explicit direct GME, IME, or DSH payments for their Medicare fee-for-service patients should also receive additional payments for their Medicare risk plan patients. Mechanisms should be developed to distribute these payments in a way that reflects the policy goals of the Medicare program.

Recommendation 13: Updating the Target Amounts for PPS-Excluded Hospitals and Distinct-Part Units

ProPAC's update framework indicates that a 2.0 percent average increase in the TEFRA target amounts is appropriate for fiscal year 1998. This average reflects inflation in the prices of hospital inputs and the Commission's judgment about the cost-increasing effects of scientific and technological advances.

Recommendation 14: Modifying the TEFRA Payment System

The Congress should consider modifying the TEFRA payment system to correct for the payment disparity between new and old providers.

Recommendation 15: Prospective Payment System for Hospital Outpatient Services

The Secretary should implement a prospective payment system for hospital outpatient services as soon as possible. Such a system should incorporate methods for controlling the volume of services.

Recommendation 16: Reducing Beneficiary Liability for Hospital Outpatient Services

Beneficiary liability for hospital outpatient services should be reduced from 20 percent of charges to 20 percent of the allowed payment, as it is for other services. Further, the Congress should correct the blended payment formula. This would help offset the increase in Medicare outlays resulting from a reduction in beneficiary liability.

Recommendation 17: Improving Dialysis Facility Data

HCFA should regularly audit a representative sample of dialysis facility cost reports to ensure that it has accurate data to assess the adequacy of the composite rates. Further, it should systematically track quality indicators for these providers.

Recommendation 18: Update to the Composite Rate for Dialysis Services

For fiscal year 1998, the composite rate for dialysis services should be increased by 2.8 percent to ensure that beneficiaries receive quality care. This level reflects the projected increase in the market basket index for dialysis services, and the Commission's judgment about the likely effects of scientific and technological advances and productivity gains on facilities' costs.

Recommendation 19: Prospective Payment System for Skilled Nursing Facilities

A case-mix adjusted prospective payment system for skilled nursing facilities should be implemented as soon as possible.

Recommendation 20: Controlling Payments for Skilled Nursing Facility Ancillary Services

Until a prospective payment system is developed, the Secretary should take steps to control SNF expenditures by limiting payments for ancillary services.

Recommendation 21: Consolidated Billing for Skilled Nursing Facility Services

The Secretary should require consolidated billing for all services furnished to beneficiaries during a Part A-covered SNF stay. Further, SNFs should use consistent, procedure-level codes for these services.

Recommendation 22: Eliminating the Cost Limit Exemption for New Skilled Nursing Facilities

The exemption from Medicare's routine cost limits for new providers should be eliminated. All SNFs should be subject to these limits.

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Recommendation 23: Defining the Home Health Care Benefit

The Congress should more specifically define the scope of Medicare's home health care benefit. The absence of clear coverage constraints limits the program's ability to control home health utilization.

Recommendation 24: Prospective Payment System for Home Health Care Agencies

A case-mix adjusted prospective payment system for home health care agencies should be implemented as soon as possible.

Recommendation 25: Interim Home Health Payment Method

The Congress should implement an interim home health payment method to control Medicare outlays until a fully prospective payment system is in place.

Recommendation 26: Home Health Visit Coding

Medicare should require consistent home health visit coding. Such information is essential for monitoring and evaluating the home health benefit and developing an effective case-mix adjustment system.

Recommendation 27: Home Health Copayments

Modest beneficiary copayments, subject to an annual limit, should be introduced for home health care services.

Recommendation 28: Controlling Long-Term Home Health Use

The Secretary should analyze the growing number of beneficiaries who are receiving home health care for prolonged periods. Additional policies may be needed to address the spending associated with these beneficiaries.

Recommendation 29: Prospective Payment System for Rehabilitation Hospitals and Distinct-Part Units

A case-mix adjusted prospective payment system for rehabilitation hospitals and distinct-part units should be implemented as soon as possible.

Recommendation 30: Prospective Payment System for Long-Term Care Hospitals

A case-mix adjusted prospective payment system for long-term care hospitals should be developed and implemented as soon as possible.

Recommendation 31: Long-Term Care Hospitals Within Hospitals

HCFA should monitor the growth in the number of long-term care hospitals within hospitals and evaluate whether the current Medicare certification rules that apply to these facilities should be changed.

Recommendation 32: Elimination of the New Provider Exemption Period

The initial exemption period for new PPS-excluded providers should be eliminated. Medicare payments for new providers should be based on an average target amount for facilities serving comparable types of patients.

Recommendation 33: Coordinating Post-Acute Care Provider Payment Methods

The Commission urges the Congress and the Secretary to consider the overlap in services and beneficiaries across post-acute care providers as they modify Medicare payment policies. Changes to one provider's payment method could shift utilization to other sites and thus fail to curb overall spending. To this end, ProPAC commends HCFA's efforts to identify elements common to the various facility-specific patient classification systems to use in comparing beneficiaries across settings.

Recommendation 34: Linking Payments for an Episode of Care

The Secretary should begin a demonstration project that links payments for the acute and post-acute portions of an episode of care. It should be designed to test whether this approach can reduce expenditures and improve continuity of care.

Recommendation 35: Improving the Risk Adjustment Method

A combination of techniques should be used to adjust Medicare's capitation payments so that

they better reflect enrollees' likely use of services. The Secretary should adopt risk adjusters based on diagnosis, health status, or both as well as an outlier policy for costly cases. Partial capitation arrangements should be tested. Plans should provide data to Medicare to support improved risk adjustment. The new risk adjustment system should be phased in.

Recommendation 36: Excluding Teaching and Disproportionate Share Payments from the Capitation Rates

The fee-for-service spending estimates Medicare uses to calculate capitation rates should exclude special payments to hospitals with graduate medical education programs and to those serving a disproportionate share of low-income patients.

Recommendation 37: Increasing Capitation Rates to Reflect Use of Services Covered by Other Government Programs

Medicare should increase the capitation rates to include estimated spending for covered services that program beneficiaries receive in facilities operated by the Departments of Veterans Affairs and Defense.

Recommendation 38: Reducing the Variation in Payment Rates

The variation in capitation rates across counties should be narrowed. The lowest rates should be raised to a minimum amount, without increasing aggregate program spending. Medicare should evaluate the adequacy and appropriateness of its payment rates, however they are determined.

Recommendation 39: Updating Capitation Rates

Medicare should use a national update framework rather than fee-for-service spending increases to determine the annual changes in risk plan payment rates.

Recommendation 40: Evaluating Alternative Methods for Determining Capitation Rates

The Medicare program should continue to evaluate other methods for determining payment rates, including competitive bidding and negotiation between the program and risk plans.

Recommendation 41: Data to Improve Plan Payments

The Secretary should require risk plans to provide information on the costs of furnishing services to Medicare enrollees. These data are necessary to determine the appropriateness of payment rates and improve Medicare payment methods.

Recommendation 42: Evaluating Plan Quality of Care

The Commission supports the Secretary's efforts to evaluate Medicare risk plans through the use of the Health Plan Employer Data and Information Set and satisfaction surveys. The Secretary should, in cooperation with the appropriate organizations, continue to adapt and improve measurement tools to evaluate plan performance.

Recommendation 43: Improving Information for Beneficiary Choice

The Commission supports the Secretary's efforts to improve beneficiary information about managed care options. All beneficiaries should receive quality and satisfaction data for risk plans and the fee-for-service option to help them decide about enrolling in a risk plan. Cost and benefit definitions should be standardized so that beneficiaries can better compare plans. Additionally, the Secretary should periodically assess whether such information could be improved.

Prologue

The Medicare program is at an important crossroads in its evolution. Never before have beneficiaries had so many choices among providers, sites of care, and delivery options. This presents special opportunities and challenges for policy makers. Medical advances and new ways of providing health care offer opportunities to improve the lives of many Americans. But a number of these changes have contributed to dramatic escalation in health care spending. Medicare is challenged, therefore, to maintain a fiscally sound program while ensuring quality health care for future generations.

ENROLLMENT OPTIONS

Medicare beneficiaries have an array of choices about how they can receive health care services. Providers and new sites of care are proliferating in most areas. Beneficiaries' most important choice, however, is between the fee-for-service and the risk contracting options. A growing share of enrollees have access to and are joining managed care organizations under the risk contracting program. At the same time, though, the vast majority of beneficiaries receive services from providers reimbursed by Medicare on a fee-for-service basis.

The incentives inherent in these two financing and delivery schemes differ. Fee-for-service providers face few direct controls over the quantity and intensity of services they furnish. Indeed, financial incentives generally reward increased service use across multiple delivery sites. Overuse and uncoordinated services during an episode of care drive up spending and may actually diminish the quality of care. By contrast, the risk contracting program rewards low service use and the selection of beneficiaries who are healthier than average. Quality concerns center on underutilization and delays in receiving care.

MEDICARE'S CHALLENGES

Policies to slow rapid expenditure growth and to keep pace with the evolving health care delivery system need to account for the different incentives inherent in the program's two options. Improvements need to be made to both the fee-for-service and the risk contracting components to promote cost-effective health care delivery and to set appropriate payment amounts. Further, Medicare needs to ensure that all beneficiaries receive quality care regardless of their choice.

Controlling Medicare Spending

The share of Medicare expenditures devoted to inpatient hospital care under the fee-for-service option has declined. The implementation of Medicare's prospective payment system (PPS) was instrumental in controlling hospital payments. At the same time, expenditures for ambulatory and post-acute care providers have gone up dramatically, primarily because of increased use. The Medicare program has a responsibility to pay adequate rates to providers and to promote the delivery of care in the most appropriate setting. It is difficult, however, to control rising use and intensity under the fee-for-service option. Thus, Medicare should continue to explore new ways to finance and deliver health care services.

PPS needs ongoing adjustments to adapt to the changing health care environment. As Medicare necessarily tightens its control over payments, the distribution of those payments across hospitals becomes even more important. Appropriate distribution is required to ensure quality care for Medicare beneficiaries while continuing to support goals such as maintaining teaching capacity and access to hospitals that serve the poor.

Increased use has been the major contributor to fee-for-service spending growth in ambulatory and post-acute care settings. Case-mix adjusted prospective payment systems would give Medicare more control over its expenditures for these services. Medicare also needs to begin to coordinate services across post-acute care sites and between the acute care hospital and other providers. One way to do this might be through a preferred provider organization. The Prospective Payment Assessment Commission (ProPAC) and the Physician Payment Review Commission have considered whether such an option would allow Medicare to

incorporate managed care principles into its fee-for-service program.

Medicare faces different challenges with its risk contracting option. Risk contracting was introduced both to allow beneficiaries the range of health care delivery choices available in the private sector and to afford savings to the program. Research indicates that Medicare spends more for beneficiaries enrolled in risk plans, however, than it would have if they had remained in the fee-for-service option. This is partly because healthier-than-average beneficiaries are likelier to enroll in a risk plan. ProPAC thus urges improved risk adjustment to capitation payments to account for favorable risk selection. This is necessary to ensure a fair allocation of payments between Medicare's fee-for-service and managed care options as well as among participating risk plans.

In addition, Medicare needs to reconsider the basis of its capitation amounts. Fee-for-service spending estimates are used in calculating plan payments. This was appropriate when little was known about the costs of providing services under a managed care option and when enrollment was low. Current equity and expenditure concerns, however, necessitate adjustments to this policy as well as longer term efforts to determine the appropriate payment amounts. Lessons from other payers' experience may be useful for Medicare in this endeavor.

Maintaining Quality of Care

Continued pressure to control Medicare expenditures, combined with rapid changes in the financing and delivery of services, has focused renewed attention on the quality of care provided to beneficiaries. Assessing and improving quality continues to be hampered by inadequate information on appropriate care and the relationship between services and health outcomes. This is complicated further because the incentives for providing services differ for Medicare's fee-for-service and managed care options. In view of these factors, the Medicare program needs a comprehensive approach to monitor the quality of care delivered under both options.

When Medicare's Utilization and Quality Control Peer Review Organization (PRO) program began in 1984, the primary role of the PROs was to monitor hospitals for abuses related to utilization and overpayment under PPS. Over time, their purview was extended to monitor the care furnished in other patient care settings and under the risk program. PROs performed this function by reviewing random samples of individual patient records for medical necessity, reasonableness, and appropriateness. They were authorized to deny Medicare payment for individual discharges, take corrective action with providers, or in extreme cases, recommend formal provider sanctions.

In 1993, the Health Care Financing Administration (HCFA) restructured the PRO program, now known as the Health Care Quality Improvement Program. Its goal is to improve the quality of care furnished to Medicare beneficiaries by focusing on patient care processes and outcomes in an educational environment instead of on utilization review in a punitive one. In accordance with this approach, PROs now conduct pattern analysis with continuous feedback to providers. They examine detailed clinical data for specific conditions or procedures to determine if local patterns of care conform to nationally recognized standards. PROs collaborate with providers to identify opportunities to improve quality, develop and implement corrective action plans, and evaluate the results. Although most of their activities involve assessing fee-for-service providers, PROs are expected to conduct at least one project during their contract periods with each risk contractor in their review area.

Pattern analysis—the most advanced quality assurance method—is useful for evaluating care delivered in both fee-for-service and managed care settings. By many accounts, the results have been positive. Overall, the care provided to Medicare beneficiaries has improved, according to expert opinion. But pattern analysis neither identifies individual instances of poor quality nor determines what has caused poor care. It can only discern patterns of care that need further investigation.

PROs no longer perform random reviews of beneficiary claims. As a result, Medicare's ability to identify and sanction providers that do not meet quality standards has been weakened. Medicare needs to remedy this situation to fulfill its responsibility to ensure that beneficiaries receive quality care.

Recommendation 1: Ensuring Quality of Care

The Medicare program needs to be vigilant in monitoring and improving the quality of care delivered to its beneficiaries in both the fee-for-service and risk contracting options. ProPAC supports a comprehensive approach to quality assurance that includes both pattern analysis and systematic review of individual cases.

Given cost-containment pressures and the rapid structural changes occurring in the health care financing and delivery system, Medicare needs to enhance its quality assurance activities. The Commission supports pattern analysis as a means to improve the overall quality of care furnished to fee-for-service and risk plan enrollees. It believes, however, that continuous quality improvement activities need to be accompanied by effective methods to identify and monitor providers with questionable performance. HCFA should explore different options to ensure that individual providers deliver adequate care. Such practices may also help to detect cases of fraud and abuse. Contracting with other entities—among them state medical societies and licensing agencies, private accreditation bodies and utilization review firms, and consumer groups—to evaluate poor performers may be an appropriate alternative to having PROs perform both of these activities.

COMMISSION RECOMMENDATIONS

ProPAC is presenting 42 additional recommendations in this report. Chapters 1 and 2 contain analyses and recommendations on fee-for-service provider policies. Chapter 3 pertains to the Medicare risk contracting program. Individual commissioners did not always agree with the majority opinion. The recommendations, however, reflect the collective judgment of the full Commission.

Chapter 1

Payments to Hospitals and Ambulatory Care Providers

Since its inception, the Prospective Payment Assessment Commission (ProPAC) has provided the Congress with annual recommendations regarding Medicare's hospital payment policies. These recommendations generally have addressed payment updates for acute care hospitals paid under the prospective payment system (PPS), the structure of other PPS payment components, and the cost limits for specialized hospitals and units excluded from PPS. ProPAC also has made recommendations on Medicare's payment methods and amounts for hospital outpatient services, and for kidney dialysis services furnished in hospital-based and free-standing dialysis centers.

In this chapter, the Commission again presents background information, recommendations, and supporting discussion concerning Medicare payments to hospitals and certain ambulatory care providers. The chapter begins by summarizing recent trends in factors pertinent to payment updates for PPS hospitals, including their Medicare inpatient costs, payments, and margins, as well as their total margins, which reflect revenues and expenses from all sources. Next, payment policies for teaching hospitals and those that serve a disproportionate share of low-income patients are addressed. This is followed by two sections that examine, respectively, payment policies for hospitals and units excluded from PPS and for hospital outpatient services. The chapter concludes with recommendations on updating Medicare payments for kidney dialysis services.

PPS HOSPITAL PAYMENT RATES

Under PPS, a hospital receives prospectively determined operating and capital payments for each Medicare discharge. Operating payments are intended to cover the hospital's costs of furnishing inpatient services, excluding costs for capital and for graduate medical education (GME) and other approved training programs. Capital payments are designed to cover the building and equipment costs of inpatient care (basically depreciation, interest, and rent). Both operating and capital payments are based on national average amounts, adjusted for factors like local wage levels that contribute to cost differences among areas and types of hospitals.

In this section, ProPAC presents recommendations on the appropriate updates for PPS operating and capital payment rates for fiscal year 1998. In developing its recommendations, the Commission considers anticipated changes in the prices hospitals pay for labor and other inputs, and other factors that may affect hospitals' costs of providing inpatient services. It also weighs the overall level, distribution, and growth of Medicare spending; the equity of PPS payments among hospitals; and the adequacy of payments for ensuring quality care.

This process entails examining hospitals' Medicare costs, payments, and margins, as well as total margins and other indicators of the overall environment in which these facilities operate.[1] The data from recent years suggest that the hospital industry is changing rapidly in response to the cumulative financial pressures imposed by private payers and Medicare's PPS. This trend has implications for hospitals' operations, for their interactions with other types of providers, and for access to services by Medicare beneficiaries and other populations.

Trends in Costs, Payments, and Margins

Remarkable changes are occuring in hospital costs. In 1994, PPS hospitals' Medicare inpatient operating costs per discharge actually decreased for the first time (see Figure 1-1).[2] Preliminary data for 1995 show this trend has continued. These declines of 1.3 percent and 1.2 percent, respectively, were almost 4 percentage points below the overall inflation rate as measured by the consumer price index.[3]

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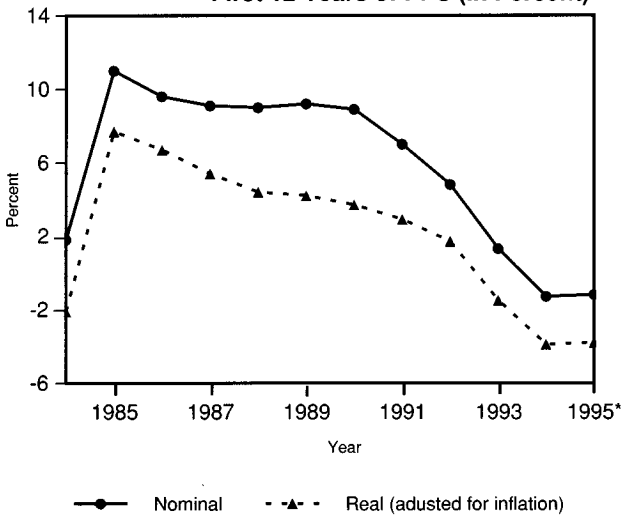
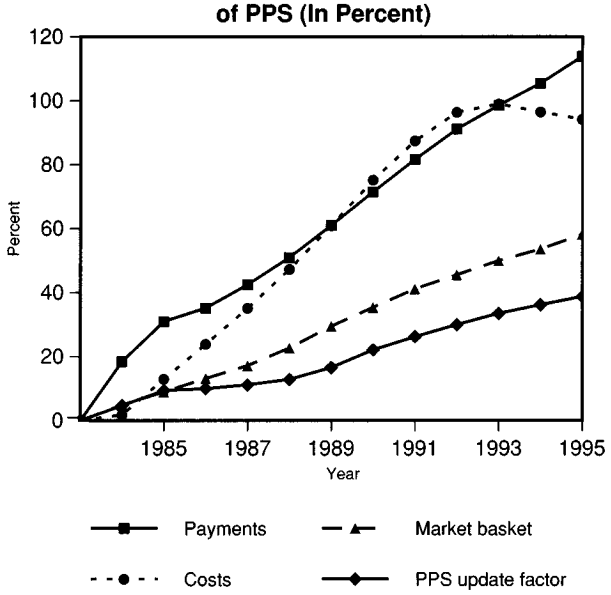
Figure 1-1. Annual Change in Medicare Operating Costs Per Discharge, First 12 Years of PPS (In Percent)



* Based on preliminary data and subject to revision.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Figure 1-2. Cumulative Increases in PPS Operating Payments and Costs Per Discharge, First 12 Years of PPS (In Percent)



Note: The PPS market basket and update factor are for the corresponding Federal fiscal year. Payments and costs are estimated for 1995 and subject to revision.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Reduced cost growth partly reflects changes in the amount and timing of services furnished during inpatient stays. The average length of stay has dropped sharply since 1990. Moreover, the decline has been steeper for patients who are 65 or older than for younger ones (22 percent compared with 12 percent). Shorter stays are due to a combination of more appropriate discharge policies and improvements in hospital productivity. These are reflected in earlier discharges to post-acute care settings for some patients, better scheduling of inpatient services, and the use of less-invasive surgical techniques and more effective drugs.

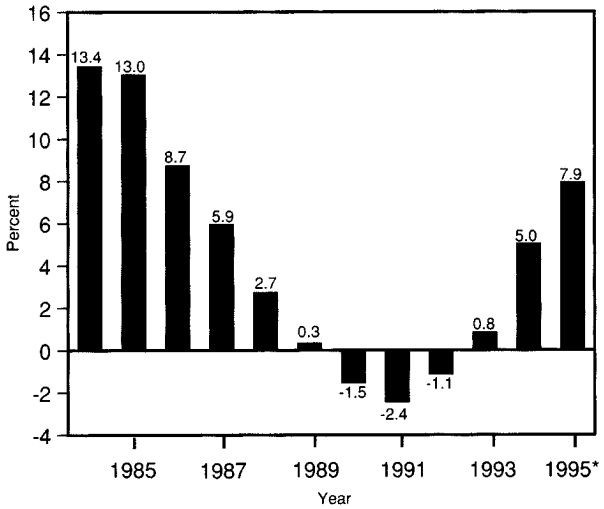
Hospitals' motivation to control their costs is commonly attributed to private payers' unwillingness to make ever-higher payments. Abetted by widespread excess capacity, this has fostered greater competition among hospitals and other providers.

For many years, however, payment pressure was applied primarily by Medicare and, to some extent, by Medicaid. From 1985 to 1991, PPS payments per case increased at a slower rate than corresponding per case operating costs (see Figure 1-2). This occurred as the Congress held annual PPS payment updates below the growth in the market basket index, which measures inflation in the prices of goods and services hospitals purchase to provide inpatient care. Annual growth in payments per case was higher than the update because the average complexity of hospitals' cases continued to increase, and because policy changes raised payments to some hospital groups.

The disparity between the payment and cost growth rates led to steadily declining PPS margins (see Figure 1-3). Hospitals generally covered escalating Medicare losses through higher payments from private payers. This was reflected in the aggregate payment to cost ratio for these payers, which rose from 116 percent in 1986 to 131 percent in 1992.[4] Hospitals thus were able to maintain fairly stable total margins (see Figure 1-4). Although the average total margin for all PPS hospitals fell from a historic high of 7.3 percent in 1984 to about 3.6 percent between 1987 and 1990, it remained higher than it had been before PPS was implemented.

In the early 1990s, private insurers increasingly began to limit their payments to hospitals. The combined pressure from public and private payers

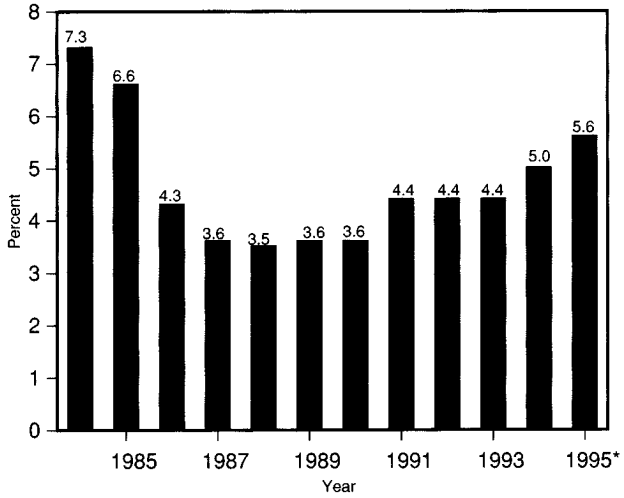
Figure 1-3. PPS Margins for All Hospitals, First 12 Years of PPS (In Percent)



*Based on preliminary data and subject to revision.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Figure 1-4. Total Margins for All Hospitals, First 12 Years of PPS (In Percent)



*Based on preliminary data and subject to revision.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

had a dramatic effect. In 1992, the growth rates of Medicare costs and payments per case were the same. Over the next three years, payment increases remained low, but cost increases were even lower, resulting in rising PPS margins.

During this period, uncompensated care losses stayed constant and Medicaid losses declined. These trends, combined with restrained cost growth, allowed hospitals to absorb smaller payment increases from private insurers without experiencing overall financial deterioration. The payment to cost ratio for private payers fell from a peak of 131 percent in 1992 to 124 percent in 1994, while total margins rose. Preliminary data from 1995 suggest that total margins have continued to increase.

These trends portray a hospital industry that is quickly adapting to a more competitive environment, changing its practice patterns, reducing costs and, at least for now, improving financial performance. Against this backdrop, the Commission presents its recommendations on updating the PPS operating and capital payment rates for fiscal year 1998.

Operating Payment Rates

ProPAC is mandated by law to report to the Congress annually on the appropriate updates for inpatient hospital payment rates under PPS. In this section, the Commission discusses its views on the update to the operating payment rates. These rates are the basis for determining the payments each hospital receives for the inpatient operating costs it incurs in treating Medicare patients.

The Omnibus Budget Reconciliation Act (OBRA) of 1993 was the latest legislation enacted to set PPS payment updates. In OBRA 1993, the annual updates through fiscal year 1997 were set below the projected rise in the PPS hospital market basket index. The fiscal year 1997 update was equal to the market basket increase minus 0.5 percentage points, or 2.0 percent. This amount was higher than that proposed by either the President or the Congress in their legislative packages last year. However, because no legislation was passed, the OBRA 1993 update was left in place. Absent new legislation, the updates for fiscal year 1998 and beyond will equal the forecasted rise in the market basket index.

ProPAC's annual update recommendation for PPS operating rates is based on an analytic framework that accounts for how various factors may affect hospital inpatient costs. These factors include hospital input price inflation, scientific and technological advances (S&TA), productivity

improvements and changes in the mix and quantity of services provided, and case-complexity trends. (Appendix A discusses each component of the update framework in more detail.) The Commission also considers how its decisions may affect access to and quality of patient care.

The projected market basket increase indicates how much inpatient operating costs would be expected to rise if the resources hospitals use to provide care and the types of patients they treat did not change. However, new technologies may be introduced or further diffused among hospitals, or additional uses may be developed for existing technologies. Scientific advances that enable hospitals to improve quality of care often require more resources. In ProPAC's view, payments should be increased to recognize these innovations so that hospitals are not discouraged from adopting them merely because they raise costs.

The Commission's framework also reflects its belief that hospitals should be able to increase their productivity by improving management techniques and taking advantage of technologies that reduce costs. As they do so, the Medicare program ought to share in the savings. Moreover, structural changes occurring throughout the health care sector may affect the role hospitals play in delivering care. Hospitals may respond by changing the quantity and mix of services they furnish during an inpatient stay. As this occurs, ProPAC may recommend an adjustment to the annual PPS update to account for changes in the services being provided to Medicare patients.

In addition, the complexity of cases treated in the hospital goes up from year to year. Case complexity is measured by the Medicare case-mix index (CMI), which reflects the distribution of patients among diagnosis-related groups (DRGs). Under PPS, increases in the CMI automatically result in a proportionate rise in payments. The Commission thinks this is appropriate as long as CMI growth reflects real changes in patient resource requirements. However, improvements in hospitals' coding practices can raise the CMI without a change in resource use. Conversely, rising case complexity within the DRGs may increase resource use without changing the CMI or payments. When these changes occur, ProPAC makes an adjustment to the annual update to account for their effects on payments and costs. This adjustment is intended to provide an adequate level of payment in the forthcoming year, after accounting for changes in these factors during the current year.

The sum of these components provides an appropriate increase in the operating payment rates for the coming year, consistent with reasonable expectations about the growth in costs per discharge. This update should allow hospitals to adapt to their environment while encouraging continued improvements in efficiency. The Commission's analytic framework thus yields update recommendations that balance the program's need to be both a fair payer and a prudent purchaser.

Recommendation 2: Updating PPS Operating Payment Rates

> **For fiscal year 1998, the update for PPS operating payment rates should be zero. This level reflects projected inflation in the prices of hospital inputs and the Commission's judgments about the likely effects of scientific and technological advances, productivity improvements and service changes, and changes in the mix of patients treated.**

The Commission believes a zero update would allow hospitals to continue furnishing quality care to Medicare beneficiaries while simultaneously fulfilling Medicare's responsibility to act as a prudent purchaser. This amount falls within the range indicated by ProPAC's analytic framework, which suggests an update between –0.6 percent and 1.4 percent for fiscal year 1998 (see Table 1-1).

The operating update is based on the projected increase in the PPS hospital market basket index. The current forecast for fiscal year 1998 is 2.8 percent. The Commission's update framework also includes two adjustments related to the market basket forecast. The first of these addresses differences between the approaches used by ProPAC and the Health Care Financing Administration (HCFA) in constructing the index. The Commission believes the index should equally reflect expected growth in employee compensation in the hospital industry and in the general economy, while HCFA gives less weight to the hospital industry projections. However, since the forecasts

Table 1-1. Update Framework for PPS Operating Payments, Fiscal Year 1998 (In Percent)

Components of the update	
Fiscal year 1998 HCFA PPS hospital market basket forecast*	2.8%
Adjustment for difference between HCFA and ProPAC market baskets	0.0
Correction for fiscal year 1996 forecast error	-0.8
Allowance for scientific and technological advances	0.4
Adjustment for productivity and service change	-3.0 to -1.0
Net adjustment for case-mix change in fiscal year 1997	0.0
Total PPS operating update	-0.6 to 1.4

* The market basket forecast was supplied by the Health Care Financing Administration, Office of the Actuary, December 1996. This forecast is subject to change as more current data become available.

for the two versions of the index are currently identical, no adjustment is necessary at this time.

ProPAC also makes an adjustment to account for errors in previous market basket forecasts that inappropriately raised or lowered PPS operating payment rates. Neither hospitals nor the Medicare program should permanently bear the financial consequences of such errors. Therefore, substantial errors (those exceeding 0.25 percentage points) in previous forecasts should be corrected when actual data become available, which is two years after they are applied to payments. The fiscal year 1996 market basket forecast was 3.5 percent, while the actual increase was 2.7 percent. The rates thus were set 0.8 percentage points too high, and should now be reduced accordingly.

ProPAC also adjusts for anticipated scientific and technological advances. This is a future-oriented policy adjustment intended to provide additional funds for hospitals to adopt health care innovations that enhance quality but raise costs. The Commission's allowances for scientific and technological advances in past years have ranged from 0.3 to 1.0 percentage points. Today's cost-competitive environment may make hospitals evaluate expensive technologies more closely before adopting them. ProPAC therefore believes this factor will contribute about 0.4 percentage points to hospital inpatient costs in fiscal year 1998.

The Commission then subtracts an amount for expected improvements in productivity. The adjustment is a future-oriented policy target, intended to provide hospitals with incentives to be more productive. This target generally is based on the performance of other service-oriented industries. In the past, ProPAC has expected hospitals to achieve productivity gains ranging from 0.5 percent to 2.0 percent per year. The amount of the target, however, is set so that hospitals and the Medicare program share equally in the savings. The productivity adjustment thus has been half the expected productivity increase, ranging from –0.3 to –1.0 percentage points.

This year, in evaluating productivity trends, the Commission has also considered changes in the services hospitals furnish. As noted earlier, some of the recent decline in hospitals' inpatient operating costs may be because they provide fewer services during an inpatient stay. To the extent this has occurred, payments in the coming year should be adjusted to better reflect the reduced service content of hospitals' Medicare discharges.

The role of the hospital inpatient setting in the continuum of care differs from the past. Hospital length of stay for Medicare beneficiaries has dropped substantially since 1990. Patients with shorter stays consume fewer resources, including medication, nursing hours, meals, and the like. But the costs that are no longer incurred are still reflected in the current payment rates. Coinciding with the drop in length of stay, beneficiaries' use of hospital outpatient services and post-acute care has soared. Moreover, length of stay declines have been

greater in DRGs associated with substantial post-acute care use, suggesting a shift in care from hospital inpatient to post-acute settings. Other factors also may have contributed to shortened hospital stays and a change in the services hospitals deliver. These include expanded use of particular technologies, like endoscopic procedures instead of open surgical procedures, that promote improved function and faster recovery.

The payment rates, therefore, continue to reflect care that is no longer being furnished as part of the hospital stay. For Medicare to be a responsible purchaser, in ProPAC's view, payment updates must be adjusted to remove differences between the hospital services being paid for and those actually being provided. At the same time, hospitals need to continue to improve their productivity. In the Commission's judgment, accounting for both productivity improvements and service change requires an adjustment in the update of between –1.0 and –3.0 percentage points.

The final component of ProPAC's update framework is the case-mix adjustment. As noted earlier, this component is designed to adjust the level of next year's payment rates to account for the effects of this year's changes in coding practices and in real within-DRG case complexity. Recent changes in hospitals' coding practices have had less of an effect on the CMI than in the past. This is largely because the last major revision to the DRGs was implemented six years ago, and hospitals' responses to these events tend to diminish over time. Increases in within-DRG case complexity during 1997 are also likely to be minor because refinements to the DRGs have improved their ability to capture real changes in this complexity. Consequently, current increases in the CMI due to changes in coding are likely to offset any rise in within-DRG case complexity that the CMI does not capture. As a result, the case-mix adjustment for fiscal year 1998 is zero.

Given these values for the update components, the Commission believes the PPS operating update could be held to zero for fiscal year 1998 without unfavorable consequences for either the hospital industry or care to Medicare beneficiaries. The delivery of care likely will continue to change as more inpatient hospital days are replaced with care in other settings or are eliminated altogether. Medicare payments need to reflect this change. Hospital occupancy rates also remain relatively low in the aggregate, suggesting system overcapacity and ongoing opportunities for hospital productivity improvements. Moreover, the latest financial data show PPS margins rising to their highest levels since the first two years of PPS; total margins have also gone up.

Although ProPAC believes the update should be zero for fiscal year 1998, its recommendation applies for only one year. It may be risky to keep the payment rates at current levels for a longer period. A major concern is uncertainty about the future and the extent of changes in productivity and service delivery hospitals will achieve. ProPAC will continue to monitor hospital financial condition to ensure that quality of and access to care do not suffer.

It should be noted that the growth in per case payments each year is greater than the PPS update. This is because increases in the Medicare CMI result in a proportional rise in hospital payments. Therefore, if the CMI continues to grow at its current rate, payments per case will increase about 1.9 percent in fiscal year 1998, despite a zero update.

Capital Payment Rates

In fiscal year 1992, Medicare began paying PPS hospitals for inpatient capital costs based on prospectively determined, per case rates. In this section, ProPAC discusses its views on setting appropriate capital payment rates for fiscal year 1998. These rates will determine the payments each hospital receives for building and equipment costs incurred in furnishing inpatient services to Medicare patients. Such costs consist of depreciation, interest, and rent, as well as certain related expenses for taxes and insurance.

Medicare's capital prospective payment system is in the midst of a 10-year transition, which will end in 2002 with all PPS hospitals paid fully on the basis of national prospective rates.[5] In the meantime, hospitals are paid one of several different ways. Those with relatively low capital costs in the 1992 base year (59 percent of all hospitals) receive a blended rate that reflects both the hospital's own historical costs (the hospital-specific rate) and the national average cost experience (the Federal capital

rate).[6] Hospitals with high base year capital costs are paid either 100 percent of the Federal rate (28 percent of all hospitals) or an amount based on their current Medicare capital costs (13 percent of all hospitals). All hospitals are also eligible for exceptions payments, which are intended to ensure that PPS payments cover at least a minimum percentage of their current capital costs.

The capital PPS was mandated in OBRA 1990. This legislation also included a budget neutrality provision for fiscal years 1992 through 1995. It required setting payment rates each year so that total projected payments would equal 90 percent of hospitals' aggregate projected Medicare inpatient capital costs.

The hospital-specific and Federal base payment rates for fiscal year 1992 were calculated from 1989 Medicare Cost Reports, the latest available data at the time. The amounts for 1989 were then updated by the estimated increase in costs between 1989 and 1992. For fiscal years 1993 through 1995, the base payment rates were updated by estimates of the industrywide historical rise in capital costs.

Subsequent cost report data indicated that capital costs had grown less rapidly than projected between 1989 and 1992. Consequently, the 1992 base payment rates were set too high. The Congress responded by reducing the base payment rates by 7.4 percent in OBRA 1993. Complete data for 1992, however, now show that the overstatement was twice as large as the early estimates suggested. As a result, the base payment rates are still higher than the Congress intended.

In addition, the updates applied for fiscal years 1993 through 1995 were much higher than either HCFA's or ProPAC's update framework would have produced for the same period. The Commission has always recommended setting each year's capital payment rates by applying an analytically determined update to an appropriate base payment rate. If this approach had been taken from 1993 through 1995, the current base payment rates would be substantially lower. In ProPAC's opinion, the current payment rates are inappropriately high and the excess amounts built into the rates should not be carried forward in future payments.

Although the base payment rates were too high, neither hospitals nor the Medicare program was much affected through fiscal year 1995 because the budget neutrality requirement limited payments. When this provision expired in 1996, however, the Federal capital payment rates jumped by 22.6 percent, compared with those in effect for the previous year.

Last year, both the Congress and the President proposed sharp reductions in those payment rates. The congressional proposal would have lowered the rates while extending and tightening the budget neutrality requirement through fiscal year 2002. The Administration proposed to make larger adjustments to the initial payment rates, without reimposing a budget neutrality provision. Since Medicare legislation was not enacted, however, these proposals were not implemented.

Recommendation 3: Setting Appropriate PPS Capital Payment Rates

> **Prospective capital payment rates for fiscal year 1998 should be set by revising the current payment rates and then applying an update factor. These revisions would correct for flaws in the data and the updating method applied in past years. As a result, the capital payment rates would be reduced by 15 percent to 17 percent.**

The current capital payment rates are from 15 percent to 17 percent too high. If they are not corrected, the excess amounts will be carried into future years, resulting in continued overpayments to hospitals.

The payment rates reflect the combined impact of two errors. The first is the 7.4 percent overstatement of the fiscal year 1992 base payment rates that still remains after the OBRA 1993 correction. The second error results from applying updates for fiscal years 1993 through 1995 that were based on historical cost trends, instead of on an update framework. The advantage of an update framework is that it accounts for anticipated changes in factors that should affect hospitals' costs, rather than actual cost growth. Updates based on a framework thus reflect projected input price inflation and reasonable expectations about improvements in productivity, as well as changes in the nature of the services provided. Applying updates based on historical cost trends was

especially inappropriate because the objective of the capital PPS was to change hospital behavior.

There are several ways to adjust the current base payment rates to achieve more appropriate payment levels. The 1992 base year capital payment rates could be corrected to reflect actual costs for fiscal year 1992, and updated to 1997 using HCFA's update framework. The latter step would involve substituting updates based on this framework for the cost trend updates originally applied in fiscal years 1993 through 1995. The actual cumulative update for these years was 13.1 percent, compared with a 4.2 percent increase suggested by HCFA's update framework. Implementing both of these changes, therefore, would lower the Federal base payment rates by about 15 percent.

Alternatively, the base capital payment rates could be replaced by the actual rates used in fiscal year 1995, which were reduced by the OBRA 1990 budget neutrality requirement. These rates then could be updated to 1997 using HCFA's update framework. This method would lower the Federal payment rates by about 16 percent.

Under a third approach, the budget neutrality requirement would be reinstated for fiscal year 1998 and later years. This would be similar to the proposal included in the Congress's legislative package last year. The Federal base payment rates would be adjusted so that anticipated aggregate capital payments would equal 90 percent of hospitals' projected total Medicare inpatient capital costs. As a result, the Federal capital payment rates for 1998 would be reduced by about 17 percent. Although this policy would lower the Federal rates by an appropriate amount, future increases in the rates would continue to be tied to changes in hospitals' capital costs. This approach thus would be inconsistent with the intent of prospective payment, which is to break the link between Medicare's capital payments and hospitals' actual capital costs.

All of these methods would also apply to the hospital-specific rates. Any of them would correct the overstatement of the payment rates that resulted from data errors and the inappropriate use of historical cost updates. The reduced payment rates would be more consistent with the intent of the capital prospective payment system.

Recommendation 4: Updating PPS Capital Payment Rates

For fiscal year 1998, the update for PPS capital payment rates should be zero. This update should be applied to appropriately revised base payment rates. The update reflects projected inflation in the prices of hospital capital inputs and the Commission's judgments about the likely effects of trends in long-term interest rates, scientific and technological advances, productivity improvements and service changes, and changes in the mix of patients treated.

A zero update applied to revised base rates would permit hospitals to maintain quality of care while meeting Medicare's responsibility to act as a prudent purchaser. This update is within the –0.2 percent to 1.8 percent range suggested for fiscal year 1998 by ProPAC's capital update framework (see Table 1-2).

Like the operating update framework, ProPAC's capital update framework considers how various factors may affect hospitals' Medicare inpatient capital costs during the coming year. Among these are anticipated changes in capital asset prices (the capital market basket forecast), scientific and technological advances, productivity and service changes, and case-mix change. Some of these components have different values when applied to capital.

The Commission develops its capital update recommendation partly on the basis of the projected increase in its capital market basket index. This index differs from HCFA's in that it reflects anticipated changes in capital prices for the forthcoming year, rather than average price changes over a longer period. Moreover, ProPAC's market basket excludes fluctuations in interest rates. The latter are handled separately, through the Commission's financing policy adjustment.

As of January 1997, the projected increase in ProPAC's capital market basket index for fiscal year 1998 is 2.4 percent. The Commission adjusts this amount when a substantial error (exceeding 0.25 percentage points) in a previous market basket forecast has inappropriately affected the capital payment rates. Since the most recent forecast error (0.2 percentage points for fiscal year 1996) was

Table 1-2. Update Framework for PPS Capital Payments, Fiscal Year 1998 (In Percent)

Components of the update	
Fiscal year 1998 ProPAC PPS capital market basket forecast[a]	2.4%
Correction for fiscal year 1996 forecast error	0.0
Financing policy adjustment	0.0
Allowance for scientific and technological advances[b]	0.4
Adjustment for productivity and service change[b]	-3.0 to -1.0
Net adjustment for case-mix change in fiscal year 1997[b]	0.0
Total PPS capital update	-0.2 to 1.8

[a] The market basket was developed by ProPAC. The forecast was supplied by the Health Care Financing Administration, Office of the Actuary, December 1996. This forecast is subject to change as more current data become available.

[b] Scientific and technological advances, productivity and service change, and case-mix change adjustments are identical to those used in the PPS operating payment update.

less than the threshold, no correction is required for fiscal year 1998.

ProPAC's update framework also includes a financing policy adjustment to account for the effects of prolonged changes in long-term interest rates. Short-term fluctuations in interest rates should not affect hospitals' inpatient capital costs. However, large changes that are expected to persist can create substantial financial burdens or windfalls for hospitals. Extended periods of unusually high rates, for instance, could force hospitals to choose between postponing needed renovation projects or incurring indebtedness beyond what Medicare would support. The financing policy adjustment would increase the capital update in such circumstances. Unusually low interest rates would allow hospitals to refinance debt, thereby reducing their costs. Under these circumstances, the adjustment would lower the payment update, allowing Medicare to share in the savings.

Interest rates on 30-year Treasury bonds have been relatively stable, hovering near their long-run average throughout the last five years. The Commission believes these rates are likely to remain stable in the near term. Therefore, a financing policy adjustment of zero is appropriate for fiscal year 1998.

ProPAC recognizes that future hospital capital investments may include more costly, quality-enhancing medical technology. The capital update framework adjusts payments to reflect the expected effect of such changes during the forthcoming year. In the Commission's view, the same adjustment for advances in science and technology should be applied to both the operating and the capital updates. Consequently, the capital payment rates should be increased 0.4 percentage points to offset the higher annual costs of new technologies.

The Commission's productivity adjustment recognizes that hospitals need to adapt their capital stock to a health care environment in which there is less demand for inpatient services. At the same time, the payment rates should be adjusted for changes in the quantity and mix of inpatient services hospitals provide. ProPAC believes the capital update should reflect the same adjustment for expected productivity improvements and hospital service changes as the operating payment update. This results in an adjustment of –1.0 to –3.0 percentage points in fiscal year 1998.

ProPAC's capital update framework also includes adjustments for changes in hospital case mix. As with the operating update framework, this adjustment offsets the effects of coding and reporting improvements that drive up hospitals' payments without affecting their costs. It also raises payments to recognize increases in within-DRG case complexity, which are not captured by Medicare's

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CMI. Since these effects are likely to be small and offsetting, no adjustment is needed for fiscal year 1998.

As described earlier, the Commission believes Medicare's current capital payment rates are too high. It recommends reducing the base rates and then applying a zero update for fiscal year 1998. As with the operating update, this recommendation is for only one year. Extending a zero update over a longer period may entail substantial risks. ProPAC will continue to monitor changes in hospitals' financial condition as well as capital spending trends to ensure that quality and access to care are not impaired.

TEACHING AND DISPROPORTIONATE SHARE PAYMENTS

PPS payments are adjusted to recognize the higher costs of hospitals with graduate medical education programs and to maintain access to hospitals that provide care to a disproportionate share of low-income patients. The adjustment for indirect medical education (IME) costs is based on a measure of the hospital's teaching intensity, determined by the ratio of residents to beds. The adjustment for disproportionate share (DSH) hospitals is based on the hospital's low-income patient share. In addition, Medicare pays each hospital a per resident amount to support the direct costs of its graduate medical education programs.

These payments have been the subject of increasing attention. The Balanced Budget Act of 1995, which the Congress passed but the President vetoed, contained provisions that would have reduced both the Medicare IME and DSH adjustments. The legislation also would have created a mechanism for distributing payments to teaching facilities, including Medicare IME and direct GME payments as well as funds from general revenues. This mechanism was intended to coordinate the contributions of all payers to the support of teaching activities and the other special missions carried out by teaching hospitals.

During the past year, ProPAC has analyzed Medicare's teaching and disproportionate share payment policies and their effects on hospital financial status. On the basis of this analysis, the Commission is making several recommendations to improve the use of these payments in achieving the program's policy objectives.

Teaching Hospital Payments

Teaching hospitals' costs are higher than those in other hospitals for a number of reasons besides their educational activities. These include the types of patients they treat and the kinds of services they provide, as well as how they deliver those services. Medicare recognizes these costs in two ways. Direct GME payments are for residents' salaries and benefits, plus the general operating costs of running hospital residency programs. The IME adjustment, which applies only to PPS payments for inpatient care, recognizes the higher patient care costs associated with these hospitals' teaching and related missions. In addition, Medicare pays teaching physicians for patient care services performed while they are supervising residents.

Medicare payments for the direct costs of residency training programs (resident salaries and benefits, faculty costs, administration, and hospital overhead) totaled $2.2 billion in fiscal year 1996.[7] Payments to each hospital are partly determined by a hospital-specific per resident amount, based on audited 1984 costs updated for inflation. Medicare pays a portion of this amount equal to its share of the hospital's inpatient days. The level of the per resident payment also varies by type of resident. The highest payments are for residents in primary care specialties.[8] Payments are about 6 percent lower for residents in other programs. Payments for residents training in a second specialty or for those who have trained for more than five years are generally half those for nonprimary care residents.

Medicare IME payments amounted to $4.3 billion in fiscal year 1996.[9] The indirect medical education adjustment is intended to compensate teaching hospitals for their higher patient care costs. Costs may be higher because patients are sicker, a broader scope of services is available, treatment is more intensive, or the staff mix is costlier. The practice styles of residents and their supervising physicians also may be less efficient than those in non-teaching settings, although the lower salaries of residents may offset this effect to some extent. Another factor that may raise teaching hospitals' costs is the expense of developing and improving diagnostic and therapeutic technologies.

Since fiscal year 1989, the IME adjustment to PPS operating payment rates for each teaching hospital has been set at 7.7 percent for every 10 percent increment in teaching intensity, based on the ratio of residents to hospital beds. The head count used in the IME adjustment is based on the number of full-time equivalent residents training in the inpatient and outpatient departments of the hospital. Residents who train in ambulatory settings outside of the hospital are excluded from the hospital's IME resident count. Unlike direct GME payments, for IME payments all residents count equally regardless of their specialty or number of years in training.

The Commission believes that Medicare's GME and IME policies need to be revised. Structural changes occuring in the health care marketplace are eroding both private payers' and Medicare's support for hospital teaching activities. Further, the design of GME and IME payments may encourage inappropriate expansion of hospitals' residency programs, while discouraging training in other settings.

Teaching hospitals offer highly valued services to Medicare beneficiaries and other populations. They are essential in developing technological innovations, conducting medical research, caring for the poor, and helping to ensure there is a well-trained physician work force for the future. It is important to maintain access for Medicare beneficiaries to the unique services they offer. In a price-competitive environment, however, it may be difficult for teaching hospitals to fulfill their multiple missions.

These hospitals are facing the same cost pressures as other health care providers. As managed care continues to grow and as other insurers become increasingly cost conscious, teaching hospitals will have to compete on the basis of price to attract patients. Yet their higher costs place them at a distinct disadvantage. This may be true especially where there is excess inpatient capacity; in such areas, teaching hospitals may have even more difficulty in securing patient volume.

Medicare is the only payer that makes separate payments to these facilities nationwide for their higher teaching-related costs. Because of IME and DSH payments, the average PPS inpatient margin for teaching hospitals is much higher than that for other hospitals. Even with these extra payments from Medicare, though, the total margins for some groups of teaching facilities are much lower than for other hospitals. The Commission is concerned about maintaining the financial viability of teaching hospitals as a group because of their special role. That concern is heightened by changes now occurring in the health care marketplace. As financial pressures grow, the Medicare program needs to ensure that its payments accurately account for teaching hospitals' added costs.

A related problem is that teaching hospitals do not receive explicit teaching payments when they treat beneficiaries who are enrolled in a Medicare risk plan. As enrollment in Medicare's risk contracting program grows, fewer beneficiaries receive their hospital care under fee-for-service arrangements. Consequently, these hospitals get less GME and IME payments for their teaching-related expenses.

ProPAC is also concerned that the design of Medicare's payments for teaching hospitals may have inappropriately influenced the number of residents and the settings in which they train. Because both GME and IME payments rise in proportion to the number of residents, hospitals have an incentive to train more of them. In fact, since 1990 the number of residents Medicare recognizes for payment has grown by more than 18 percent.[10] By contrast, teaching hospitals do not get additional Medicare funding if they employ more nurses or other caregivers. Since Medicare's per resident payments subsidize the hiring of residents, they may be favored over other hospital workers.

Moreover, that teaching payments are made only to hospitals may discourage the development of training opportunities in other settings. The current payment scheme does not allow hospitals to include in their IME resident count the time residents spend training outside of the facility. Nor does it provide payment to other sites of training for direct or indirect teaching costs.[11]

The Commission's recommendations concerning teaching payments are guided by several principles. One is that Medicare funds should be used for the benefit of Medicare beneficiaries. A second is that Medicare payment policies should not drive decisions about the number and mix of residents

trained. In addition, Medicare funding for teaching-related activities should be available to those organizations that incur the costs of training, but flexible enough to allow training in other settings when appropriate. Finally, other payers and the public, both of which benefit from medical education and research, should pay their fair share of these costs. The following recommendations reflect the Commission's views on Medicare's teaching payments and mechanisms for providing broader support for graduate medical education and teaching hospitals.

Recommendation 5: Improving the Distribution of Medicare's Indirect Medical Education Payments

> **Medicare's IME payments should reflect the historical relationship between hospital costs and teaching intensity. Further, they should continue to be based on the hospital's volume of Medicare patients. These payments should no longer change in proportion to annual variations in the number of residents or beds. In addition, the payment method should be flexible enough to allow and support training in settings outside of the hospital.**

Medicare IME payments to PPS hospitals are based on patient volume, case mix, and teaching intensity. The Commission believes these payments should continue to fully reflect changes in Medicare patient volume and case mix. However, it is concerned that the current method creates strong incentives for hospitals to increase residents and discourages them from reducing the size of resident staffs when appropriate.

Hospitals may also be deterred from training residents in non-hospital sites, since doing so would reduce Medicare payments. Likewise, the current policy may have encouraged growth in hospital-based specialties relative to others, like family practice, that require training in other settings.

In ProPAC's opinion, Medicare IME payment policy should be modified so that a change in the number of residents does not result in a proportionate change in payments. These payments should, however, continue to reflect the amount and type of care these hospitals provide to Medicare beneficiaries. They also should be unaffected by a residency program's decision to expand training to other settings.

There are a number of options for implementing these changes. The teaching intensity measure could be set at the current or a past level. This would allow payments to continue to reflect changes in patient volume and case mix while removing the relationship between payments and year-to-year changes in the number of residents in the hospital. Under this approach, hospitals could also allow residents to train in non-hospital settings without losing teaching-related payments.

Alternatively, the payment method could be modified so that changes in teaching intensity from a base level result in a smaller adjustment in payments than is now the case. This could be done, for example, by recognizing only a fraction of the change in teaching intensity from the base level. To further encourage training in non-hospital settings under this approach, hospitals could be allowed to include in their resident count the time residents spend training elsewhere.

Regardless of the approach chosen, these changes should not result in increased Medicare outlays. In addition, the per discharge payment may need to be modified over time to accommodate changes in the overall costs of teaching activities and in the cost structure of teaching hospitals.

Recommendation 6: Reducing the Level of Medicare's Indirect Medical Education Payments

> **The indirect medical education adjustment should be reduced from its current level of 7.7 percent to 7.0 percent in fiscal year 1998.**

It is important to maintain access for Medicare beneficiaries to the services teaching hospitals provide. Medicare payments thus should reflect the added costs incurred by these facilities. The current level of the teaching adjustment, however, continues to be higher than appropriate. For fiscal year 1998, the adjustment should be lowered to 7.0 percent; this would mean a 9.1 percent decrease in each hospital's IME payments.

Ultimately, the adjustment should more closely correspond to the actual relationship between teaching intensity and costs. ProPAC estimates that Medicare operating costs per discharge go up by 4.1 percent for each 10 percent rise in teaching intensity. This estimate reflects both the additional patient care costs residents generate and other factors that historically have caused teaching hospital costs to be higher.

In making this recommendation, ProPAC recognizes the important role teaching hospitals play, but also acknowledges that Medicare has more than adequately compensated them for their greater costs. Teaching hospitals' PPS margins are at their highest levels since the first two years of PPS, and substantially above those of non-teaching hospitals.

Nevertheless, a large and immediate reduction in IME payments might make it difficult for teaching hospitals to support their unique missions. These hospitals tend to have lower total margins than other hospitals, in large part because they provide more uncompensated care and they have smaller shares of private pay patients. The Commission believes teaching hospitals should be able to adjust readily to its proposed reduction in payments for fiscal year 1998 without compromising access to quality care. Any further changes in the level of the adjustment, however, should be made gradually and monitored closely to ensure that access to the services these facilities provide is not adversely affected.

Recommendation 7: Improving Medicare's Payments for Direct Graduate Medical Education Costs

> **Medicare's payments to hospitals for the direct costs of GME programs should not change in proportion to annual variations in the number of residents trained. The method for determining the level and distribution of these payments should be as neutral as possible concerning the number and specialty mix of residents and the site of their training.**

Medicare has always made extra payments to hospitals to recognize the costs of graduate medical education programs. These payments are intended to ensure that both the general public and the Medicare population will have access to well-trained physicians for their future health care needs. Medicare pays teaching hospitals a hospital-specific per resident amount for its share of these expenses.

As with the IME payment, Medicare's GME payment method may distort hospitals' decisions about the number of residents they train. Hospitals have little motivation to reduce the size of their residency programs because they receive a large payment for each resident. Moreover, since residents mainly provide patient care, the subsidy creates an incentive to substitute them for other types of caregivers. In addition, restricting GME payments to hospitals discourages the development of training programs in alternative sites like ambulatory care clinics and health maintenance organizations.

The payment method could be changed in several ways. Each hospital could get a lump sum payment based on its historical share of Medicare's GME spending. Such a payment would likely need to be recalculated periodically to account for changes in the resident population. Alternatively, the method could be revised to recognize only a fraction of any change in the number of residents compared with a base level. Hospitals would continue to receive a partial payment for residency positions they eliminate and a partial payment (or no payment) for additional residents. Special provisions would be required for hospitals and other entities training residents for the first time. Regardless of the specific approach, removing the direct link between payments and the number of residents a hospital trains would weaken the adverse incentives created by the current payment method.

Recommendation 8: Establishing a Broader-Based Financing Mechanism for Graduate Medical Education and Teaching Hospitals

> **Explicit payments for graduate medical education and teaching hospital costs should not be limited to the Medicare program. Mechanisms to broaden financial support for training physicians in hospitals and other locations should be developed. The payments should reflect the reasonable costs of training at each facility and protect the access of beneficiaries and other populations to the services they provide.**

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Medicare is the only payer that explicitly pays hospitals nationwide for the direct and indirect costs of teaching. Although other payers have implicitly helped fund these activities through higher prices for patient care services, their payments are not directly linked to the size and structure of teaching programs. Moreover, under the growing pressure of competition, purchasers of health services are becoming less willing to pay higher prices to these facilities. As a result, teaching hospitals will find it increasingly difficult to maintain their broader missions and to attract patients.

To allow teaching hospitals to compete fairly with other facilities, separate mechanisms that explicitly support their missions should be developed. As centers for training future physicians, leaders in research, and providers to underserved populations, teaching hospitals are an integral part of this nation's health care delivery system. It is important that they have the financial support to maintain this role.

Teaching hospitals can be expected to compete successfully for patients if their special missions are recognized through an explicit payment mechanism. Such a mechanism would be consistent with ProPAC's recommendations on Medicare teaching payments, which are intended to continue support for teaching facilities while eliminating the inappropriate incentives embedded in Medicare's current methods.

Several important design issues would need to be considered in developing a broader support mechanism. One critical issue is how payments would be financed. Funds could be provided through general revenues, or through a tax on payers or providers. Another consideration is which entities should be eligible to receive these broad-based funds. Payments could be distributed through consortia consisting of hospitals and other facilities that provide training, for example.

A number of other issues are also pertinent. One is the structure of the payment mechanism. Parallel funds could be established to address different objectives, as with Medicare's IME and direct GME payments. Alternatively, there could be a single fund or a number of different funds using payment criteria that vary by the setting in which training occurs. Whether payments are made on a per facility, per patient, or some other basis would also have to be decided.

Under any reasonable approach, having an explicit funding mechanism for medical education and teaching hospital costs could enhance efficiency while supporting teaching hospitals' multiple missions.

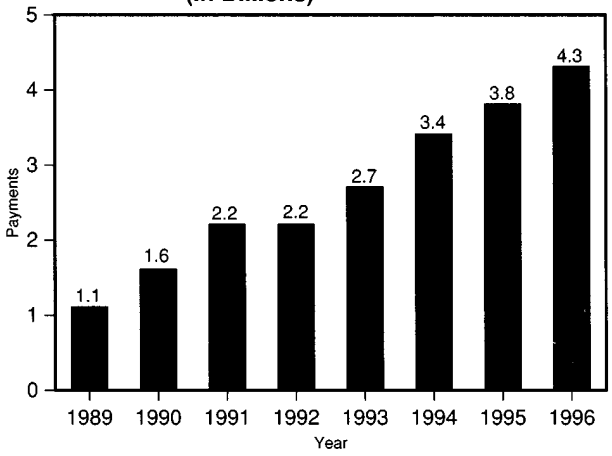
Disproportionate Share Hospital Payments

Since 1986, Medicare has made special payments to PPS hospitals that treat a disproportionate share of low-income patients. The DSH adjustment originally was regarded as necessary to offset the higher costs of treating indigent patients. In recent years, however, it has been viewed more broadly as helping to preserve access to care for Medicare and low-income populations.

DSH payments have grown rapidly since fiscal year 1989, increasing almost fourfold from $1.1 billion to $4.3 billion in 1996 (see Figure 1-5). This acceleration is largely due to legislative changes that raised the DSH payment rate for some hospitals. But growth in hospitals' low-income patient loads over time has also played a role.

DSH payments are distributed through a percentage add-on to the PPS payment rate. This means that a hospital's DSH payments are tied to its volume and mix of PPS cases. The add-on

Figure 1-5. Medicare Disproportionate Share Hospital Payments, 1989-1996 (In Billions)



SOURCE: Health Care Financing Administration.

for each case is determined by a complex formula and the hospital's percentage of low-income patients. That percentage is the sum of two ratios: Medicaid patient days as a share of total patient days, and patient days for Medicare beneficiaries who receive Supplemental Security Income (SSI) cash payments as a percentage of total Medicare patient days. Medicaid and SSI patient shares thus are weighted equally, even though the former group accounts for more than four times as much of hospitals' costs.[12] Moreover, the low-income patient share does not include other amounts that also reflect care provided to the poor, such as uncompensated care.

The current DSH distribution formula includes a threshold, or minimum value, for the low-income patient share a hospital needs to qualify for a payment. In fiscal year 1996, this criterion limited eligibility to 38 percent of PPS hospitals. In addition, the formula is progressive; above the threshold, the adjustment rate rises as the hospital's low-income patient share increases. Those features target payments to hospitals that devote the greatest share of their resources to treating Medicaid and SSI patients. They also partially compensate for the fact that these hospitals generally have fewer Medicare cases on which to receive the DSH add-on.

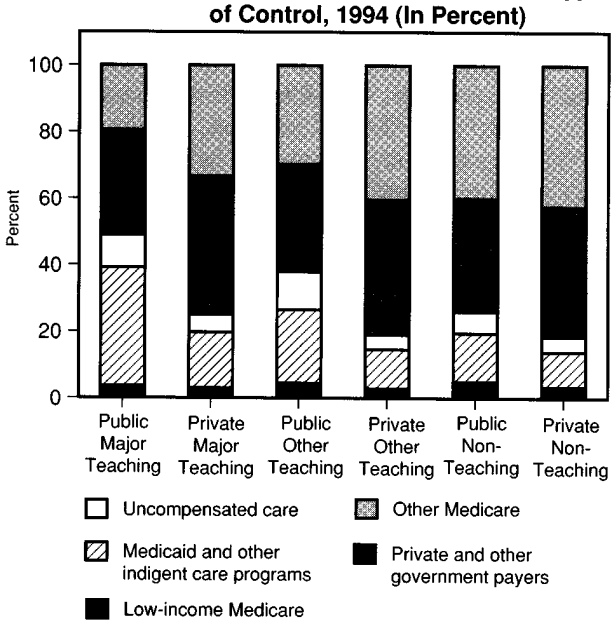
Because there are multiple DSH formulas, hospitals with the same share of low-income patients can have substantially different payment adjustments. The primary differences are in the formulas applied to urban and rural and large and small hospitals. The thresholds are much higher for rural hospitals. Consequently, more than 95 percent of all DSH payments go to urban facilities. Urban hospitals with at least 100 beds benefit from steeply graduated payment adjustments, while small hospitals in both urban and rural areas receive a lower, fixed adjustment.[13] As a result, DSH payments are highly concentrated; about half go to only 250 hospitals.

Each DSH formula also has a large payment "notch" at the threshold. For example, an urban hospital with at least 100 beds receives a 2.5 percent adjustment if its low-income patient share is 15.0 percent, but gets nothing if the share is 14.9 percent.

Last year, the Congress proposed a substantial cutback in DSH payments and it is likely to consider some reduction again in this year's budget negotiations. The possibility of less funding comes at a time when competitive pressures make it increasingly difficult for hospitals serving a large share of low-income patients to cover their uncompensated care costs. This is partly due to downward pressure on payment rates in the private insurance market. But it is also because these hospitals have only a small base of privately insured patients to help offset these costs. Public major teaching hospitals, for example, have about twice the uncompensated care burden of any voluntary hospital group, coupled with a markedly smaller share of privately insured patients (see Figure 1-6).

These pressures highlight the need to target available DSH funds toward the institutions that are most important to the health care safety net. However, improving the allocation of DSH funds is complicated by growing disparities between the amount of care hospitals provide to the poor and the amount indicated by the low-income patient share measure used in the current distribution formula.

Figure 1-6. Patient Group Cost Shares, by Hospital Teaching Status and Type of Control, 1994 (In Percent)



Note: Due to data limitations, the cost shares devoted to local indigent care programs other than Medicaid are probably understated.

SOURCE: ProPAC analysis of data from the American Hospital Association Annual Survey of Hospitals.

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Medicaid utilization has never been a good measure of overall service to the poor, because the proportion of the low-income population covered by Medicaid varies markedly from state to state. In addition, the hospitals that treat the most Medicaid patients do not necessarily provide the most uncompensated care.

The problems with the Medicaid measure have been exacerbated in recent years by state reforms implemented under Medicaid waivers. Of particular concern are the substantial expansions in eligibility in Oregon and Tennessee, which reflect changes in policy rather than growth in the incidence of poverty.

In the future, the Medicaid patient day count may become an increasingly less accurate measure of service to the poor. With much greater control over the design of their programs, some states may expand eligibility and service coverage while others scale them back, with little relationship to the amount of care provided to the poor. Recently enacted welfare reforms are likely to have a similar effect on the SSI component of the DSH low-income patient share measure.

In its March 1996 *Report and Recommendations to the Congress*, ProPAC recommended reviewing Medicare's DSH payment methods to ensure that available funds are distributed as equitably as possible. The Commission recognized that improving the distribution might require developing a better measure of the services hospitals provide to indigent patients and collecting new data. This year, ProPAC's recommendations set forth the principles for a comprehensive redesign of this critically important component of Medicare payments.

Recommendation 9: Principles for Improving Medicare's Disproportionate Share Payment Adjustment

> **Medicare's DSH payments should be aimed at protecting access to hospital care for its beneficiaries. Payments should be distributed based on each hospital's share of low-income patient care and volume of Medicare cases. The low-income share measure should reflect the costs of services provided to low-income groups in both inpatient and outpatient settings. These groups include Medicare patients eligible for SSI, patients sponsored by Medicaid and local indigent care programs, and uninsured and underinsured patients as represented by uncompensated care.**

The Commission believes DSH payments should protect access to care for Medicare beneficiaries, and that Medicare should fund its share of the overall subsidy needed to do so. Thus, the DSH adjustment should continue to link payments to the hospital's volume of Medicare inpatient cases. This helps protect Medicare patients' access to care at the hospitals they use.

ProPAC's approach moves away from the notion of compensating hospitals for the added costs of treating poor patients. This rationale was emphasized when the DSH adjustment was enacted. Since then, however, research conducted by the Commission and others has found little evidence of any systematic relationship between the share of poor patients a hospital treats and per case costs.[14] ProPAC believes, though, that hospitals serving large numbers of poor patients need added support—particularly as other payers tighten their rates—to remain financially viable.

The measure of low-income patient share should include poor Medicare patients and patients covered by any indigent care program, as well as those who receive uncompensated care. Low-income Medicare patients would continue to be identified by their eligibility for SSI payments. Indigent care programs would include Medicaid and other programs sponsored by city, county, or state governments that operate in some areas. All other low-income patients would be represented by uncompensated care.

Because program eligibility criteria vary among states and localities, the relative importance of these patient groups also varies. It is therefore critically important that the DSH low-income patient share measure encompasses all of these categories. In particular, hospitals' uncompensated care burdens tend to be greater when Medicaid eligibility and coverage are limited and no other state or local indigent care programs are available. The proposed measure would be unaffected by this type of variation.

A measure of provider costs would be the best way to determine the amount of low-income care furnished. Costs associated with each of the relevant patient groups could be summed to arrive at the total costs of treating the poor. Those costs as a share of the hospital's total patient care expenses would reflect the proportion of resources the hospital devotes to caring for the poor.

Although DSH payments would continue to be made only for Medicare inpatient cases, the measure of low-income patient costs should encompass both inpatient and outpatient services. This would help hospitals with a substantial amount of outpatient care that is uncompensated or covered by Medicaid. It also would recognize that many hospitals are unable to separate their inpatient and outpatient costs accurately, particularly for uncompensated care.

In ProPAC's proposed measure, hospitals' uncompensated care costs would not be offset by operating subsidies from a state or local government or by payments from an uncompensated care pool. The full value of services to the poor would thus be used to determine each hospital's low-income patient share and the DSH payment it receives per case. This approach would avoid creating an incentive for state and local governments to reduce their funding levels for public hospitals or for other programs that help finance uncompensated care costs. It should be noted, however, that subsidies for uncompensated care, as well as payments from other programs for the poor, may vary substantially among areas and across hospitals. This variation may have to be considered in evaluating the potential effect of redistributing DSH payments.

Hospitals' uncompensated care costs should include both charity care and bad debts. The Commission believes that many bad debts are appropriately reflected in the DSH adjustment. This is because hospitals' propensity to attempt collection before approving charity care, as well as the income and asset criteria they apply, vary widely. Equally important, an all-inclusive measure would eliminate the need to separate charity care from bad debts, a substantial burden for hospitals and HCFA alike. Moreover, including bad debts would avoid influencing hospitals' practices in approving patients for charity care. Besides generating data to monitor their own policies, many facilities must report the amount of charity care they provide using state-established criteria. ProPAC's approach would not require them to implement different criteria for Medicare.

The average share of total patient care costs devoted to treating the poor may change over time. It might increase if more privately insured patients lost their coverage or became unable to pay their deductibles and copayments. On the other hand, it might decrease as fewer Medicare beneficiaries qualified for SSI under welfare reform or if states tightened their Medicaid eligibility and coverage requirements. Under ProPAC's approach, a hospital's low-income cost share would determine its DSH adjustment. The total amount of DSH payments nationally, therefore, would rise or fall with these changes in hospitals' low-income shares. The Congress would have to decide whether this were desirable, or whether the DSH payment mechanism should distribute a fixed pool of funds.

Recommendation 10: Improving the Distribution of Disproportionate Share Payments

> **DSH payments should be concentrated among hospitals with the highest shares of poor patients. Therefore, a minimum threshold should be established for the low-income patient cost share. Hospitals falling just above the threshold should receive only a minimal per case payment, with the amount then increasing as low-income share rises. The same general approach for distributing payments should apply to all PPS hospitals.**

The objective of protecting Medicare patients' access to hospital services is best met by concentrating DSH payments in the hospitals with the largest low-income patient cost shares. Payments can be targeted by establishing a minimum value, or threshold, for the low-income share hospitals must have before payment begins. The proportion of PPS hospitals receiving a DSH payment should not be larger than in past years (approximately 40 percent) and perhaps should be smaller.

In addition, it is important that the DSH payment formula not create a substantial jump in payments

as the hospital's low-income share crosses the threshold. This problem could be avoided by making the adjustment proportional to the difference between the hospital's low-income share and the threshold. In this way, hospitals with low-income shares just above the threshold would receive small payments, with the amount increasing as low-income shares rise.

DSH payments could be further concentrated if the payment formula were progressive. This approach is used in the current DSH adjustment formulas for some hospital groups. A progressive formula partially compensates for the fact that hospitals with the largest shares of poor patients often would receive little assistance because they have relatively few Medicare cases. However, ProPAC's preliminary analysis shows that using the proposed low-income cost share would alleviate the need for such a formula. In fact, much of the progressivity in the current DSH formula is needed because the current low-income share measure does not account for uncompensated care.

The same general approach for distributing DSH payments should apply to all hospitals. This would help protect access to care for Medicare beneficiaries, regardless of the type or location of the hospitals they use. The special treatment given some hospital groups in the current system should not be necessary under ProPAC's proposal.

ProPAC's analysis indicates that a DSH payment adjustment that is proportional to the difference between a hospital's low-income cost share and a threshold would target the hospitals in greatest need of assistance. Hospitals with the lowest total margins generally would receive more DSH payments than they do under the current system; those with above-average margins would get less. Implementing this proposal also could result in a substantial redistribution of DSH payments. More work is needed to develop an adjustment formula that distributes payments most appropriately. The Commission will continue its analysis of options for this formula in the coming months.

Recommendation 11: Collecting Data to Support Disproportionate Share Payment Reform

> **The Secretary should collect the data necessary to implement a revised DSH payment mechanism. Due to recent and planned changes in the Medicaid and SSI programs, the measure now used to distribute DSH payments is becoming increasingly untenable. Although several new data elements would be required, this need not substantially increase the current hospital reporting burden. Periodic audits of these data would also be necessary.**

To implement ProPAC's DSH adjustment proposal, the Secretary will have to collect data from each hospital on its low-income patient cost share. Accurate and consistent data are not available from existing secondary sources. Nonetheless, the required information could be obtained by straightforward means, without using a complex cost assignment scheme like that in the Medicare Cost Report.

Each hospital's low-income patient cost share could be estimated by dividing total charges for all low-income patient groups by total patient charges. The only data needed would be charges for each relevant patient group (Medicare, Medicaid, indigent care programs other than Medicaid, and uncompensated care) along with total patient care charges.[15] Charges for low-income Medicare patients would be estimated by multiplying each hospital's total Medicare charges by its ratio of SSI patient days to total Medicare days. This approach would yield a reasonably accurate estimate of the proportion of costs devoted to treating low-income patients in each hospital.

HCFA would need to develop uniform definitions and reporting instructions to govern hospitals' reporting of charge data; information from a sample of hospitals would need to be audited. However, since hospitals would not be required to report charity care and bad debt charges separately, this would not impose too great a burden. It would be important to ensure that inappropriate items, like contractual or courtesy discounts, are not counted as uncompensated care. Similarly, charges reported in duplicate categories (primarily among Medicaid, other indigent care programs, and uncompensated care) must be avoided.

Data initially would be needed from all PPS hospitals to evaluate the payment formula. The formula would probably have to be recalibrated at some

point. However, requiring ongoing reports only from hospitals that expected to receive a DSH payment would minimize the resources hospitals and HCFA would devote to data development.

Another issue concerns hospitals that cannot aggregate charges accurately by payer group. Standard accounting procedure calls for assigning charges to whatever principal payment source the patient identifies on admission. But that source often changes, and not all data systems can reassign charges accordingly. This problem could be solved in two ways. First, HCFA could require hospitals to develop the necessary data system capability if they want to receive a DSH payment. Alternatively, HCFA could choose to accept the hospital's best estimates. Hospitals' estimates may work reasonably well under the proposed approach, since the majority of payer assignment problems involve changes among low-income groups. The most common problem occurs when uninsured patients are initially categorized as charity care but later are determined eligible for Medicaid.

It would be important for hospitals to capture charges for Medicare and Medicaid managed care patients, which means they must be informed of these patients' sponsorship at the time of admission. Hospitals already need to identify Medicaid managed care patients to avoid being shortchanged on their DSH payments. Under ProPAC's approach, this requirement would be extended to Medicare managed care enrollees. The Commission does not believe it would be appropriate to rely on patients to report their own coverage status; the health plan must provide the information necessary for the hospital to count these patients. A relatively simple way for health plans to do this is to include a sponsorship code in each patient's insurance identification number.

The Commission would be glad to work with HCFA in planning for the data collection initiative needed to support reform of the disproportionate share adjustment.

Payments for Risk Plan Patients

The teaching and disproportionate share payment policies described in the preceding sections currently apply only to the Medicare fee-for-service program. However, over four million Medicare beneficiaries are enrolled in risk plans—more than 10 percent of the total Medicare population. When risk plan enrollees are treated in the hospital, the payment is determined by the arrangement between the hospital and the beneficiary's plan. This payment generally is unrelated to the PPS rate the hospital would receive from Medicare under the fee-for-service program.

The ability of the plan and the hospital to negotiate a competitive payment for patient care is, in fact, one of the linchpins of managed care. It enables the plan to put pressure on providers to control the costs of patient care. However, this process makes it unlikely that plans' payments to hospitals will include those components of Medicare fee-for-service payments that support the higher costs certain hospitals face or the special missions they serve. While these payments are explicit parts of the fee-for-service program, there is no mechanism for ensuring that the policy goals they represent are supported in the Medicare risk program.

Although Medicare risk plans may pay higher prices to certain hospitals to reflect their perceived quality or attractiveness to current or potential enrollees, these additional amounts do not explicitly correspond to IME or DSH payments under PPS. Moreover, because Medicare risk plan patients generally are not included in the count of Medicare patients for purposes of determining direct GME payments, hospitals receive less support for those costs than if all of their Medicare patients were in the fee-for-service program.

Recommendation 12: Making Teaching and Disproportionate Share Payments to Facilities That Treat Medicare Risk Plan Enrollees

Facilities that receive explicit direct GME, IME, or DSH payments for their Medicare fee-for-service patients should also receive additional payments for their Medicare risk plan patients. Mechanisms should be developed to distribute these payments in a way that reflects the policy goals of the Medicare program.

Medicare's special payments to teaching and disproportionate share hospitals increase with the number of fee-for-service discharges at each facility. The Commission is concerned that there are

no corresponding mechanisms to distribute these special payments to facilities for their Medicare risk plan patients. Consequently, as risk plan enrollment grows, explicit support for teaching and disproportionate share hospitals is eroding. It may therefore become increasingly difficult for them to carry on their teaching activities and other special missions. Since Medicare's explicit payments to these facilities help support its policy goals, these payments should also be made for patients who are enrolled in a risk plan.

In addition, current payment policy puts teaching hospitals at a disadvantage when they compete for patients in the Medicare risk program. Risk plans may be unwilling to pay the extra costs these hospitals incur. Establishing separate mechanisms to support their activities would enable teaching hospitals to compete with others on the basis of patient care costs and quality, while subjecting them to the same market pressures to improve their quality and efficiency.

Several approaches could be taken to develop these mechanisms, depending on how Medicare's teaching and disproportionate share payment policies are changed. Hospitals could, for example, submit billing information for their risk plan patients so that HCFA could compute the teaching and DSH payments it would have made had those patients been in the fee-for-service program. As described earlier, facilities would need to be able to identify their Medicare risk plan patients for HCFA to determine the payment amount they should receive.

PAYMENTS TO PPS-EXCLUDED HOSPITALS AND DISTINCT-PART UNITS

When PPS was established, it was clear that prospective payment based on DRGs could not be applied universally, so certain providers were excluded. Five types of specialty hospitals (rehabilitation, psychiatric, long-term care, children's, and cancer) and two types of distinct-part units in general hospitals (rehabilitation and psychiatric) are exempt from PPS. They are excluded primarily because DRGs fail to predict their resource costs accurately.

PPS-excluded providers are subject to the payment limitations and incentives established in the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Payments for inpatient operating costs are based on each provider's current Medicare-allowable inpatient operating costs per discharge or a target amount. The target amount equals the provider's allowable costs per discharge in a base year, trended to the current year by an annual update factor. Medicare's share of allowable capital costs is paid in its entirety.

Under TEFRA, a facility with Medicare-allowable inpatient operating costs below its ceiling (its target amount times the number of Medicare discharges) receives its costs plus an incentive payment. This equals either 50 percent of the difference between its costs and its ceiling or 5 percent of the ceiling, whichever is less. A facility with inpatient operating costs above its ceiling receives the ceiling plus 50 percent of the difference between the ceiling and its costs. Total payments, however, may not exceed 110 percent of the ceiling.

New providers are exempt from the payment limits for up to their first three years of operation. During this time, payments are based on reasonable costs. The second full cost reporting period for new providers becomes the base year for establishing their target amount. In any given year, a facility may receive an additional amount, known as an exceptions payment, under certain circumstances if its costs are above its target amount.

Although the Congress legislates the update to the TEFRA target amounts, the Secretary and ProPAC are required to recommend an update factor each year. The Commission's update recommendation for fiscal year 1998 is presented below. In addition, ProPAC recommends that the Congress consider modifying the TEFRA payment system and discusses several options. This stems from the Commission's ongoing concern about the unintended long-run effects of current policy, particularly the disparity in financial performance among providers.

Update to the TEFRA Target Amounts

Updates to the target amounts in fiscal years 1994 through 1997 were based on a complex formula. Under this formula, each facility's update was determined by comparing its current costs to

its 1990 target amount. This policy was intended to reduce the large gaps between costs and target amounts experienced by some facilities. The updates ranged from the projected increase in the PPS-excluded facility market basket index to the market basket increase minus 1.0 percentage points. For fiscal years 1998 and beyond, the update for all facilities is currently set at the forecasted market basket increase.

Recommendation 13: Updating the Target Amounts for PPS-Excluded Hospitals and Distinct-Part Units

> **ProPAC's update framework indicates that a 2.0 percent average increase in the TEFRA target amounts is appropriate for fiscal year 1998. This average reflects inflation in the prices of hospital inputs and the Commission's judgment about the cost-increasing effects of scientific and technological advances.**

The Commission's recommendation is determined primarily by the projected increase in the PPS-excluded market basket index (see Table 1-3). The market basket measures inflation in the prices of inputs used by these facilities in treating Medicare patients. HCFA's current market basket increase forecast for fiscal year 1998 is 2.8 percent. The Commission believes, however, that HCFA's market basket as constructed does not adequately recognize the unique characteristics of the hospital labor market. The major reason is that the labor component of HCFA's market basket gives too little weight to expected wage growth in the hospital industry. Therefore, as with the PPS operating update, the Commission has constructed its own version of the market basket for PPS-excluded facilities. Its recommendation thus includes a negative adjustment of 0.1 percentage points to account for the difference between the forecasts for HCFA's and ProPAC's market baskets.

ProPAC believes the update should be corrected for substantial prior market basket forecast errors. Because projections necessarily rely on available data, they cannot accurately anticipate all future economic conditions that may affect input prices. Updates based on market basket forecasts, therefore, may result in overpayments or underpayments to PPS-excluded facilities. These should not be carried forward to subsequent payment years. The market basket projection used to update TEFRA target amounts in fiscal year 1996 was 3.4 percent. The actual market basket increase, however, was only 2.7 percent. Therefore, the Commission's update framework includes a negative adjustment of 0.7 percentage points for the fiscal year 1996 market basket forecast error.

The update also includes an allowance for scientific and technological advances for PPS-excluded hospitals and distinct-part units. It is intended to encourage providers to adopt quality-enhancing technologies, even when they increase costs. The level of this allowance reflects the Commission's judgment about the expected growth in costs due to scientific and technological advances used to provide inpatient services to Medicare beneficiaries.

To reach an informed judgment on the appropriate allowance, ProPAC reviewed prior allowances and generally assessed changes in the use and cost of technologies expected for fiscal year 1998. On

Table 1-3. Update Framework for PPS-Excluded Hospitals, Fiscal Year 1998 (In Percent)

Components of the update	
Fiscal year 1998 HCFA PPS-excluded market basket forecast*	2.8%
Adjustment for difference between HCFA and ProPAC market baskets*	-0.1
Correction for fiscal year 1996 forecast error	-0.7
Allowance for scientific and technological advances	0.0
Total PPS-excluded update	2.0

* The market basket forecast was supplied by the Health Care Financing Administration, Office of the Actuary, December 1996. This forecast is subject to change as more current data become available.

the basis of this review, the Commission concluded that the diffusion of new technologies will not substantially increase Medicare costs in PPS-excluded facilities during fiscal year 1998.

Unlike the Commission's update frameworks for PPS hospitals, the formula for excluded facilities does not include a productivity adjustment. The adjustment to the PPS updates is based on the principle that Medicare should share in the savings generated by productivity improvements. The program automatically shares in the savings under TEFRA, though, because part of any increase in efficiency is factored into reduced payments. A further reduction for productivity gains thus would not be appropriate.

Changes to the TEFRA Payment System

The Congress initially excluded specialty hospitals and units from PPS temporarily, with the understanding that prospective payment for these providers would be implemented at a later date. They have remained under the TEFRA payment system for much longer than anticipated, however. This is because the patient classification systems necessary for prospective payment have not yet been developed. Consequently, several flaws inherent in the TEFRA payment system that would have had little significance in the short run have led to undesirable effects over time. Of major concern are the substantial payment disparities across providers.

The use of facility-specific historical costs to set the target amounts systematically rewards certain facilities and penalizes others. Providers that had relatively high costs per case in the base year may have a greater opportunity to keep their costs below their target amounts. To the extent they succeed, they benefit by receiving incentive payments. By contrast, providers that were more efficient in their base year, as reflected in relatively low costs per case, are penalized by having a low target amount. They are less likely to receive incentive payments because their ability to keep costs below that target is doubtful. The TEFRA system is also problematic because the update mechanism does not account for changes in case mix or treatment patterns. Although the exceptions process provides additional payments under certain circumstances, these are made retrospectively and may not fully compensate for the higher costs associated with a more complex case mix.

Providers that have been subject to TEFRA longer thus may be disadvantaged relative to new ones entering the market. This is especially likely because newly certified hospitals and units are exempt from the TEFRA limits for their first two full cost reporting years. Moreover, they have incentives to inflate their initial costs. To the extent that new providers do this—thereby establishing high target amounts—they have an additional advantage compared with older ones. Moreover, if patient volume increases in subsequent years (as frequently occurs for new facilities), fixed costs are spread over a larger patient base, keeping costs per discharge below the facility's target amount.

In fact, the financial performance of new facilities is very different from that of older ones. Hospitals and units that were first subject to TEFRA limits after fiscal year 1989 had higher costs, payments, and payment to cost ratios than those entering the TEFRA system before then. In addition, aggregate payment to cost ratios for all facility types steadily improved from 1990 to 1994, except for children's and cancer hospitals. This is primarily due to the influx of new entrants with higher costs and payments.

Recommendation 14: Modifying the TEFRA Payment System

The Congress should consider modifying the TEFRA payment system to correct for the payment disparity between new and old providers.

Several methods to correct for the payment disparity between new and old providers have been considered in the past. Each one has strengths and weaknesses and may raise additional equity issues if implemented.

Rebasing may be appropriate, given that older facilities are at a competitive disadvantage under TEFRA. To rebase, the target amount for each facility would be calculated with more recent cost report data or, perhaps, as the average of multiple years. This would account for differential changes in patient complexity, treatment patterns, or input

prices across facilities. Rebasing would, however, penalize hospitals that had constrained their costs by paying them less. At the same time, facilities that had not become more efficient would be rewarded with higher target amounts. Older facilities could still be at a competitive disadvantage because their recent costs would reflect past spending patterns that were constrained by the annual updates.

Floor and ceiling limits applied to individual target amounts would narrow the payment gap by bringing hospitals at either end of the range closer to the mean. These limits could be based on an average target amount for each facility type or subsets of providers grouped by facility age or patient mix, for example. But determining the appropriate floor and ceiling amounts would be difficult. Without adequate case-mix measures, hospitals that incur higher costs because they treat sicker patients could be disadvantaged.

A dollar amount cap on incentive payments to any facility could curb payments to new facilities and control the growth in Medicare spending on these providers overall. Under current policy, per case incentive payments to providers with costs below their target are limited. Incentive amounts become larger, however, as patient volume increases. Additional information on the relationship between costs and targets across providers would be needed to determine the appropriate threshold.

Another option would be to have differential updates to recognize that all hospitals and units do not face identical cost increases. The update to the TEFRA target amounts for fiscal year 1997 is facility-specific. The update for fiscal year 1998 and beyond, however, is a single national percentage. The update process may be an appropriate way to recognize that changes in medical practice patterns are not likely to be uniform across different provider groups.

PAYMENTS FOR HOSPITAL OUTPATIENT SERVICES

Medicare beneficiaries receive services in a variety of ambulatory facilities, including hospital outpatient facilities, ambulatory surgical centers, free-standing kidney dialysis centers, comprehensive outpatient rehabilitation facilities, and rural health clinics. Medicare expenditures for these services have been growing rapidly. Since fiscal year 1983, payments for ambulatory services (excluding those for physician services) have risen an average of 14 percent annually, reaching $16.3 billion in 1995. HCFA estimates that about 70 percent of these payments were made to hospitals for services provided in outpatient departments.

Payment for hospital outpatient services is extremely fragmented. While some services are paid using prospective rates, most are paid on the basis of costs or charges, or a blend of costs or charges and prospective rates. When payments are based on costs or charges, there is little financial incentive to provide care in the most efficient fashion, since lower costs or charges result in correspondingly lower payments. In addition, the multiple payment methods across services create conflicting financial incentives and undermine the effectiveness of any one set of incentives. At the same time, the existence of multiple ambulatory settings complicates the issue of outpatient payment reform. Medicare's payment for a given service can vary substantially across these different providers. This may result in various payment amounts for the same service depending on where it was provided, and also may inappropriately affect the choice of treatment site.

Two additional problems arise with respect to Medicare's payment for hospital outpatient services. First, unlike in other settings where beneficiary cost sharing is 20 percent of the total payment, beneficiary liability for services provided in the hospital outpatient department is set at 20 percent of charges. Because charges are much higher than payments, beneficiaries using hospital outpatient services are responsible for significantly more than 20 percent of the total payment. For certain surgical, radiological, and diagnostic procedures, beneficiaries, on average, are liable for more than half of all payments. These copayment requirements are considerably higher than if the same services were provided in other ambulatory settings. Even across hospitals, beneficiary liability for the same service differs, because charges vary widely.

Second, a flaw in Medicare's payment method for most hospital outpatient surgeries, radiology procedures, and selected diagnostic services systematically pays hospitals more than the Congress intended. Medicare's share of payment for these services is supposed to be the total amount minus the beneficiary copayment. For facilities paid a

blend of costs or charges and prospective rates, however, program payments are not reduced by the entire copayment, because the payment formula written in statute was incorrectly specified.

Recommendation 15: Prospective Payment System for Hospital Outpatient Services

> **The Secretary should implement a prospective payment system for hospital outpatient services as soon as possible. Such a system should incorporate methods for controlling the volume of services.**

The Commission has long believed that Medicare should pay adequate rates for efficiently provided care. To this end, ProPAC supports the use of prospectively determined rates for hospital outpatient services. Prospective payment rewards efficient low-cost providers and penalizes inefficient ones.

ProPAC recognizes that prospective rates alone cannot curb the rise in expenditures for ambulatory care. If the unit of payment is the service, then providers can increase revenues by delivering more services. Thus, to contain growth in spending and encourage use of an appropriate mix of services and settings, payment reform must include some mechanism to control volume, such as expenditure targets. Such an approach would reduce the payment rates for all services if total spending exceeded some predetermined amount.

Because beneficiaries can receive services in an array of ambulatory settings, the payment methods and amounts should be comparable across the various types of providers. In the absence of justifiable differences in the cost of furnishing services, Medicare's policy of paying different amounts for similar services inappropriately favors some providers over others. For this reason, the ultimate goal of payment reform should be to create a payment system that is consistent across all ambulatory facilities.

Recommendation 16: Reducing Beneficiary Liability for Hospital Outpatient Services

> **Beneficiary liability for hospital outpatient services should be reduced from 20 percent of charges to 20 percent of the allowed payment, as it is for other services. Further, the Congress should correct the blended payment formula. This would help offset the increase in Medicare outlays resulting from a reduction in beneficiary liability.**

Differences in cost sharing across ambulatory settings penalize beneficiaries who receive care in hospital outpatient departments. Moreover, this penalty increases as hospital charges rise. The burden of coinsurance is mitigated for many beneficiaries because they have supplemental insurance policies or are eligible for Medicaid benefits that cover most copayments. About 11 percent of Medicare beneficiaries, however, lack such coverage. Those who have private policies indirectly carry the growing burden of cost sharing through rising insurance premiums.

ProPAC recognizes there are some obstacles to reducing beneficiary liability. Basing copayments on Medicare-allowable payments could substantially increase program spending. Since beneficiary liability is subtracted from the total payment to determine Medicare's contribution, charge-based copayments reduce the amount for which the program is responsible. Setting beneficiary copayments at 20 percent of the payment would thus substantially increase Medicare expenditures. In addition, copayments would have to be based on estimated payments until a prospective system was implemented. This could be done in several ways. Copayments could equal a lower percentage of charges, for example. Alternatively, an estimate of each hospital's payment to charge ratio could be used in determining the coinsurance amount for each service.

The problem with hospital outpatient cost sharing is exacerbated because the blended formula used to pay some hospitals does not capture the full amount of the beneficiary's copayment. Since Medicare's share of the total payment is calculated after the beneficiary's share is determined, the flawed formula overstates the program's share of the total payment. This results in payments that are higher than intended. Further, the flaw in the formula provides an incentive to raise charges for these services, thereby increasing beneficiary liability and total payments to hospitals. The formula-driven overpayment should be corrected immediately. The resulting savings could be used to partially offset the costs of reducing beneficiary liability.

PAYMENTS FOR DIALYSIS SERVICES

The 1972 amendments to the Social Security Act extended Medicare coverage to people of all ages with end-stage renal disease (ESRD). These beneficiaries are entitled to receive all Part A and Part B services, including chronic dialysis and kidney transplantation. The program covers about 93 percent of the ESRD population. The number of beneficiaries with ESRD grew 8.6 percent per year, on average, between 1986 and 1994.

Most ESRD patients are treated with hemodialysis or peritoneal dialysis. These services are furnished either at hospital-based or free-standing dialysis facilities, or at home under provider supervision. Facilities receive a prospective payment, called the "composite rate," to cover the bundle of services, tests, drugs, and supplies routinely required for a single dialysis treatment. The composite rate for hospital-based providers is $126 per treatment; for independent facilities, it is $122. The rates have remained essentially the same since 1983, because the Medicare statute does not provide for an annual update.

The Omnibus Budget Reconciliation Act of 1990 requires ProPAC to recommend to the Congress an annual update to the composite rate. To develop this recommendation, the Commission assesses the costs of providing dialysis and how they are likely to change in the coming year. This assessment is based on a framework similar to those used to derive the PPS hospital update recommendations. It includes a market basket index to reflect input price changes, an allowance for the cost of scientific and technological advances, and a target for productivity improvements. In addition, the Commission evaluates evidence regarding the quality of care provided to dialysis patients.

ProPAC uses data from dialysis facility cost reports to develop the market basket index, track productivity trends, and assess the adequacy of the composite rates. These data are incomplete for substantial numbers of providers. The cost and staffing values are questionable for others. The Commission, therefore, is concerned about the reliability of these data, and questions whether reported costs represent the true costs of providing dialysis.

Recommendation 17: Improving Dialysis Facility Data

HCFA should regularly audit a representative sample of dialysis facility cost reports to ensure that it has accurate data to assess the adequacy of the composite rates. Further, it should systematically track quality indicators for these providers.

A HCFA audit of a sample of 1991 dialysis facility cost reports found that reported costs were overstated. Independent facilities had Medicare costs that were 12.2 percent lower than reported costs, while hospital-based facilities had a 4.6 percent discrepancy. More current data are likely to reflect actual costs more accurately. HCFA has employed a number of mechanisms to improve the quality of data, including a new cost report for independent facilities and revised cost report instructions. At the same time, the National Renal Administrators Association has been working with its members to help ensure that cost reports are filed correctly. Without another HCFA audit, however, Medicare does not have an accurate measure of the cost of providing dialysis services. Periodic audits are therefore necessary.

Because Medicare is the dominant payer for chronic dialysis, it has a unique responsibility to monitor the quality of these services. HCFA plans to conduct a pilot project to track specific quality indicators systematically. The Commission supports this effort and urges the Secretary to commit sufficient resources to ensure timely completion of the project so that quality measurement can be fully implemented without delay.

Recommendation 18: Update to the Composite Rate for Dialysis Services

For fiscal year 1998, the composite rate for dialysis services should be increased by 2.8 percent to ensure that beneficiaries receive quality care. This level reflects the projected increase in the market basket index for dialysis services, and the Commission's judgment about the likely effects of scientific and technological advances and productivity gains on facilities' costs.

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The market basket index for dialysis facilities is intended to measure change in the cost of producing a dialysis treatment due to anticipated changes in the prices of the goods and services that dialysis providers purchase. It is constructed by defining four input categories—capital, labor, other direct costs, and overhead—and weighting each by its share of total expenses. The anticipated price change for each component is then measured by the projected change in prices for related goods or services.

Whereas the market basket measures changes in input prices, the S&TA and productivity improvement adjustments are intended to account for expected changes in the use of inputs. In general, the productivity adjustment reflects the cost-decreasing effects of using inputs more efficiently, while the S&TA allowance reflects the cost-increasing effects of the adoption or diffusion of relevant new technologies that enhance quality.

The Commission's market basket forecast indicates that prices will rise 2.8 percent for independent and hospital-based facilities between fiscal years 1997 and 1998 (see Table 1-4). An examination of overall developments in the dialysis industry suggests that current scientific and technological advances reflect the further diffusion of emerging technologies, rather than the introduction of significant innovations. ProPAC's fiscal year 1998 S&TA allowance is thus consistent with allowances from recent years of between 0.5 percent and 1.0 percent. Finally, providers should be able to achieve modest productivity gains of 0.5 percent to 1.0 percent, which would offset the costs related to S&TA. (See Appendix A for more information on the background analyses.)

In making this recommendation, the Commission also considered the characteristics of the dialysis industry and the relationship between payments and costs. The number of dialysis providers increased by about 7 percent annually from 1988 to 1995. The supply of independent proprietary facilities grew at 10 percent per year. These providers account for about 63 percent of all facilities and serve the same proportion of all patients. Financial analysts regard these facilities as attractive investments because the potential for future profitability is high. Increasing consolidation is occurring within the industry, which provides opportunities for growth in market share, greater economies of scale, and expanding lines of business. Although Medicare payment to cost ratios are declining, payments to independent facilities continue to exceed reported costs (see Table 1-5).

By contrast, Medicare payment to cost ratios for hospital-based facilities are considerably lower. Substantially higher per treatment costs, which are partly related to their overhead allocation practices, may be responsible for this. In addition, rural facilities and those that provide fewer treatments overall have relatively poor financial performance.

Many industry experts have raised concerns about whether facilities can continue to provide quality dialysis services without higher payments. There is no conclusive evidence indicating that the quality of care has actually declined or that reimbursement levels are related to outcomes. Recent studies do suggest, however, that almost half of all U.S. hemodialysis patients are underdialyzed, which raises the risk of morbidity and mortality.[16] Other studies have found that

Table 1-4. Update Framework for the Dialysis Composite Rate, Fiscal Year 1998 (In Percent)

Components of the update	
Fiscal year 1998 dialysis market basket forecast*	2.8%
Allowance for scientific and technological advances	0.5 to 1.0
Adjustment for productivity	-1.0 to -0.5
Total dialysis composite rate update	2.8

* The market basket was developed by ProPAC. The forecast was supplied by the Health Care Financing Administration, Office of the Actuary, December 1996. This forecast is subject to change as more current data become available.

Table 1-5. Payment to Cost Ratios for Hospital-Based and Independent Dialysis Providers, Fiscal Years 1991-1995

Type of Provider	1991	1992	1993	1994	1995
Hospital-based	0.80	0.78	0.77	0.77	0.74
Independent	1.13	1.12	1.11	1.04	1.03

Note: Includes both hemodialysis and peritoneal dialysis treatments.

SOURCE: ProPAC analysis of unaudited Medicare Cost Report data from the Health Care Financing Administration.

controlling for factors such as age, race, sex, and cause of renal failure does not fully explain the variation in mortality rates across facilities.[17] Those findings suggest that treatment, independent of patient characteristics, is the major factor influencing patient outcomes.

Given these quality of care concerns, ProPAC recommends a payment increase for fiscal year 1998. An update of 2.8 percent, as suggested by the Commission's framework, would allow facilities to make quality improvements, such as lengthening dialysis sessions. Further, the Secretary should closely monitor the relationships among treatment patterns, patient outcomes, and facility costs. Future recommendations to increase the composite rate will depend on whether the Commission finds that higher payments raise the standard of care.

Notes to Chapter 1

1. The PPS inpatient margin is the difference between the PPS operating and capital payments the hospital receives and the sum of its Medicare inpatient operating and capital costs, taken as a percentage of the payments. The total margin is the difference between the hospital's total revenues and its total expenses, taken as a percentage of total revenues.

2. Most acute care hospitals entered PPS at the inception of their first Medicare cost-reporting period beginning during fiscal year 1984. Since hospitals' reporting periods vary, the data for a given PPS year actually reflect a range of 12-month reporting periods spanning almost two years. Consequently, PPS costs, payments, and margins for 1985, for example, overlap calendar years 1985 and 1986 about equally. Likewise, the final data for 1995 will reflect hospitals' PPS experience during 1995 and 1996.

3. The consumer price index for urban consumers, produced by the Bureau of Labor Statistics, measures the rate of increase in the prices of a market basket of goods and services purchased by consumers living in urban areas.

4. Prospective Payment Assessment Commission, *Hospital Costs and Payments by Revenue Source: The Impact of Medicaid Payment Increases in 1992,* ProPAC Intramural Report I-95-05, October 1995.

5. Like the PPS operating payment rates, the Federal capital rates are based on a national payment amount per discharge, adjusted to reflect factors that affect capital costs across areas and types of hospitals. The payment rate for each case is determined by multiplying the adjusted payment amount by the relative weight for the DRG to which the patient is assigned. The DRG weights are the same as those used for the operating payment rates under PPS.

6. The blend factors change each year; in fiscal year 1998, the blended rate will consist of 30 percent of the hospital-specific rate and 70 percent of the Federal capital rate.

7. This estimate is from the Congressional Budget Office, January 1997. It includes both Part A and Part B payments for the direct graduate medical education costs of residents' training. The estimate excludes direct medical education payments for nursing and allied health professions training programs.

8. Primary care specialties include family practice, general internal medicine, and pediatrics. Also included in this higher payment category are residents in obstetrics and gynecology, preventive medicine and public health, and geriatric subspecialty programs.

9. This estimate is based on total PPS spending estimates from the Congressional Budget Office and ProPAC's payment model.

10. From 1984 to 1996, the number of residents in training programs increased by about 30 percent, according to data reported in the *Journal of the American Medical Association.* A large portion of this increase, however, was in subspecialty residency programs, which were not included in the residency count reported for 1984. See *JAMA* 256(12): 1585-94, September 26, 1986, and *JAMA* 276(9): 739-48, September 4, 1996.

11. Medicare payments for direct GME costs or IME costs are provided only to hospitals. Hospitals can receive direct GME payments for the time residents spend training in non-hospital settings but only if the hospital pays substantially all the training costs for those residents.

12. American Hospital Association Annual Survey data for 1994 were used to determine the shares of total patient care costs devoted to each major payer group. These shares were 42.1 percent for Medicare and 13.6 percent for Medicaid. The share of Medicare costs accounted for by SSI patients was 7.8 percent; the Medicare SSI share of total patient care costs was therefore 3.3 percent.

13. Payments for rural hospitals with 500 or more beds, of which there are very few, are based on the same formula as those for large urban hospitals.

14. A multivariate analysis of hospital cost differences ProPAC conducted recently indicated that low-income patient load generally does not increase Medicare costs per case. At the patient level, a study by Arnold Epstein, Robert Stern, and Joel Weissman did find evidence that, in five Massachusetts hospitals, inpatients of lower socioeconomic status had longer stays and required more resources. ("Do the Poor Cost More? A Multihospital Study of Patients' Socioeconomic Status and Use of Hospital Resources," *The New England Journal of Medicine* 322(16): 1122-28, April 19, 1990.) A study by Gerald Kominski and Stephen Long, however, found that poor hospital patients had slightly lower costs. ("Do Low-Income Medicare Patients Have Costlier Hospital Stays?" *Journal of Health Economics,* in press). This latter study appears to offer the more generalizable finding because it was based on a much larger national sample of patients, and it also focused solely on Medicare patients.

15. The charges for a given case result from aggregating the hospital's posted price for each service the patient receives (room and board, surgical procedures, radiology exams, laboratory procedures, and so forth). By law, the same price schedule must be used for all patients, regardless of the amount of payment actually received or its source.

16. Project HOPE, *Quality of Dialysis in the United States*, ProPAC Extramural Technical Report E-96-03, June 1996.

17. Project HOPE, *Quality of Dialysis in the United States*.

Chapter 2

Post-Acute Care Providers

The share of Medicare expenditures devoted to post-acute care is rising. This is due to double-digit increases in spending for these services and a slowdown in acute care hospital and physician payment growth. As a result, policy makers have intensified efforts to change the cost-based reimbursement methods for skilled nursing facilities (SNFs), home health agencies, rehabilitation hospitals and units, long-term care hospitals, and other providers that furnish post-acute care.

Any one type of post-acute care provider accounts for a relatively small portion of total program dollars. Collectively, though, their share of Part A expenditures skyrocketed from 8 percent in 1988 to 25 percent in 1994 (see Table 2-1). The rate of increase in Medicare spending for SNFs and home health agencies slowed somewhat in fiscal years 1995 and 1996. Nevertheless, payments to these providers are growing twice as fast as total Part A spending, on average.

The rapid rise in post-acute care spending is largely due to growth in the number of Medicare beneficiaries receiving post-acute care and in the volume and intensity of services they use. In turn, increased utilization reflects the combined effects of several factors. Acute care hospitals have shortened inpatient lengths of stay in part by furnishing fewer services during an admission. Many services now provided in ambulatory and post-acute care settings previously were furnished in acute hospitals. But post-acute care use has climbed also because of changing practice patterns and medical advances that have expanded the range of patients and conditions treatable in these sites.

Relatively generous program payment and coverage policies have also contributed to burgeoning post-acute care use. Medicare payment methods vary by facility type, but all post-acute providers are paid at least partially on the basis of their costs per unit of service. Cost-based payment systems create few incentives to improve efficiency, and fee-for-service methods lead to greater utilization because provider revenues rise with each service. Although Medicare's coverage guidelines for services provided in rehabilitation and skilled nursing facilities are generally well-defined, those for home health care are not. As a result, home health care is used in an expanding range of circumstances.

The Prospective Payment Assessment Commission (ProPAC) believes Medicare should replace cost-based reimbursement for post-acute care providers with fully prospective payment systems.

Table 2-1. Distribution of Total Medicare Part A Program and Beneficiary Payments for Selected Services, Fiscal Years 1988-1994

	Share of Part A Payments (In Percent)					Total Part A Payments (In Billions)
Year	PPS Hospital	Skilled Nursing	Home Health	Rehabilitation	Long-Term Care	
1988	89.2%	2.2%	3.6%	2.0%	0.3%	$ 59.1
1989	85.3	5.5	4.0	2.1	0.3	65.3
1990	84.4	4.8	4.7	2.6	0.3	72.3
1991	81.4	4.8	6.9	2.9	0.3	81.4
1992	77.4	6.3	8.6	3.4	0.3	92.0
1993	73.9	7.7	10.0	3.6	0.5	102.9
1994	71.1	8.8	11.7	3.4	0.7	114.1

Note: Percentages do not add to 100 because shares for hospices, cancer hospitals, children's hospitals, and psychiatric facilities are not shown.

SOURCE: ProPAC analysis using Medicare Cost Reports and other data from the Health Care Financing Administration.

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A unit of payment larger than the current service unit should be considered. These changes would encourage providers to become more efficient and help to curb rising utilization. A necessary component of prospective payment is the ability to effectively measure and control for variations in case mix that account for cost differences across providers. Payment should be higher for patients with greater resource needs and lower for those who require less care. These recommendations, therefore, emphasize the importance of developing and implementing patient classification systems. The ability to compare case mix across sites is also helpful in analyzing treatment patterns and the costs of delivering care.

A number of other actions should be taken in the near term to control post-acute care service use and slow Medicare spending increases. Individual recommendations pertaining to skilled nursing facilities, home health agencies, rehabilitation hospitals and units, and long-term care hospitals are presented separately. The relative lack of distinction among post-acute care providers regarding the types of patients treated and the mix of services furnished, however, complicates efforts to constrain utilization growth. Ultimately, therefore, policies should be applied consistently across post-acute provider types. In addition, the Medicare program should test whether integrating payments for acute and post-acute care would help to slow spending and ensure that beneficiaries receive the appropriate mix of services in the appropriate setting.

SKILLED NURSING FACILITIES

The Medicare SNF benefit provides up to 100 days of post-acute care per spell of illness. To be eligible, Medicare beneficiaries must have completed a minimum three-day hospital stay within 30 days of the SNF admission and need skilled nursing or rehabilitative services on a daily basis. Beneficiaries pay no coinsurance during the first 20 days of care. Beginning on the twenty-first day, they are responsible for daily copayments equal to one-eighth of the Medicare Part A deductible ($95 a day in 1997).

For payment purposes, Medicare separates SNF costs into routine, capital, and ancillary service categories. Medicare payments for routine costs, which include room, board, and nursing services, are based on facility-specific costs, subject to an input price-adjusted national average per diem cost limit. Separate limits apply to hospital-based and free-standing facilities. New SNFs are exempt from these limits for up to their first four years of operation.

Payments for capital are based on facility-specific costs. Ancillary services (such as laboratory tests, radiology procedures, and physical, occupational, and speech therapies) furnished by the SNF or by another provider under arrangement with the facility are reflected in the SNF's cost report and are also reimbursed on a facility-specific cost basis under Part A.[1] Occasionally, a SNF does not supply certain ancillary services and does not have an arrangement with another provider to do so. In these situations, an external provider may bill Medicare directly for services covered under Part B.

Medicare payments to SNFs increased, on average, 28.8 percent per year from 1992 to 1996 (see Table 2-2). The primary reason for this was the rise in Medicare's average payments per day, which jumped from $152 to $286 over this period. In turn, payments per day are heavily influenced by spending for ancillary services; Part A therapy charges climbed from 15 percent of total Medicare SNF charges in 1990 to 31 percent in 1994.

Increases in both the number of beneficiaries receiving SNF services and the number of Medicare-covered days also have contributed to the rise in expenditures. These grew by 10.7 percent and 9.8 percent, respectively, from 1992 to 1996, in part because of the proliferation of Medicare-certified SNFs. Since 1990, almost 4,900 new SNFs have been certified, an average growth rate of 6.5 percent per year. The number of hospital-based SNFs has risen more rapidly than free-standing facilities.

Recommendation 19: Prospective Payment System for Skilled Nursing Facilities

A case-mix adjusted prospective payment system for skilled nursing facilities should be implemented as soon as possible.

Medicare's cost-based payments for SNF services should be replaced with an all-inclusive prospective payment system to encourage providers to control their costs. A prospective payment for each SNF

Table 2-2. Medicare Part A Skilled Nursing Facility Payments and Use, Fiscal Years 1992-1996

Year	Payments (In Billions)	People Served (In Thousands)	Days (In Millions)	Payments Per Day
1992	$ 4.2	757	27.5	$152
1993	6.0	878	33.2	181
1994	7.9	1,028	36.5	217
1995*	10.0	1,100	38.6	259
1996*	11.5	1,135	40.0	286
Average Annual Increase	28.8%	10.7%	9.8%	17.3%

Note: Payments are incurred Part A expenditures, rather than outlays, and do not include beneficiary copayments. Average annual increases may not match year values due to rounding.

* Estimated.

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

admission would create incentives for facilities to manage the provision of services throughout an entire stay. Unfortunately, a case-mix system that can account for differences in resource use on an admission basis has not yet been developed.

The Health Care Financing Administration (HCFA) is conducting a demonstration project to test a case-mix adjusted per diem prospective payment system. Under such an approach, facilities would have incentives to control the cost of services provided during a day of care, but not to limit the length of stay. Nevertheless, until an admission-based case-mix measurement system is developed, an all-inclusive per diem payment approach would be an improvement over current methods.

The Commission recognizes that prospective payment alone cannot fully contain spending growth since it does not constrain the number of patients who use SNF services. In addition, per diem prospective rates could create financial incentives for providers to increase revenues by lengthening the patient stay. Therefore, the Secretary should consider additional ways to stem the rise in SNF expenditures.

Recommendation 20: Controlling Payments for Skilled Nursing Facility Ancillary Services

> **Until a prospective payment system is developed, the Secretary should take steps to control SNF expenditures by limiting payments for ancillary services.**

The rapid growth in payments for SNF ancillary services must be curbed. In an attempt to address this problem, HCFA is developing salary equivalency guidelines (that is, caps on salary costs) for occupational and speech therapists, similar to those already in place for physical and respiratory therapists. Such guidelines limit the costs for which SNFs can be reimbursed for services furnished under arrangement by an outside provider. However, these caps will not control service volume and will not affect services delivered directly by SNFs or by other providers that bill Medicare separately.

Until all-inclusive prospective payment rates are implemented, HCFA should explore other ways to constrain payments for ancillary services. One method is to apply cost limits. Alternatively, HCFA could develop prospective payment rates for each ancillary service based on national or regional costs, the resource-based relative value scale (used for Medicare physician payment), or some other standard.

Recommendation 21: Consolidated Billing for Skilled Nursing Facility Services

> **The Secretary should require consolidated billing for all services furnished to beneficiaries during a Part A-covered SNF stay. Further, SNFs should use consistent, procedure-level codes for these services.**

Most ancillary services provided to SNF patients eligible for Part A benefits are billed to Medicare

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by the SNF and are paid under Part A. However, as mentioned earlier, some ancillary services are billed and paid for under Part B. In the latter instance, patients are responsible for additional out-of-pocket costs due to the Part B copayment. At the same time, Medicare cannot determine the total costs of providing SNF services. Further, the Commission is concerned that, because facilities can reduce costs by shifting the provision of ancillary services to Part B providers, any effort to control expenditures will be weakened.

To remedy these problems, SNFs should bill for all services provided to their patients during Part A-covered stays. Any proposal for such consolidated billing should specifically define the ancillary services to be included. Currently, the dollar amount of Part B services provided to Part A-eligible patients in SNFs is quite small. This change, therefore, would have an insignificant effect on the solvency of the Federal Hospital Insurance (Part A) Trust Fund.

Consistent coding is another step toward accurate monitoring of the costs of SNF care. Currently, facilities are not required to use any particular service unit definitions when billing for ancillary services. Consequently, service use cannot be compared across patients or facilities. Using procedure codes like those in the HCFA Common Procedure Coding System (HCPCS), which is used to define physician and independent therapist services, for all ancillary services used by Part A-eligible SNF patients is a straightforward solution to this problem.

Recommendation 22: Eliminating the Cost Limit Exemption for New Skilled Nursing Facilities

> **The exemption from Medicare's routine cost limits for new providers should be eliminated. All SNFs should be subject to these limits.**

In light of the rapid rise in the number of SNFs and corresponding growth in payments, the Commission believes the Medicare program no longer should finance the start-up costs of new facilities. Therefore, the routine cost limit exemption for new providers should be eliminated. For SNFs currently operating under this exemption, the Secretary could impose the limits immediately, phase them in, or eliminate the exemption for providers opening after a specified date.

HOME HEALTH CARE AGENCIES

Medicare pays for services provided to beneficiaries in their homes if they are homebound and under the care of a physician who prescribes intermittent skilled nursing services, or physical or speech therapy.[2] Once care is authorized, beneficiaries may receive any number or mix of these qualifying services as well as home health aide, occupational therapy, or medical social services. Physicians must review and sign the care plan at least every 62 days. Beneficiaries pay no coinsurance or deductibles for home health visits.[3]

Home health agencies are either facility-based or independent, free-standing organizations. Medicare pays agencies the lower of their costs or a limit; there are no exemptions for new entrants. The limits are based on 112 percent of the average cost per visit for free-standing agencies for each of the six visit types, computed separately for urban and rural areas.

Medicare home health expenditures are one of the program's fastest growing components; payments more than doubled between 1992 and 1995 (see Table 2-3). While estimates indicate that the rate of increase has slowed, nearly $2 billion more was spent for home health services in 1996 than in 1995. The primary reason for the rise in spending is growth in the number of visits provided.

The initial surge in home health use came after Medicare relaxed the benefit qualification criteria in response to a 1988 legal challenge.[4] Since then, the number of beneficiaries receiving services and the number of visits per user have continued to climb. Between 1992 and 1996, Medicare-covered home health visits more than doubled, from 127 million to 281 million; the number of visits per user increased by nearly half, from 52 to 76. Payments per visit remained relatively stable over this period, rising just over 2 percent annually. Yet because beneficiaries are receiving more visits, overall payments per user have gone up by about 12 percent annually over the past few years.

Skilled nursing and home health aide services account for the vast majority of all visits—90 percent in 1994. Aide visits represent a growing share of the

Table 2-3. Medicare Part A Home Health Care Payments and Use, Fiscal Years 1992-1996

Year	Payments (In Billions)	People Served (In Millions)	Visits (In Millions)	Visits Per User	Payments Per User
1992	$ 7.3	2.4	127	52	$2,958
1993	9.6	2.8	160	57	3,464
1994	12.6	3.1	207	67	4,053
1995*	15.7	3.5	258	74	4,512
1996*	17.5	3.7	281	76	4,722
Average Annual Increase	24.6%	10.9%	22.1%	10.0%	12.4%

Note: Payments are incurred Part A expenditures, rather than outlays. Average annual increases may not match year values due to rounding.

* Estimated.

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

total. In 1988, about a third of all home health visits were for aide services; by 1994, almost half were for such services. This suggests that the home health benefit is increasingly covering beneficiaries' chronic needs since aides provide personal care and other services that are not necessarily related to acute illnesses.[5]

Unlike the SNF benefit, home health coverage does not depend on a prior hospitalization. In fact, the bulk of home health visits do not occur directly after an acute inpatient stay. Further, a relatively small number of beneficiaries receive the majority of home health visits (see Table 2-4). In 1994, 12 percent of those receiving home health care had 150 or more visits, accounting for slightly more than half of all visits. These beneficiaries averaged about 275 visits throughout the year. By contrast, half of the beneficiaries receiving home health services had fewer than 30 visits and accounted for only 10 percent of the total. Overall, about 10 percent of Medicare beneficiaries received home health care services in 1996.

Table 2-4. Home Health Visits Per User, Fiscal Year 1994

Visits Per User	Percent of Total: Users	Percent of Total: Visits	Average Number of Visits Per User
1-9	23.0%	1.8%	5
10-29	30.2	8.5	18
30-49	13.4	8.1	38
50-99	14.5	16.0	70
100-149	6.6	12.6	122
150+	12.3	53.1	275
Total	100.0	100.0*	64

* Column does not sum to total due to rounding.

SOURCE: ProPAC analysis of a 20 percent sample of home health claims data from the Health Care Financing Administration.

The growth in the number of home health agencies has contributed to higher spending for this benefit. Between 1991 and 1995, the number of agencies went up 50 percent. The supply of free-standing and hospital-based facilities rose at about the same rate.

Recommendation 23: Defining the Home Health Care Benefit

The Congress should more specifically define the scope of Medicare's home health care benefit. The absence of clear coverage constraints limits the program's ability to control home health utilization.

Medicare's guidelines for home health care eligibility and coverage are broadly defined and thus contribute to greater use of services by more and more beneficiaries. The homebound requirement is not very restrictive and is difficult to enforce. Many circumstances can justify the need for intermittent skilled nursing care or for physical or speech therapy.

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The physician certification requirement is a weak restraint at best, partly because there are no specific criteria to guide physicians' determinations of medical necessity.

The Medicare program has a responsibility to ensure that the services it pays for are reasonable, necessary, and medically appropriate. The lack of a clearly defined benefit compromises this responsibility. Clearer coverage guidelines would, in ProPAC's view, help constrain home health use while ensuring that Medicare continues to meet the needs of its beneficiaries.

Recommendation 24: Prospective Payment System for Home Health Care Agencies

A case-mix adjusted prospective payment system for home health care agencies should be implemented as soon as possible.

Moving from cost-based payments to a prospective system would slow home health care expenditure growth while encouraging agencies to deliver services in the most efficient manner. Prospective payment for an episode of care with adequate case-mix adjustment may be desirable because it would create incentives for agencies to manage the entire mix of services a patient receives. Defining the episode, however, would be difficult since current treatment patterns vary widely. Some patients use home health care for well-defined needs over short time spans, while others receive care for longer periods to address more chronic needs.

A prospective payment system must include a robust measure of patient acuity. Unfortunately, the case-mix system used in HCFA's most recent prospective payment demonstration project did not adequately predict the resource needs of home health patients. HCFA is now collecting data to develop a more refined system, but this will take several years. The Commission urges the Secretary to expedite case-mix research. In the meantime, ProPAC believes an interim system must be implemented immediately to stem the rise in home health spending.

Recommendation 25: Interim Home Health Payment Method

The Congress should implement an interim home health payment method to control Medicare outlays until a fully prospective payment system is in place.

An interim approach should have two major components: a per visit payment method and a way to limit total payments for a beneficiary. Each one could be structured in several ways. The options chosen should reflect a balance between controlling Medicare spending and giving facilities the flexibility to stay within payment limits while providing quality care.

The Commission acknowledges that this type of payment approach would not be appropriate for an extended period. Without adequate case-mix adjustment, payments would not recognize changes in treatment approaches or increases in patient acuity. As a result, inappropriate patterns of care could persist, and gains in efficiency would not be rewarded. ProPAC believes, however, that an interim system could be designed to limit Medicare spending without compromising access to quality home health services.

Per Visit Payments—Medicare per visit payment amounts could either continue to be based on agency-specific costs subject to a per visit limit, or be set prospectively. The first approach would give Medicare considerable control over its per visit spending in that no agency would receive per visit payments above its costs. Such a method, however, would fail to break the link between payments and costs.

The second approach, prospective per visit rates, would begin the transition from cost-based payments. Separate rates for each type of home health service could be calculated from existing cost report data and trended to the current year. They could be based on agency-specific costs, national average amounts, or a blend of the two. Agency-specific rates would account for historical practice patterns and case mix. National rates adjusted for local wage differences would impose conformity among agencies. Prospective per visit rates, whether based on agency or national costs, would reward facilities for keeping their costs per visit below the payment amount. Because a home health visit is not uniformly defined, however, agencies could simultaneously reduce their unit costs and increase revenues by shortening visits and providing more of them.

Limits on Payments Per Beneficiary—The second major component of an interim system would be a per beneficiary limit on payments. This would encourage agencies to control the number of visits and adjust the mix of services provided to each user. The duration, calculation, and application of the limits would need to be specified, thereby establishing the stringency of the interim system and how agencies might respond to it.

An outlier payment mechanism similar to that under Medicare's prospective payment system for acute hospitals could be applied to minimize financial losses associated with high-cost cases. Further, an incentive payment for cases below the limits would create an additional impetus for agencies to keep their costs low. It could, however, inappropriately reward agencies for seeking additional low-cost cases.

The limit would be associated with payments for services provided over a specific period, perhaps a year or a month. An annual limit would encourage better coordination of care for beneficiaries who use services for a long time. Given that most visits are associated with these users, this might be an appropriate course of action.

Monthly limits would provide incentives for agencies to manage and restrict service use across all patients, including the large proportion of home health users who receive services over short periods. Monthly limits also would correspond to the typical agency billing cycle. However, they could encourage facilities to spread visits over a longer period to reduce the likelihood that payments for a beneficiary would reach the limit in any given month. In addition, monthly limits would be more difficult to implement than annual limits because the amounts would need to be adjusted to reflect more intensive home health use at the beginning of an episode of care. Since the limits would vary during the course of treatment, there would need to be a way to determine when a new episode of care begins. This could be a break in home health service use or a hospitalization.

Beneficiary limits could be calculated based on agency-specific expenditures, national average Medicare outlays, or a blended amount. Agency-specific calculations would recognize at least some historical case-mix differences across facilities. They would, however, also reflect differences in treatment patterns, efficiency, and cost-allocation practices. National average amounts would provide stronger incentives for high-cost agencies to bring their spending in line with others.

Expenditure limits could be applied to the agency's aggregate payments or to spending for individual patients. With aggregate limits, total spending for all services provided during the relevant period would be compared with the product of the limit and the number of beneficiaries treated. Agencies could average low-cost cases with costlier ones to remain under the limit. They would, therefore, have strong incentives to increase the number of low-cost cases.

Applying the limit to the spending for each beneficiary would be more stringent and give Medicare more control over outlays. Payments for a high-cost beneficiary would be held to the limit amount, even for an agency that had a majority of cases with payments below the limit. Thus, a facility would have incentives to control service volume for heavy users. But it also might try to avoid beneficiaries who would incur costs above the monthly limit.

The Commission would be pleased to work with the Congress and the Secretary to develop an interim home health payment approach that would help slow spending growth and serve as an appropriate bridge to a fully prospective system.

Recommendation 26: Home Health Visit Coding

> **Medicare should require consistent home health visit coding. Such information is essential for monitoring and evaluating the home health benefit and developing an effective case-mix adjustment system.**

Medicare's definition of a home health visit is worded broadly, allowing agencies considerable discretion to determine the intensity, content, and duration of a visit. A visit is defined as "an episode of personal contact with the patient by staff of the [home health agency] . . . for the purpose of providing a covered home health service."[6] In general, agencies must report information only on the number, type, and costs of visits.

Medicare needs consistent information on home health visits for two major reasons. First, as a

prudent purchaser, the program needs to evaluate the adequacy and appropriateness of home health services beneficiaries receive and to compare service delivery patterns across patients and agencies. Second, Medicare needs visit information to develop a case-mix adjusted prospective payment system. Understanding what services are provided during different types of visits, and for how long, is necessary to establish meaningful patient groups and case-mix measures, and to set prospective rates. Consistent coding would also enable Medicare to monitor service use once such a system is in place.

The Commission believes consistent visit coding requirements can be implemented without placing an undue administrative burden on agencies. A modified version of HCPCS could be used to describe services that home health agencies furnish.

Recommendation 27: Home Health Copayments

> **Modest beneficiary copayments, subject to an annual limit, should be introduced for home health care services.**

Medicare beneficiaries incur no out-of-pocket costs for home health visits. All other Medicare benefits, except for laboratory services, are subject to some form of beneficiary cost sharing. In ProPAC's opinion, the Medicare program should impose modest copayments for home health care services.

With copayments, beneficiaries would share financial responsibility for services with the program. Although most have some form of supplemental insurance or Medicaid coverage that would cover these outlays, copayments might curb use by making beneficiaries more involved in treatment decisions and more aware of service costs. Copayments also might limit fraudulent billing practices, since beneficiaries could identify services for which Medicare was billed but that were never delivered.

In arriving at this recommendation, the Commission carefully considered the adverse effects of implementing copayments. For example, copayments would likely affect direct out-of-pocket spending only for the small share of beneficiaries who lack supplemental insurance or Medicaid coverage. In addition, introducing copayments would impose some additional costs on agencies. On balance, though, ProPAC believes it is both appropriate and fair to have a carefully constructed policy that imposes minimal copayments with annual limits.

Recommendation 28: Controlling Long-Term Home Health Use

> **The Secretary should analyze the growing number of beneficiaries who are receiving home health care for prolonged periods. Additional policies may be needed to address the spending associated with these beneficiaries.**

The small share of home health users who receive the most visits in any year accounts for a sizable portion of home health care spending. These patients not only receive visits for longer periods—sometimes a year or more—but also appear to have less intensive, more chronic needs, and to use home health aides heavily. This group is also more likely to be 85 or older, or disabled.

Awareness of this phenomenon may be important in the context of making changes to the payment system. Unless coverage policies are modified, special provisions may be needed to address extended home health use in the short term, and possibly under a prospective payment system. Such measures could include focused case management, especially for users who are disabled and have unique needs. Other options include expenditure limits, copayments for visits above a certain threshold, or more stringent care plan recertification requirements.

REHABILITATION FACILITIES AND LONG-TERM CARE HOSPITALS

Rehabilitation hospitals and distinct-part units and long-term care hospitals are excluded from PPS and paid in accordance with the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). Rehabilitation facilities and long-term care hospitals must be certified as such before they receive this exclusion. A rehabilitation hospital or unit must serve an inpatient population of whom at least 75 percent receive intensive rehabilitation for one or more of 10 specified conditions.[7] Also, Medicare patients in rehabilitation facilities generally

must be capable of receiving three hours of therapy daily. A long-term care hospital is any acute care hospital with an average length of stay exceeding 25 days. A subset of these facilities, known as "hospitals within hospitals," must meet additional qualifying criteria.

Under TEFRA, payments for inpatient operating costs are based on each facility's current Medicare-allowable costs or a limit. A facility's limit equals its target amount (its base-year costs per discharge updated to the current year) times the number of Medicare discharges. New hospitals are exempt from the payment limits for up to their first three years of operation. During this time, Medicare payments are based on allowable costs. The second full cost reporting period for a new hospital is set as the base year for establishing the target amount. In specific situations, a provider may receive an additional amount, known as an exceptions payment, for any given year if its costs are substantially higher than its target amount in that year. Capital payments are based on reasonable costs. (See Chapter 1 for a more detailed description of the TEFRA payment method.)

When TEFRA was enacted in 1982, it applied to all hospitals. The Congress intended it to be a temporary measure to slow hospital expenditure growth until a fully prospective payment system could be implemented. When PPS began, however, specialty providers—including rehabilitation hospitals and units and long-term care hospitals—were excluded because diagnosis-related groups (DRGs) and payments based on national average costs were not appropriate for them.[8] The Congress expected that a separate prospective payment system would be applied within a few years.

PPS-excluded providers have remained under the TEFRA payment system for longer than expected, however. Prospective payment for these facilities has not been implemented primarily because adequate patient classification systems, which are necessary to adjust payments to reflect patient needs, have not been developed. Consequently, Medicare utilization and spending have grown rapidly, and the payment system has created substantial variations in financial performance across providers.

Aggregate Medicare payments to rehabilitation hospitals and units combined more than doubled between 1990 and 1994, from $1.9 billion to $3.9 billion (see Table 2-5). Though Medicare payments to long-term care hospitals are comparatively small, they grew fourfold over the same period, from about $200 million to about $800 million. This rise in overall spending partly reflects the increase in payments per admission. Although the update to the TEFRA target amounts is intended to constrain the rise in per case payments, in recent years these have grown faster than the update factor, on average. Numerous new providers entering the TEFRA system with higher base costs are largely responsible for this trend.

Between 1986 and 1995, the number of rehabilitation hospitals and distinct-part units grew, respectively, by 11.2 percent and 6.6 percent annually. After dipping in the late 1980s, the number of long-term care hospitals increased from 90 in 1990 to 176 in 1995, a rate of 14.4 percent a year. Similarly, the number of Medicare discharges from rehabilitation hospitals and units combined rose by 13.8 percent annually from 1990 to 1994; long-term care hospital discharges accelerated by 20.6 percent a year over the same period.

The TEFRA payment system not only has failed to curb rising Medicare expenditures, but also has led to marked disparities in financial performance between new and old providers. Although determined by each facility's own base-year costs, target amounts are less likely to reflect the reasonable

Table 2-5. Medicare Part A Program and Beneficiary Payments to Rehabilitation Facilities and Long-Term Care Hospitals, Fiscal Years 1990-1994 (In Billions)

Year	Rehabilitation Facilities	Long-Term Care Hospitals
1990	$1.9	$0.2
1991	2.4	0.2
1992	3.1	0.3
1993	3.7	0.5
1994	3.9	0.8
Average Annual Increase	19.7%	41.4%

SOURCE: ProPAC analysis using Medicare Cost Reports and other data from the Health Care Financing Administration, Office of the Actuary.

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costs of providing services over time. Therefore, hospitals and units that have been subject to the TEFRA payment limits for a longer period are disadvantaged compared with newer facilities. (See Chapter 1 for additional discussion of this issue.) This is especially important since newly certified providers are exempt from the TEFRA limits during their start-up periods and thus have little incentive to restrain their initial costs. To the extent that new hospitals come in with high base-year costs and establish high target amounts, they have an ongoing advantage relative to older providers. Once the target amount is set, providers can keep their costs per discharge below their limit in later years by spreading fixed costs over a growing patient base.

Recommendation 29: Prospective Payment System for Rehabilitation Hospitals and Distinct-Part Units

A case-mix adjusted prospective payment system for rehabilitation hospitals and distinct-part units should be implemented as soon as possible.

HCFA should move more quickly to replace the TEFRA payment system. A case-mix adjusted prospective payment system would provide incentives for controlling total Medicare expenditures. It also would recognize appropriate cost differences and reward efficient facilities, particularly older ones that have responded to TEFRA's incentives to constrain costs. Further, the Secretary should require facilities to report the data necessary for administering and evaluating such a system.

A patient classification system, known as the "functional independence measure–function related groups" (FIM-FRGs), has been developed for rehabilitation hospitals and units.[9] Under this system, patients are assigned to groups primarily on the basis of functional status, though diagnosis and age are also determinants. HCFA's recent evaluation of this system found that FIM-FRGs are effective predictors of resource use among rehabilitation patients and that they could be an adequate basis for prospective payment.[10] Because the work to develop a prospective payment system based on FIM-FRGs should be completed soon and the system has strong support from the rehabilitation industry, implementation in the near term is feasible.

Recommendation 30: Prospective Payment System for Long-Term Care Hospitals

A case-mix adjusted prospective payment system for long-term care hospitals should be developed and implemented as soon as possible.

Long-term care hospitals are among the fastest growing Medicare provider groups and exhibit the largest payment disparity between new and old providers. Medicare, therefore, needs to replace the TEFRA system. The tools necessary to implement a prospective payment system for those hospitals, however, have not been developed.

Much of the difference in financial performance among long-term care hospitals may be explained by their heterogeneous nature. Since they are licensed as acute care hospitals in the states in which they operate, their only distinguishing characteristic is their long average length of stay. Long-term care hospitals are hard to define as a group, however, because they provide a diverse mix of comprehensive rehabilitation, chronic respiratory care, and pain and wound management services.

Despite this heterogeneity, long-term care hospitals generally fall into two major categories. Some facilities tend to treat more chronic types of patients who require less intensive services. A large proportion of newer long-term care hospitals, many of which specialize in respiratory services and weaning ventilator-dependent cases, appear to treat a sicker patient population. Because of this and the pressure of the payment limits over time, older hospitals have lower costs per case than newer ones. A more meaningful distinction among long-term care hospitals would be patient mix differences, which cannot yet be measured.

For these reasons, HCFA should step up its efforts to develop an adequate patient classification system for long-term care hospitals. Such a system not only would form the basis for a prospective payment system for these providers, but also would be an essential tool for analyzing differences in patient resource use and costs among long-term care hospitals. The Secretary should require hospitals to report the data necessary for developing, administering, and evaluating such a system.

Recommendation 31: Long-Term Care Hospitals Within Hospitals

HCFA should monitor the growth in the number of long-term care hospitals within hospitals and evaluate whether the current Medicare certification rules that apply to these facilities should be changed.

The Social Security Act specifically excludes from PPS rehabilitation and psychiatric distinct-part units of acute care hospitals and free-standing long-term care hospitals, but not long-term care units. In fact, the Act does not even designate such units for Medicare certification. PPS assumes that some of a hospital's patients will cost more to treat than its payment rate while others cost less; it is expected that in aggregate, payments and costs will be about equal. Long-term care hospitals were exempted because by definition, most (if not all) of their patients are long-stay cases who cost considerably more than the average. Therefore, they risk systematic underpayment under PPS. This rationale did not apply to long-term care units, however, because they account for only a small share of a facility's total patient volume.

Recently, a new organizational model called the hospital within a hospital has emerged. These are entities in which the average length of stay exceeds 25 days; they are housed either within a hospital or on the same campus as another hospital. Insofar as they function like long-term care distinct-part units, excluding them from PPS would be inconsistent with the law. To make certain they truly are separate entities, HCFA implemented additional qualifying criteria effective as of fiscal year 1995.[11]

Some are concerned that the hospital within a hospital model was devised as a way for acute care hospitals to receive higher payments for their long-stay cases. If this is true, these entities undermine the incentives of PPS, and HCFA should no longer certify them. The health care system, however, is undergoing substantial structural changes. The development of long-term care hospitals within hospitals may be an appropriate and efficient alternative to acute inpatient care for cases that require additional services, but at a more intensive level than those provided in other post-acute care sites.

HCFA should conduct a comprehensive study of the characteristics, patient mix, treatment patterns, costs, and financial performance of hospitals within hospitals. Such information is necessary to determine if additional policy changes are needed for this subset of providers. To facilitate this effort, HCFA should also develop a reporting mechanism to differentiate hospitals within hospitals from free-standing long-term care hospitals.

Recommendation 32: Elimination of the New Provider Exemption Period

The initial exemption period for new PPS-excluded providers should be eliminated. Medicare payments for new providers should be based on an average target amount for facilities serving comparable types of patients.

New providers have little reason to keep their initial costs low. In fact, they have a strong incentive to inflate base-year costs to establish high target amounts and thus receive higher payments in subsequent years. ProPAC analyses have shown that the average Medicare inpatient operating payment per discharge has climbed over time. This is primarily due to the influx of new high-cost providers.

During this start-up period, payment limits based on an average target amount for each facility type would help reduce the disparities between new and old facilities and control Medicare spending. Likewise, the base target amount for new providers should be limited.

There are several options in determining the appropriate limits. They could be calculated using data from all providers within a group, such as all rehabilitation hospitals. This method could place facilities with higher costs at a disadvantage, however. An alternative would be to base the limit on the average for subsets of providers. The criteria for designating comparable groups of facilities could be predicated on provider characteristics like age, geographic location, or size. A better option would be to identify groups of facilities using patient characteristics that are related to resource use. Additional information on the reasons for cost differences across facilities may be needed before choosing any option.

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Psychiatric hospitals and units, children's hospitals, and cancer hospitals face the same incentives under TEFRA as rehabilitation and long-term care facilities do. Therefore, the exemption period should be eliminated for these providers as well. Although the number of psychiatric hospitals has declined recently, psychiatric units have increased along with Medicare discharges and spending for these facilities. ProPAC is much less concerned about this issue as it pertains to children's and cancer hospitals, though, because neither their numbers nor their Medicare payments are rising appreciably.

COORDINATING POST-ACUTE CARE PAYMENTS

The Commission believes its recommendations on payment policies for each post-acute care provider would slow spending growth and promote more equitable payments. Patient characteristics such as medical complexity or functional status may influence the choice of post-acute care site. But for many beneficiaries, several types of providers could meet their needs. In fact, ProPAC analyses indicate that patients with the same hospital-assigned DRG receive post-acute care in a variety of settings.[12]

Because of this overlap, policy makers need to consider broader implications as well. The ability to substitute care among post-acute settings may contribute to inappropriate spending growth, even after policies are improved for individual provider types. Further, even though prospective payment encourages providers to deliver care more efficiently, facility-specific payments encourage them to lower their costs by unbundling services to other settings. The ability to substitute care among post-acute settings may weaken any efforts to control payments to or use of a particular type of provider. It may also boost total expenditures.

Recommendation 33: Coordinating Post-Acute Care Provider Payment Methods

The Commission urges the Congress and the Secretary to consider the overlap in services and beneficiaries across post-acute care providers as they modify Medicare payment policies. Changes to one provider's payment method could shift utilization to other sites and thus fail to curb overall spending. To this end, ProPAC commends HCFA's efforts to identify elements common to the various facility-specific patient classification systems to use in comparing beneficiaries across settings.

As discussed earlier, the Commission supports prospective payment systems for each type of post-acute care provider. The patient classification system used, unit of service, payment amount, and implementation schedule, however, will differ for each system. Because of these inconsistencies, payment policy may influence clinical decisions inappropriately and exacerbate differences in payment amounts across providers for similar services.

To minimize these potential problems, Medicare needs to better understand the similarities and differences in services and patients across settings. Adoption of the Commission's SNF and home health coding recommendations would make it easier to compare service use across these sites. Additional comparative beneficiary-level data need to be developed as well, and HCFA is beginning this effort. It is identifying patient descriptors common to each of the patient assessment instruments used by various post-acute care providers. Patient classification systems typically use data from these instruments and are, in turn, the basis of case-mix measurement. The Commission urges continued support for this work.

Ultimately, Medicare should move toward more uniform payment policies across sites. Payment amounts should vary depending on the intensity and nature of services beneficiaries require, rather than on the setting. Further, providers should have incentives to coordinate services for an episode. Understanding the variations in beneficiary needs and service use across sites is an important beginning to achieving these goals.

Recommendation 34: Linking Payments for an Episode of Care

The Secretary should begin a demonstration project that links payments for the acute and post-acute portions of an episode of care. It should be designed to test whether this approach can reduce expenditures and improve continuity of care.

Many beneficiaries use multiple providers during an episode of care. Under fee-for-service, providers have no incentive to minimize total episode costs by directing patients to the least intensive, most appropriate site of care or to coordinate services across settings. Linking the payments for the bundle of services furnished during an episode could address these issues. As a result, Medicare beneficiaries would benefit from better coordinated services, and the program could curb its spending.

The Commission believes a demonstration project should be initiated to determine how this payment approach would affect post-acute care use and total spending. It should focus on the small group of DRGs that accounts for the largest share of post-acute care. Patterns of care and outcomes of service delivery should be assessed under such a demonstration as well.

A number of technical issues would have to be addressed in developing this demonstration. The providers, services, and time period covered would need to be specified. All providers and services could be included under the payment amount. Alternatively, the payment could include only those providers and services that are most likely to be used after a hospital stay for a particular condition. Similarly, the period covered could be longer or shorter. These decisions would underlie a definition of the acute/post-acute episode of care that would be critical in establishing the total payment amount.

A broad definition of an episode would present more opportunities to realize economies and to develop other ways to deliver care. With a larger service unit, the entity receiving the payment would have the flexibility to shift service delivery across sites and to provide social or other support services to lower overall costs. A broad definition could also lead to greater overpayment or underpayment for an episode.

Narrow definitions would probably be easier to implement because fewer providers would be involved and the payment would apply to services over a shorter period. They would, however, make it easier for providers to furnish services outside the episode to raise their total payments. Further, the ability to achieve savings through reorganizing care would be more limited.

One of the most important design and political issues in a linked payment approach is deciding which type of entity would receive the payment. Since this entity would organize and oversee the continuum of services for beneficiaries, it would bear the risk that payments would not cover costs. Hence, this entity would have a strong incentive to develop the most efficient patterns of care. The options include an acute care hospital, a post-acute care provider, or a provider service network. Alternatively, the payments could be distributed through a preferred provider organization-type arrangement.

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Notes to Chapter 2

1. The term "under arrangement" refers to a contractual relationship in which the external provider charges the SNF for the services furnished, rather than submitting a claim to Medicare. In these circumstances, the only restriction on ancillary service charges and subsequent costs to the SNF (other than meeting Medicare's definition of reasonableness) is that the salaries for physical therapists and respiratory therapists be below salary caps established by the Health Care Financing Administration.

2. If a beneficiary no longer needs skilled nursing care, physical therapy, or speech therapy but requires occupational therapy, home health coverage can continue.

3. Home health patients who receive durable medical equipment or drugs used to treat osteoporosis are responsible for a 20 percent copayment on those services.

4. During the mid-1980s, HCFA tightened the interpretation of the home health care benefit. This reduced the number of people qualifying for the services as well as the number of services used per person. The legal basis for this interpretation was invalidated in 1988, however, and home health utilization surged. Duggan v. Bowen, 691 F. Sup. 1487 (D.D.C. 1988).

5. Home health aide services include personal care such as bathing, dressing, and grooming; simple wound dressing changes; and assistance with medications.

6. Health Care Financing Administration, *Home Health Agency Manual* §218.1.

7. The 10 conditions are stroke, spinal cord injury, congenital deformity, amputation, major multiple trauma, hip fracture, brain injury, polyarthritis (including rheumatoid arthritis), neurological disorders (including multiple sclerosis, muscular dystrophy, Parkinson's disease), and burns. 42 C.F.R. §412.23(b)(2).

8. The other specialty providers excluded from PPS are psychiatric hospitals and distinct-part units, children's hospitals, and cancer hospitals.

9. Margaret Stineman and others, "A Case-Mix Classification System for Medical Rehabilitation," *Medical Care* 32(4):366-79, April 1994.

10. Grace Carter and others, "A Patient Classification System for Inpatient Rehabilitation Patients: A Review and Proposed Revisions to the FIM-FRGs, Volume I," RAND report prepared for the Health Care Financing Administration, forthcoming.

11. To qualify as a hospital within a hospital, a facility must have a governing body, chief medical officer, medical staff, and chief executive officer separate from the host hospital. In addition, it must perform basic hospital functions without assistance from the host hospital or controlling third party, or receive at least 75 percent of its inpatient referrals from sources other than the host hospital, or demonstrate that the host hospital provides no more than 15 percent of its total inpatient operating costs. 42 C.F.R. §412.23(e)(3).

12. Prospective Payment Assessment Commission, *Medicare and the American Health Care System: Report to the Congress,* June 1996.

Chapter 3

The Medicare Risk Contracting Program

Policy makers debating the future of the Medicare program have looked to managed care arrangements to contain spending. These arrangements have lowered the costs of private sector firms and could slow the growth in Medicare expenditures. Medicare's primary managed care option, called the risk contracting program, has not achieved the savings for Medicare that private experience suggests are possible, however. This is primarily because the capitation payments to managed care plans do not reflect plan enrollees' below-average probability of using health care services. Another reason is that Medicare's capitation rates are based on fee-for-service spending experience. This link restricts potential savings from managed care and produces rates that may be inappropriate.

The Prospective Payment Assessment Commission (ProPAC) is recommending changes to the risk contracting program that will help limit Medicare spending. These include introducing a more robust risk adjustment system, revising the payment rates, and developing a better method to update payments from year to year. To improve Medicare's ability to evaluate the adequacy and appropriateness of its payments, the Commission is recommending that the program collect new data from risk plans. Medicare also needs data to monitor and evaluate plan quality and to provide beneficiaries with comparative information about plans. Armed with this information, beneficiaries will be better able to understand the differences between Medicare's fee-for-service and risk contracting options, and make the selection that best meets their needs.

This chapter begins with an overview of Medicare's risk contracting program. It goes on to describe Medicare's payment policies and the relationship between those policies and plan participation. ProPAC's recommendations for improving payment policy follow. The final section describes the flow of information between Medicare, risk contracting plans, and beneficiaries. This section concludes with the Commission's recommendations for improving the data needed to evaluate the payment rates, support evaluations of plan quality, and allow beneficiaries to make informed choices among plans.

PROGRAM OVERVIEW

Most Medicare beneficiaries can join health maintenance organizations (HMOs) that participate in the risk contracting program.[1] Introduced in 1985, this program offers HMOs prospective payments for each Medicare beneficiary they enroll.[2] For this payment, HMOs must provide all Medicare-covered services and any additional ones they agree to cover under their Medicare risk contract.

As of January 1997, 4.2 million beneficiaries (11 percent of the total Medicare population) had joined risk plans. Enrollment has grown by 32 percent annually since 1993 (see Table 3-1). HMO

Table 3-1. Medicare Risk Program Participation, 1990-1997

	Enrollees		
Year	Number (In Millions)	As a Percentage of Total Medicare Enrollment	Contracts
1990	1.2	3.5%	95
1991	1.3	3.7	85
1992	1.5	4.2	83
1993	1.7	4.7	90
1994	2.1	5.7	109
1995	2.9	7.7	154
1996	3.9	10.4	189
1997	—	—	248

Note: Enrollment data are as of September each year; contract data are as of January each year.

SOURCE: Health Care Financing Administration, Office of Managed Care.

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participation in the Medicare risk contracting program also has accelerated over the last three years. After declining between 1987 and 1991 and experiencing nearly flat growth in the early 1990s, participation has recently surged. As a consequence, a plan is available for the first time in some areas; in others, beneficiaries have a greater choice of plans. Medicare program payments to risk plans totaled $19 billion in fiscal year 1996.

PAYMENT POLICY

An HMO with a risk contract receives a monthly payment for each enrolled beneficiary. The amount is based on projected Medicare fee-for-service spending, less a 5 percent discount retained as Medicare savings. The method for establishing the payment amount is similar to that used by other payers, such as private sector employers and Medicaid programs, when they began contracting with HMOs. In recent years, some payers have begun to use past HMO prices for setting future rates, rather than basing them on indemnity premiums.

The base rate equals 95 percent of the projected average, per enrollee fee-for-service Medicare program payments (the adjusted average per capita cost) in each county the plan serves. This amount is calculated separately for three categories of enrollees: aged, disabled, and those who are eligible for Medicare due to end-stage renal disease. Plan payments are adjusted to reflect beneficiary characteristics associated with differences in expected levels of spending (the beneficiary's age, sex, Medicaid or institutionalization status, and employer-based coverage).

Medicare payments are not based on plans' costs of providing covered services. Medicare recognizes that risk plans may furnish services at lower costs than the payments they receive. It therefore requires each plan to submit what it calls an adjusted community rate (ACR) proposal to calculate how much plan payments will exceed projected costs. The annual proposal documents a plan's expected costs for Medicare-covered benefits. These costs are estimated from the spending experience of the plan's commercial (non-Medicare and non-Medicaid) enrollees, adjusted for higher expected use by Medicare beneficiaries. A plan includes in these calculations its administration and profit requirements, which are also based on its commercial experience.

If a plan's expected payments exceed its projected costs, the difference must be returned to Medicare, credited to future years, or used to provide additional benefits to enrollees. Most plans choose to offer the additional benefits in the form of more services, lower cost sharing, or coverage for out-of-network providers. To further attract Medicare enrollees, plans may include even more benefits than required to make up the difference between payments and estimated costs. Though plans can charge a premium for this coverage, many choose to waive some or part of this amount.[3] Greater benefits and lower out-of-pocket spending generally make joining a risk plan an attractive option for beneficiaries.

Problems with Risk Contracting Payment Policies

There are two fundamental problems with Medicare's risk contracting program payment policies. First, the capitation payments are not adequately adjusted to account for differences in the expected costliness of enrollees in risk plans. In addition, the payment amounts reflect fee-for-service program spending at the county level. This approach has led to a number of problems with the payment rates, among them volatility and possible bias in the capitation amounts.

Medicare risk plans have attracted enrollees who are healthier, on average, than those in the fee-for-service option.[4] This phenomenon is called favorable risk selection. The risk adjustment to the capitation amounts does not adequately account for these differences. Thus, Medicare outlays for beneficiaries who join risk plans are higher than they would have been if the enrollees had not joined such plans. It is estimated that favorable risk selection to plans and inadequate risk adjustment to payments together have increased Medicare spending from 5 percent to 7 percent for each beneficiary currently enrolled in a risk plan.[5]

Medicare's capitation rates reflect variation in fee-for-service prices and practice patterns. Expensive providers, high utilization rates, or both have driven up fee-for-service spending in some areas. In these markets, plans may have considerable

opportunities to furnish care more efficiently than under fee-for-service arrangements. For example, plans often can contract selectively with lower-priced or more efficient providers. Physicians, hospitals, and others may be willing to accept discounted payment rates in areas with many providers. Plans can sometimes shift patients from more expensive settings to less costly ones. But because Medicare capitation payments are tied to fee-for-service spending, Medicare has limited ability to share in these savings. Instead, plans convert most of the savings into extra benefits for their enrollees.

By contrast, capitation rates based on fee-for-service spending sometimes are not high enough to cover the service cost plus administration and profit requirements of the HMO. This is most likely to occur in the predominantly rural counties that have the lowest capitation rates. The rates may be low because of efficient patterns of care or inadequate access to care. In these counties, plans have fewer opportunities to reduce health care spending.

But these are not the only problems resulting from basing capitation rates on fee-for-service spending. Another is that, in some areas, changes in the amount of the capitation payments are volatile from year to year. This is the case particularly in counties with few Medicare beneficiaries. Additionally, base payment rates may be too high in areas where plans enjoy favorable selection. With less costly beneficiaries in risk plans, the payment rates there will reflect the higher-than-average spending for Medicare beneficiaries remaining in the fee-for-service option.

Relationship Between Payment Rates and Plan Participation and Benefits

HMOs have several reasons for securing a Medicare risk contract. One is that the capitation rates allow plans to earn a profit. Another is that employers may encourage HMOs to participate so that their retirees can enroll. This is an increasingly popular strategy for reducing employer liability for retirement-related health insurance. Yet a third reason is that, in competitive markets where most private sector employees are in managed care plans, HMOs may participate in Medicare to increase their total enrollment. Larger plans may negotiate more favorable contracts with providers.

ProPAC analysis of 1995 data suggests that HMOs are more likely to participate in the risk contracting program in urban areas that have higher Medicare payment rates. An HMO located in a metropolitan area where the payment rate is 10 percent above the national average is about 11 percent more likely to have a risk contract than an HMO serving an area with the national average rate. Other factors, including local market conditions and HMO characteristics (such as size, ownership, and model type), also are related to the probability of participation.

The payment rate also affects benefit packages. Risk plans in urban areas with higher payment rates tend to offer the most generous benefit packages, while plans in areas with the lowest payment rates generally have the fewest additional benefits. The extra benefits are an important inducement for beneficiaries to join these plans.

Overall, then, the analysis suggests that Medicare payment influences plans' decisions about participation in the risk contracting program and the value of the additional benefits they will offer. Nonetheless, since these observations are based on a single year of data, no conclusions can be drawn about plans' probable responses to changes in the level of the payment rate.

RISK CONTRACTING PROGRAM PAYMENT IMPROVEMENTS

The risk contracting program could restrain Medicare spending, but only if problems with the payment method are addressed. The following recommendations would improve the payment method in several ways.

Adopting a new risk adjustment method would allow Medicare capitation rates to reflect enrollees' likely use of health care services more accurately. Adjusting the base payment rates would establish capitation payment amounts that are more in line with the costs of an efficient plan. Using an update framework instead of the rise in fee-for-service spending to increase plan payment rates from year to year would let Medicare share in HMO efficiencies. It also would remove the effects of biased selection from rate increases and give plans more predictable updates in future years. Exploring alternate methods for setting capitation rates, such as

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competitive bidding and negotiation, might permit Medicare to exert greater influence on plans to provide quality care at less cost.

Implementing these recommendations would decrease the capitation rates in some areas and raise them in others. Given the relationship between participation and payment rates, this might influence where Medicare risk plans are available. Lowered payment rates might cause some plans to drop certain counties from their service areas or not renew their Medicare contracts. But plans could employ other strategies as well. Indeed, they have some flexibility in this regard. They could bargain more forcefully with providers over practice patterns and provider payment rates or reduce the value of the benefit package they offer. The latter approach would, however, make risk plans less attractive to beneficiaries. In areas where rates increased, nonparticipating plans might seek a Medicare contract. Plans already participating in these areas would be able to offer beneficiaries extra benefits, which would make enrolling in these plans even more attractive.

Recommendation 35: Improving the Risk Adjustment Method

> **A combination of techniques should be used to adjust Medicare's capitation payments so that they better reflect enrollees' likely use of services. The Secretary should adopt risk adjusters based on diagnosis, health status, or both as well as an outlier policy for costly cases. Partial capitation arrangements should be tested. Plans should provide data to Medicare to support improved risk adjustment. The new risk adjustment system should be phased in.**

Researchers have been evaluating risk adjustment methods that would explain more of the variation in health care spending than the demographic adjusters Medicare now uses. Two types of methods are most promising. One employs diagnosis-related information that accounts for prior use of health services. The other is based on indicators of health status, functioning, and past and present conditions, which are collected through a beneficiary survey. Recent evidence suggests that risk adjustment methods based on prior diagnoses are the best available predictors of spending.[6] A method could be designed that would draw on both types of information. The desirability of a combined method, however, would depend on whether the additional data collection cost is justified by the ability to make more accurate predictions.

Even the best available risk adjustment methods, though, are not likely to correct fully for selection possibilities. Thus, some combination of payments for actual services used, along with a risk-adjusted capitation payment (that is, partial capitation), should be considered. A limited version of partial capitation is an outlier scheme. An outlier policy would provide additional funds to plans for enrollees whose health care spending had exceeded a specified threshold. Outlier payments could be financed by withholding an appropriate percentage from plan payments. This type of policy would financially assist plans with large shares of costly beneficiaries, thereby reducing their financial incentives to stint on enrollees' care.

Improved risk adjustment likely will involve new costs to Medicare for collecting data from plans. Once gathered, the information will need to be processed quickly enough to adjust the payment in a timely manner. The plans also are likely to incur expenses, since they will have to provide Medicare with new utilization and cost data.

Introducing a new method could entail significant redistribution of capitation funds, potentially disrupting the risk contracting program. Thus, the method should be applied to increasing shares of the payment rates over time.

Implementing a new risk adjustment method would make Medicare's capitation rates more accurate but would not completely eliminate the effects of risk selection. Consequently, Medicare should continue to support ongoing refinement of risk adjustment methods, even as it implements a new approach.

Recommendation 36: Excluding Teaching and Disproportionate Share Payments from the Capitation Rates

> **The fee-for-service spending estimates Medicare uses to calculate capitation rates should exclude special payments to hospitals with graduate medical education programs and to those serving a disproportionate share of low-income patients.**

Medicare's fee-for-service spending in each county includes the special payments made to hospitals that operate graduate medical education programs and to those that serve a disproportionate share of low-income patients. Medicare provides these extra payments to recognize the higher costs of teaching hospitals and to maintain access to hospitals that serve large numbers of poor patients. (See Chapter 1.) Plans are unlikely to pay these hospitals amounts that reflect the special Medicare payments. Consequently, the capitation payment rates may be higher than the costs that efficient plans would be expected to incur in providing Medicare-covered services. Removing special payments from the fee-for-service spending base would result in more appropriate capitation rates.

ProPAC analysis of 1995 data found these payments accounted, on average, for 5.3 percent of the capitation rates. This percentage, however, varied substantially across counties. If these special payments were excluded from the rate calculation formula, rates would be lowered only by 2.5 percent or less in half of all counties. In counties where many Medicare fee-for-service beneficiaries are cared for by teaching and disproportionate share hospitals, though, payment reductions would be far greater. The variation in the amount by which county rates would be affected by this policy change reflects the uneven geographic distribution of teaching and disproportionate share hospitals.

At the same time the capitation rates are adjusted, a mechanism should be developed to make additional payments to teaching and disproportionate share hospitals for the Medicare risk plan enrollees they treat. (See Recommendation 12.)

Recommendation 37: Increasing Capitation Rates to Reflect Use of Services Covered by Other Government Programs

> **Medicare should increase the capitation rates to include estimated spending for covered services that program beneficiaries receive in facilities operated by the Departments of Veterans Affairs and Defense.**

In certain locales, some beneficiaries receive Medicare-covered services from Department of Veterans Affairs (VA) and Department of Defense (DoD) facilities. Since the Medicare program does not pay for these services, the base per capita fee-for-service spending amounts in these areas are understated compared with actual use of Medicare-covered services. As a result, the capitation rates in areas having large retired military populations and VA and DoD facilities are lower than the rates in otherwise comparable areas. At the same time, the beneficiaries who choose risk plans are not likely to use these facilities. A ProPAC analysis of 1991 data estimated that services provided to Medicare beneficiaries in these facilities made up about 3 percent of the total cost of Medicare-covered services.[7] The value of such services varied from 1 percent to 7 percent of total Medicare costs across states.

Because of the geographic variation in the use of these providers, Medicare should raise capitation payments to reflect the costs of services other government programs provide Medicare beneficiaries. This would increase Medicare's spending for the risk contracting program. In addition, the Health Care Financing Administration (HCFA) would incur some administrative expenses in obtaining data on service utilization from VA and DoD and adjusting the capitation rates. Nonetheless, this adjustment would improve payment equity.

Recommendation 38: Reducing the Variation in Payment Rates

> **The variation in capitation rates across counties should be narrowed. The lowest rates should be raised to a minimum amount, without increasing aggregate program spending. Medicare should evaluate the adequacy and appropriateness of its payment rates, however they are determined.**

Under current payment methods, Medicare's capitation rates vary widely among counties, leading to substantial differences in payment both between and within market areas. Evidence shows that plans' projected spending for furnishing Medicare benefits does not vary as much as the payment rates. Improving risk adjustment methods and adjusting the fee-for-service spending base, as recommended above, probably would help to decrease some of this payment variation. Nevertheless, substantial differences in the payment rates are likely to continue.

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The Commission believes the payment rates in some areas are too low to allow risk plans to provide Medicare services. To address this problem, a minimum payment amount should be set. This should be done in a way that does not increase overall spending, either by reducing all payment rates above the floor or by lowering the highest rates.

Variation in the capitation rates could be constrained using several alternate approaches. Local amounts could be blended with the national average rate, bringing all payment rates closer to the average. A larger geographic area could be used as the basis for the payment rate. Updates could be structured to bring base payment amounts closer to each other over time. The selected method should produce payment rates that reflect appropriate sources of variation in plans' costs.

It is unclear how much payment variability is appropriate, however. To the extent that high rates are caused by inefficient practice patterns and low rates reflect underservice, bringing the payment rates closer to the average may be desirable. But other factors—among them differences in health status not captured by risk adjustment tools, input prices, or market conditions—also contribute to payment rate variation.

To be a prudent buyer of health services, Medicare should evaluate the adequacy and appropriateness of its capitation rates. It should develop methods for assessing the base payment rates and decide how to adjust them in response to changes in local market conditions. Such evaluation and adjustment methods are equally important for payment rates determined in other ways, since currently envisioned approaches like competitive bidding and negotiation cannot guarantee appropriate payment rates.

Recommendation 39: Updating Capitation Rates

> **Medicare should use a national update framework rather than fee-for-service spending increases to determine the annual changes in risk plan payment rates.**

Medicare uses the projected increase in fee-for-service program spending as the basis for updating the amounts it pays to risk plans. Such an approach is no longer appropriate for several reasons. One is that, when risk plans can keep their cost increases below those in the fee-for-service program, Medicare has no way to share in these savings. Another is that capitation rate increases based on fee-for-service spending have been highly volatile in some counties. This has been a particular problem in counties with few Medicare beneficiaries. Volatile rates not only make it difficult for plans to offer a consistent benefit package from year to year, but also may make certain areas unattractive to HMOs.

Yet a third reason is that, in counties where Medicare beneficiaries are enrolled in risk plans, the payment rates and updates may be biased from risk selection effects. In these counties, spending increases reflect the pattern of health service use by a high-risk fee-for-service population, rather than that of average beneficiaries.

The Commission supports annual updates to capitation rates based on a framework that considers factors affecting plans' costs. This framework could be structured to reflect economic indicators like inflation and general productivity growth. It also could account for regional differences and factors affecting industry performance, such as risk selection, efficiency, and the adoption of new technology.

Recommendation 40: Evaluating Alternative Methods for Determining Capitation Rates

> **The Medicare program should continue to evaluate other methods for determining payment rates, including competitive bidding and negotiation between the program and risk plans.**

The Commission supports the Secretary's efforts to identify alternate ways of setting and updating capitation rates. HCFA's Competitive Pricing Demonstration will evaluate the feasibility and desirability of competitive bidding. Under the proposed design, all qualified HMOs that want to offer (or continue to offer) a risk plan in the demonstration area must participate in this demonstration. Plans will offer bids on a standard benefit package. HCFA will use the bids to establish a uniform, risk-adjusted government contribution toward the purchase of coverage from any of the participating plans.

Medicare should pursue other ways to establish its capitation payments as well. The Secretary should consider using a third party, such as a group purchasing entity, to negotiate with plans on Medicare's behalf. Employer purchasing groups like the Pacific Business Group on Health and some state Medicaid agencies have used a bidding and negotiation process to establish the premiums they will pay plans. This approach has also allowed these purchasers to specify their requirements for quality and benefits.

Innovations designed to lower payments to plans possibly will mean fewer additional benefits for risk plan enrollees. Consequently, these plans may be less attractive to beneficiaries, and Medicare might see a falloff in risk enrollment. In addition, some beneficiaries who remain in risk plans will have to pay out of pocket for services the plans would have covered with higher Medicare capitation rates. If Medicare succeeds in lowering payments to plans, the Secretary should consider policies that would enable the program to share the savings with beneficiaries.

RISK PLAN INFORMATION

The Medicare program has a responsibility to ensure the appropriateness of its risk plan capitation rates, the quality of care delivered by plans, and the ability of beneficiaries to make informed choices about this managed care option. To fulfill these responsibilities, the program should have plan-level data on costs and utilization, along with plan coverage and benefit policies. The Commission is offering three recommendations to improve the information used by Medicare to evaluate and adjust its risk contracting program and by beneficiaries to make enrollment decisions.

Information from Risk Plans

Efforts to improve the capitation rates and to ensure quality care will require data on risk plans' costs and Medicare enrollees' service use. Current plan reporting requirements are inadequate to meet the needs of an expanding and maturing Medicare risk contracting program. Estimates of the costs of services used by risk plan enrollees should be available to inform policy decisions regarding capitation base rates and updates. In addition, utilization and outcomes data are necessary for quality assurance and enforcement. The Commission is aware of the potential burden of additional reporting requirements. It believes, therefore, that the value of these data should be carefully assessed in light of their costs.

Recommendation 41: Data to Improve Plan Payments

> **The Secretary should require risk plans to provide information on the costs of furnishing services to Medicare enrollees. These data are necessary to determine the appropriateness of payment rates and improve Medicare payment methods.**

As part of the application process, HMOs submit information on their general finances to document that they are solvent and can manage the risk of capitation payments. Participating HMOs also annually prepare ACR proposals. As described earlier, these proposals project plans' spending based on estimated costs of providing Medicare-covered services to their non-Medicare population. The spending is then adjusted for higher usage rates. Medicare does not require plans to report their actual financial performance under the risk contracting program. Thus, the program has no basis to judge whether plan projections reflect actual costs. This information is needed to evaluate the appropriateness of plan payment increases and the relationship between payments and the costs of care.

Financial performance data would be valuable to the Medicare program in at least two other ways. Cost data would permit Medicare to assess whether plans were returning appropriate amounts of payments to beneficiaries in the form of additional benefits. Further, the information could be used to explore alternative bases for Medicare payments.

The Commission does not intend for plans to submit a complex and expensive documentation of costs. The desired information could be obtained through a process similar to the one used to prepare the ACR proposal.

Recommendation 42: Evaluating Plan Quality of Care

> **The Commission supports the Secretary's efforts to evaluate Medicare risk plans through the use of the Health Plan Employer Data and Information Set and satisfaction surveys. The Secretary should, in cooperation with the appropriate organizations, continue to adapt and improve measurement tools to evaluate plan performance.**

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The Medicare program has always had safeguards in place to ensure that HMOs can provide services and maintain quality of care. To qualify for Medicare's risk contracting program, HMOs must demonstrate sufficient operating experience and capability to furnish the full range of services available to fee-for-service Medicare enrollees in the area. Participating HMOs must also have quality assurance programs and enroll a minimum share of non-Medicare, non-Medicaid plan members.

HCFA is improving on these quality assurance requirements by working with several organizations to develop better measurement and reporting requirements. Beginning in 1997, the agency is requiring plans to report Health Plan Employer Data and Information Set (or HEDIS) measures. Additionally, in cooperation with the Agency for Health Care Policy and Research, HCFA is planning to survey risk plan enrollees on their satisfaction with various aspects of their plan.

The Commission supports these efforts to use the best available methods to determine whether risk plans are serving beneficiaries adequately. Medicare should continue to work with beneficiary groups, advocates, and leading research organizations to determine which measures and data risk plans should report.

Information for Beneficiaries

Most beneficiaries have the option of enrolling in a risk plan. Often, they are able to choose among competing plans. To date, Medicare program information about the risk option has been general and provided only to new beneficiaries or to those who request it. More information is supplied by the plans themselves, through advertising and other marketing activities. Although some private organizations have developed expertise in helping beneficiaries decide whether they should enroll in a risk plan and which plan best meets their needs, these entities have had a limited reach. Thus, most beneficiaries have not had synthesized, objective information to help them weigh the trade-offs between remaining in the fee-for-service program and joining a risk plan. Nor have they been able to compare the various risk plans.

Recognizing this shortcoming, HCFA is launching many initiatives in 1997 to improve the information potential enrollees can use in deciding whether to join a risk plan. It is developing a series of charts that compare plan benefits, quality indicators, and satisfaction scores. HCFA is also planning to test the use of an independent third-party enrollment broker to distribute information and process enrollments. The agency will continue to review plan marketing materials and has issued standards on the terms and language that can be used in these publications. In addition, HCFA is studying the kinds of information beneficiaries want and need, and the best ways to present it.

Recommendation 43: Improving Information for Beneficiary Choice

The Commission supports the Secretary's efforts to improve beneficiary information about managed care options. All beneficiaries should receive quality and satisfaction data for risk plans and the fee-for-service option to help them decide about enrolling in a risk plan. Cost and benefit definitions should be standardized so that beneficiaries can better compare plans. Additionally, the Secretary should periodically assess whether such information could be improved.

HCFA has taken important steps to improve the information it gives beneficiaries about Medicare managed care choices. The agency should continue to evaluate if this information is clear and helps beneficiaries decide whether to choose a risk plan and which risk plan to join. To accomplish this goal, Medicare should consult with industry, beneficiaries, and consumer advocates.

As beneficiaries make their decisions, they first should be able to compare risk plans with the fee-for-service option. Medicare should collect and report quality of care information for beneficiaries in the fee-for-service option when it is possible to do so. In addition, it should standardize the definition of the terms used to describe out-of-pocket spending requirements, benefits, and coverage so that beneficiaries can evaluate the products and choose among plans.

Notes to Chapter 3

1. To enroll in a risk plan, a beneficiary must be entitled to Part A coverage and enrolled in Part B. Beneficiaries eligible for Medicare because of end-stage renal disease (unless they already belonged to an HMO with a risk contract when they became Medicare-eligible) or who elected hospice care are not permitted to join a risk plan. Some beneficiaries live in areas not served by any risk plans.

2. Beneficiaries also can enroll in plans that are not at financial risk for the cost of their care. These options are health care prepayment plans, which are paid based on the cost of providing certain ambulatory services, and cost-contracting plans, which cover all Medicare services. To test other managed care models Medicare also is conducting a number of demonstration programs. About 18 percent of Medicare managed care enrollees had chosen either a cost-contracting or demonstration plan as of May 1996.

3. Plans may also charge beneficiaries a premium for the average amount of beneficiary cost sharing expected in the fee-for-service program.

4. Jerrold Hill and others, *The Impact of the Medicare Risk Program on the Use of Services and Costs to Medicare*, Health Care Financing Administration Contract 500-88-0006, December 3, 1992; Physician Payment Review Commission, *Annual Report to Congress 1996,* March 1996; Gerald Riley and others, "Health Status of Medicare Enrollees in HMOs and Fee-for-Service in 1994," *Health Care Financing Review* 17(4):65-76, Summer 1996.

5. Gerald Riley and others, "Health Status of Medicare Enrollees."

6. Randall Ellis and others, "Diagnosis-Based Risk Adjustment for Medicare Capitation Payments," *Health Care Financing Review* 17(3):101-28, Spring 1996; Jonathan P. Weiner and others, "Risk-Adjusted Medicare Capitation Rates Using Ambulatory and Inpatient Diagnoses," *Health Care Financing Review* 17(3):77-99, Spring 1996.

7. Prospective Payment Assessment Commission, *Medicare Per Capita Expenditures and Costs*, Intramural Technical Report I-96-01, June 1996.

Appendix A. Background Material and Analyses

Appendix A provides background material and analyses to support some of the Prospective Payment Assessment Commission's (ProPAC's) recommendations in this report. It includes technical materials on the individual components of the prospective payment system (PPS) operating update framework: the PPS hospital market basket index, scientific and technological advances (S&TA), productivity improvement and service change, and case-mix change. The update for payments to dialysis facilities is also discussed. Further analyses supporting Commission decision making are available in ProPAC's Technical Report Series. These reports, which can be obtained by contacting the Commission, are abstracted in Appendix D.

OPERATING UPDATE FOR PPS HOSPITALS

The Prospective Payment Assessment Commission annually recommends an update to the operating payment rates under Medicare's prospective payment system. The Commission's recommendation is based on an analytic framework that considers anticipated inflation in the prices of goods and services hospitals use to furnish inpatient care to Medicare beneficiaries, adjusted for expected changes in the mix of resources used and the types of patients treated. The recommendation thus combines objective data and the Commission's collective judgment about the impact of factors that likely will affect hospital costs in the forthcoming year. The fiscal year 1998 PPS operating update recommendation is ProPAC's thirteenth.

The Commission's operating update recommendations have always been below the forecasted increase in the prices hospitals face, averaging 1.5 percentage points less (see Table A-1). The updates actually implemented generally have been lower still. The annual increase in per case payments, however, has always been substantially higher than the update to payments. This is because payments rise as the mix of hospital patients, as measured by the case-mix index (CMI), becomes more costly. Medicare policy changes have also boosted per case payments in some years.

ProPAC's analytic framework consists of four major components. The first is a forecast of hospital input price increases, as measured by the PPS hospital market basket index. The second is an allowance for the cost-increasing effects of scientific and technological advances. The third is an adjustment for productivity improvement and service change. The final component reflects the effect of case-mix change. Each of these is discussed below.

Table A-1. Comparison of Increases in Hospital Market Basket, Average PPS Updates, and PPS Payments Per Case, Fiscal Years 1984-1997 (In Percent)

Fiscal Year	Forecasted Increase in PPS Market Basket[a]	Actual Increase in PPS Market Basket	PPS Update			Increase in PPS Payments Per Case[c]
			ProPAC's Recommendation[b]	HCFA's Recommendation	Actual	
1984	4.9%	4.9%	—	4.7%	4.7%	18.5%
1985	4.0	3.9	—	4.5	4.5	10.5
1986	4.3	3.9	1.5%	0.0	0.5	3.2
1987	3.7	3.5	1.7	0.5	1.2	5.4
1988	4.7	4.7	2.3	0.8	1.5	6.0
1989	5.4	5.5	4.2	2.7	3.3	6.6
1990	5.5	4.6	4.1	4.0	4.7[e]	6.5
1991	5.2	4.3	4.7	3.7	3.4	6.0
1992	4.4	3.1	3.0	3.0	3.0	5.2
1993	4.1	3.0	2.8	2.7	2.7	3.9
1994	4.3	2.5	3.6	2.6[d]	2.0	3.5
1995	3.6	3.0	2.6	2.0	2.0	4.1
1996	3.5	2.7	1.7	1.5	1.5	3.4
1997	2.5	—	1.0	1.0	2.0	3.9

[a] Based on data available when final PPS rule was issued.

[b] Based on ProPAC's annual *Report and Recommendations to the Congress* and market basket forecast when final PPS rule was issued.

[c] Increases for 1984 through 1995 are based on Medicare Cost Report data, which correspond to hospital cost reporting periods, rather than Federal fiscal years; those for 1996 and 1997 are based on PPS update and estimated case-mix index increases.

[d] Annual update based on the Health Care Financing Administration's recommendation that rates be frozen at the 1993 level through January 1, 1994.

[e] Actual update for fiscal year 1990 adjusted to reflect 1.22 percent across-the-board reduction in diagnosis-related group weights.

SOURCE: ProPAC.

MARKET BASKET INDEX

The PPS hospital market basket index measures the prices of the goods and services hospitals use in providing inpatient care. As hospital input prices increase, the costs of delivering the same care in the same way rise proportionately. The projected change in the market basket index is thus an integral component of the Commission's PPS update recommendation.

The market basket consists of 26 components reflecting the full range of goods and services that hospitals purchase (see Table A-2). Capital goods, such as buildings and equipment, are excluded from the market basket because Medicare pays hospitals separately for capital-related costs. Each component's weight reflects its share of total hospital operating expenses. Because data on actual price changes for individual goods and services generally are not available, the price change for

Table A-2. Fiscal Year 1998 PPS Hospital Market Basket Expense Categories, Weights, Price Proxies, and Forecasts (In Percent)

Expense Category	Fiscal Year 1992 Weights	Price Proxy	Fiscal Year 1998 Forecast
Wages and salaries	50.24%	HCFA occupational wage index	3.3%
Employee benefits	11.15	HCFA occupational benefit index	3.2
Professional fees	2.13	ECI, compensation for professional specialty and technical workers	3.3
Utilities	2.47		-0.1
Fuel, oil, and gasoline	0.35	PPI, refined petroleum products	-5.8
Electricity	1.35	PPI, commercial electric power	0.3
Natural gas	0.67	PPI, commercial natural gas	0.6
Water and sewage	0.11	CPI, water and sewage maintenance	6.2
Professional liability insurance	1.19	HCFA professional liability insurance premium index	-0.4
All other	32.83		2.0
All other products	24.03		1.4
Pharmaceutical	4.16	PPI, ethical (prescription) drugs	2.5
Food: direct purchase	2.36	PPI, processed foods and feeds	0.3
Food: contract service	1.10	CPI, food away from home	4.1
Chemicals and cleaners	3.80	PPI, industrial chemicals	0.6
Surgical and medical instruments	3.13	PPI, medical instruments and equipment	1.7
Photographic supplies	0.40	PPI, photographic supplies	-0.2
Rubber and plastics	4.87	PPI, rubber and plastics	0.3
Paper products	2.06	PPI, converted paper and paperboard products	2.8
Apparel	0.88	PPI, apparel	1.8
Machinery and equipment	0.21	PPI, machinery and equipment	1.8
Miscellaneous products	1.07	PPI, finished goods	1.1
All other services	8.79		3.7
Business services	3.82	ECI, compensation for private workers in business services	3.7
Computer and data processing	1.93	AHE, computer and data processing services	4.0
Transportation and shipping	0.19	CPI, transportation	4.1
Telephone	0.53	CPI, telephone services	2.1
Postage	0.27	CPI, postage	8.1
All other services: labor	1.71	ECI, compensation for private services occupations	3.1
All other services: nonlabor	0.34	CPI, all items	2.8
Total	100.00		2.8

Note: Weights may not sum to 100 percent due to rounding. Forecasts were prepared in December 1996. AHE = average hourly earnings, CPI = consumer price index for urban consumers, ECI = employment cost index, PPI = producer price index.

SOURCE: Health Care Financing Administration, Office of the Actuary, and DRI/McGraw-Hill, Inc.

each component of the market basket is measured by a proxy based on price indexes developed and maintained by the Bureau of Labor Statistics.

The weights assigned to each component of the market basket are revised periodically. This rebasing most recently occurred prior to fiscal year 1997, with each component's weight revised to reflect spending shares in 1992, rather than 1987 as in the previous market basket. The Health Care Financing Administration (HCFA) also changed some of the price proxies it uses, but these changes were relatively minor.

Employee wages and salaries account for about half the total weight in the market basket. Price changes for this component are measured by HCFA's occupational wage index. This index is a composite of 10 different wage rate proxies that are combined to represent nine different employee categories, each of which is weighted to reflect its share of hospital labor costs. The proxies come from the Department of Labor's employment cost index, which measures the change in employee wage rates per hour worked. One of these proxies is an index that measures changes in hospital worker wages. The other nine reflect economywide wages for types of workers comparable to those hospitals employ. The price change for benefits, the second largest market basket component, is measured similarly.

The 24 other components together make up about 39 percent of the total market basket. The largest of these components represents particular types of products, such as rubber and plastic goods, pharmaceuticals, chemicals and cleaners, and surgical and medical instruments. The price changes for most of these products are measured using different producer price indexes, which reflect price changes for goods sold in nonretail markets. Another important set of components is services, the largest being business and computer-related services.

Fiscal Year 1998 PPS Hospital Market Basket Forecast

The update for the coming year is based on a forecast of the increase in the market basket index. DRI/McGraw-Hill develops the forecasts for HCFA using complex statistical models that project the expected change for each of the 26 market basket components. The forecasts are revised quarterly, and ProPAC generally uses the December estimate in its March update recommendation. When implementing the update, HCFA uses the June estimate, which is the most recent available before the start of the new fiscal year. Market basket forecasts for a given year often change somewhat from one quarter to the next because of the availability of more recent data on price trends and economic conditions.

The most recent forecast of the PPS hospital market basket increase for fiscal year 1998 is 2.8 percent. The prices of many market basket components are expected to rise faster than that, however. Employee wages, the largest component, are forecasted to increase by 3.3 percent. Similarly, business and computer services are projected to grow by 3.7 percent and 4.0 percent, respectively. The prices for a number of other items are actually expected to fall. Utility prices are anticipated to decline by 0.1 percent and professional liability insurance is forecasted to drop by 0.4 percent. The market basket forecast used for this report was made in December 1996; it is likely to change when later data are available.

Adjustment for Difference Between HCFA and ProPAC Market Baskets

The Commission and HCFA disagree on how the PPS hospital market basket should be constructed. Specifically, ProPAC's market basket gives greater weight to the measure of hospital industry wages relative to the economywide measures in determining the wage and benefit components. The hospital industry measure makes up 50 percent of the wage and benefit components in ProPAC's version, compared with about 33 percent in HCFA's version.[1] In addition, there are some technical differences in how the various wage and benefit proxies are combined that can affect the estimated increase in average labor compensation.

Because of these differences, the forecasted increases in ProPAC's and HCFA's market baskets can diverge. HCFA's version, however, is the one used to set the annual updates. The Commission's update framework therefore is based on HCFA's construction of the market basket, but includes an

adjustment for discrepancies between the two forecasts. For fiscal year 1998, the forecasted increase in both market basket indexes is 2.8 percent. Consequently, the adjustment is zero, but the factor is still included in the framework to recognize the conceptual difference and to indicate that any future divergence in forecasts will be reflected in the Commission's update recommendation.

Correction for Fiscal Year 1996 Forecast Error

There may be sizable differences between the forecasted increase in the market basket index and actual input price inflation in any given year. Forecasting is not an exact science, and there can be significant errors when trends do not follow historical patterns. Unanticipated price fluctuations in one or two components of the market basket can also cause forecast errors.

Substantial discrepancies between forecasted and actual increases in the market basket index can result in large overpayments or underpayments to hospitals under PPS. For example, the PPS operating update in fiscal year 1994 was based on a forecasted increase of 4.3 percent, while the actual rise was only 2.5 percent. Hospitals thus received an update that was 1.8 percentage points higher than justified by the increase in the prices of the goods and services they use. This equaled about $1 billion in payments.

In developing its update recommendation, the Commission makes an adjustment to reflect substantial forecast errors (that is, errors of 0.25 percentage points or more). This adjustment is intended to remove the effects of these errors from future PPS payments. The forecast error is determined at the end of each year, using data on the actual increase in the market basket index for that year. Because of the timing of these data, there is a two-year lag in the correction for market basket forecast errors. The Commission's fiscal year 1998 update recommendation therefore includes a correction factor for the error in the fiscal year 1996 market basket forecast.

The forecasted market basket increase used to calculate the update factor for the fiscal year 1996 PPS payment rates was 3.5 percent. The actual increase in the fiscal year 1996 market basket, however, was only 2.7 percent. To account for this discrepancy, ProPAC's 1998 update recommendation includes a market basket forecast error correction factor of –0.8 percentage points.

The largest contributor to the fiscal year 1996 forecast error was chemical prices, which were projected to increase by 6.5 percent but actually declined by 1.1 percent. Another major contributor to the error was lower-than-anticipated growth in the hospital worker and service worker wage proxies. Lower-than-forecasted growth in benefits and the price of paper products also contributed to the error. This is the seventh consecutive year that there has been a significant negative forecast error. However, given the recent trend toward lower actual and projected hospital input price inflation, negative forecast errors may not continue over the next few years.

SCIENTIFIC AND TECHNOLOGICAL ADVANCES

Innovations in health care technology affect the cost of treating Medicare inpatients. The effects of these advances are reflected in two components of ProPAC's update framework: the scientific and technological advances allowance and the productivity adjustment. The S&TA allowance, an upward adjustment to the update, reflects the Commission's judgment on the level of financing required for advances that improve the quality of care for beneficiaries, but are more expensive. Because other technological innovations reduce costs or improve efficiency, hospitals have a financial incentive to adopt them to help meet the productivity target.

S&TA Estimation Process

Informed by technology-specific analyses conducted for ProPAC, the Commission has, in past update recommendations, included S&TA adjustments ranging from 0.3 to 1.0 percentage points (see Table A-3). These analyses (most recently conducted for fiscal year 1995) required three steps.[2] First, specific innovations were selected from a pool of candidates. Technologies were included only if they were expected to increase hospital inpatient costs substantially, and if they enhanced the quality of patient care. They also had to be emerging and not fully diffused (that is, used for between 5 percent and 75 percent of all potentially affected Medicare patients). In the second step, estimates of the per treatment or per case costs associated with using each technology were generated. Finally, these costs were multiplied by the number of Medicare inpatients expected to use the technology in the upcoming year. The expected incremental cost of all the selected technologies were summed and then expressed as a percentage of the expected total payments for that year.

Table A-3. Scientific and Technological Advances Allowances for PPS Operating Costs, Fiscal Years 1987-1997 (In Percent)

Fiscal Year	Percent of Total Medicare Operating Payments to PPS Hospitals
1987	0.7%
1988	0.5
1989	0.5
1990	0.3*
1991	0.7*
1992	0.7
1993	1.0
1994	1.0
1995	0.3
1996	0.3
1997	0.1 to 0.6

* The Commission did not set explicit allowances for S&TA, but rather a net allowance for S&TA and productivity. The values represent initial estimates.

SOURCE: ProPAC.

The Commission exercises its discretion when using this estimate to set the S&TA allowance. It may, for example, incorporate other effects of technology not measured by this method (such as small-ticket technologies). The Commission's judgment is also required because of the many factors that influence the adjustment's accuracy. These factors may include the unpredictability of patient and physician receptiveness to change, changing market conditions, and additional outcome studies that alter scientific opinions.

Beginning with fiscal year 1996, the Commission adopted a more qualitative approach to derive its S&TA allowance. The review of recent hospital technology developments began by evaluating the technologies identified in previous analyses. Using studies highlighted in medical journals and other sources, ProPAC assessed the change in the growth of S&TA costs to determine the appropriate level of of the S&TA allowance, compared with last year's. For the 1998 update, the Commission supported an adjustment of 0.4 percentage points, believing that the incremental cost-increasing effect of technological advances on PPS hospital operating costs would be relatively small.

Technologies Included in the Analysis for Fiscal Year 1998

Although medical research is progressing, the diffusion of new technologies appears to be slowing as hospitals consider their relative costs and benefits more carefully. However, improvements to existing technologies are being made and new applications found. In addition, computer information systems are becoming more prevalent. ProPAC's review concentrated on advancements in four broad categories that in recent years have been significant in the S&TA analysis: cardiovascular

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drugs, devices, and techniques; radiology, imaging, and nuclear medicine; biotechnology; and management information systems.[3]

Cardiovascular Drugs, Devices, and Techniques—These technologies relate to the management of cardiac arrhythmias, acute myocardial infarctions (AMIs or heart attacks), coronary artery disease, and strokes, and are traditionally large contributors to the S&TA. Coronary stenting (the implantation of an expandable mesh stainless steel tube into a coronary artery) for treatment of heart attacks is more frequently performed, while the use of percutaneous transluminal coronary angioplasty alone (balloon angioplasty without a stent) has leveled off.[4] The stenting procedure is being refined with various anticoagulation regimes and new stent designs. The monoclonal antibody c7E3, or abciximab, has reduced the rate of acute complications of coronary angioplasty in high-risk settings, and clinical indications are growing.

The Food and Drug Administration (FDA) has recently approved several new drugs and devices that provide physicians with additional treatment options for cardiovascular conditions. Another agent, recombinant plasminogen activator (r-PA or reteplase), which was licensed by the FDA in 1996, can be used in thrombolytic therapy for the management of AMIs. Clinical trials have shown it to have a more rapid effect, with fewer complications, compared with streptokinase and tissue-type plasminogen activator (t-PA).[5] Select patients also are receiving t-PA for the early treatment of strokes.[6] Intravenous amiodarone has been approved for the treatment of cardiac arrhythmias. Also in the past year, the FDA approved the use of an implantable defibrillator for AMI and arrhythmia patients who would not have been treated previously, along with a dual-chamber pacemaker that senses and adjusts for physical activity.

Intravascular ultrasound imaging, included in the fiscal year 1996 S&TA discussion, continues to be studied as a tool for the treatment of coronary atherosclerosis. Other promising imaging technologies are ultrafast computerized tomography, which allows early diagnosis of artherosclerosis by detecting calcium in coronary arteries, and magnetic resonance angiography.

Radiology, Imaging, and Nuclear Medicine—Recent developments in radiology, imaging, and nuclear medicine are based mostly on further applications and improvements of existing technologies. These tools include magnetic resonance imaging (MRI), single photon emission computerized tomography, computerized axial tomography, ultrasound, stereotactic surgery, and radionuclides. As a result, this group of technologies is not likely to contribute to S&TA costs as substantially as it did in the past.

The growth of image-guided therapy and digital electronic radiology may increase S&TA costs. Image-guided therapy, such as MRI-guided biopsy, is growing because imaging is especially useful in directing treatments for very small lesions or abnormalities.[7]

Biotechnology—This category represents genetically engineered or biosynthetic products, like monoclonal antibodies. In 1996, the FDA approved four new radiolabeled antibodies for diagnostic imaging. One locates myocardial injury, another identifies the disease stage for patients with small cell lung cancer, and the other two detect the potential spread of colon or prostate cancer.[8] Because of their limited application, these biotechnology products will be relatively small contributors to the S&TA adjustment.

Management Information Systems—This category includes computer systems for clinical departments (such as radiology), computer networks, limited computer-based patient record systems, and decision support applications for physicians. These systems are likely to be substantial contributors to both the operating and capital S&TA allowances in fiscal year 1998. Comprehensive systems have diffused slowly because of their high costs and concerns about confidentiality. Hospitals are adopting them more rapidly today, however, responding to greater information needs in an increasingly competitive environment.[9]

PRODUCTIVITY IMPROVEMENT AND SERVICE CHANGES

The productivity adjustment has traditionally been intended to provide hospitals with a financial incentive to improve productivity, either from using existing inputs more efficiently or from adopting cost-decreasing technologies. Each year, ProPAC sets a policy target for the amount of productivity improvement it believes is reasonable to expect hospitals to attain in the coming year. A negative adjustment equal to one-half the expected increase is then made to the PPS operating and capital update recommendations. This reflects the Commission's belief that the Medicare program and the industry should share equally in the savings resulting from productivity gains.

This year, ProPAC has broadened the scope of the productivity adjustment to reflect changes in the nature of services hospitals provide during inpatient stays. The adjustment still embodies a target for the productivity gains the Commission expects hospitals to achieve in fiscal year 1998, but it also includes an additional amount for service changes. This adjusts for the difference between the set of services reflected in the PPS payment rates and the services that are actually delivered today in the inpatient setting.

This section summarizes the industrywide changes that have affected the structure of services included in inpatient stays, the effect of service changes and other factors on the trend in productivity, and the Commission's decision regarding the hospital productivity and service changes adjustment for fiscal year 1998.

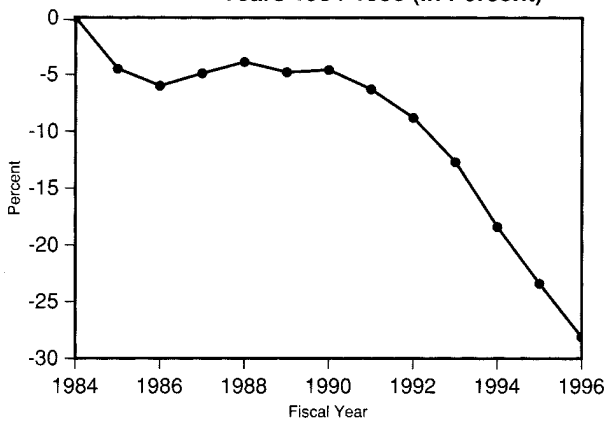
Changes in the Hospital Industry

The environment in which hospitals operate has changed dramatically in recent years. Most notably, the rate at which hospital costs per case rise each year has dropped from around 9 percent in 1985 through 1991 to a new plateau of only about 2 percent beginning in 1994.[10] One of the most important changes to occur during this three-year period was a substantial decline in inpatient lengths of stay (LOS). While this trend was seen in all patient groups, the largest reductions have been in the Medicare population. After five years in which there was almost no net change, the average PPS length of stay fell almost 2 percent in fiscal year 1991 (see Figure A-1). The decrease accelerated to nearly 3 percent the next year and then to more than 4 percent. In fiscal year 1994, LOS declined 6 percent, and this rate has continued through the end of fiscal year 1996. Over this six-year period, the average stay has gone from 8.4 days to an estimated 6.3 days—a cumulative drop of 25 percent.

As PPS stays have shortened, Medicare beneficiaries' use of post-acute care services, provided mostly by home health agencies, skilled nursing facilities, rehabilitation facilities, and long-term care hospitals, has grown rapidly. Home health visits increased the most—more than 25 percent anually between 1991 and 1995—and utilization for all of these provider groups has risen by at least 10 percent a year.

The large increase in post-acute care volume coinciding with the substantial drop in hospital LOS has been cited as evidence that some services formerly provided during hospital stays have been shifted to post-acute settings. At a minimum, these services include dietary, housekeeping, and nursing; physical therapy and other ancillary services may be shifted as well. Follow-up care in physicians' offices and other ambulatory care settings, as well as in the home by family and caregivers paid

Figure A-1. Cumulative Change in PPS Average Length of Stay, Fiscal Years 1984-1996 (In Percent)



Note: The percent changes for fiscal years 1984 through 1994 are for PPS hospitals and PPS-covered stays only; those for 1995 and 1996 are based on patients 65 and older in community hospitals, which include PPS-excluded rehabilitation units.

SOURCE: ProPAC analysis of MedPAR data from the Health Care Financing Administration and data from the American Hospital Association Annual Survey of Hospitals.

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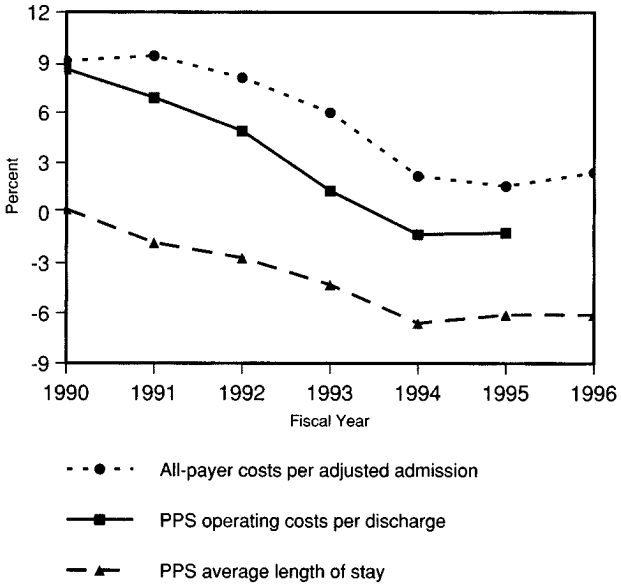
for outside of Medicare, may also have substituted for some services formerly furnished in the hospital.

Besides changes in setting, technological advances have eliminated the need for some hospital services altogether. Endoscopic surgery and new anesthetic agents are examples of innovations that allow the patient to reach the same level of functioning in fewer days, thus shortening the entire episode of care. This has reduced many patients' requirements for hospital services, once again in the categories of room and board, nursing care, and some ancillary services.

Although there is no way to estimate the specific effects of these changes, there traditionally has been a strong association between declines in LOS and slower cost growth. In fact, PPS was seen from the beginning as providing strong incentives to reduce costs by shortening hospital stays. In the first year of PPS, both LOS and cost growth fell sharply. Conversely, while length of stay held steady through fiscal year 1990, costs per case increased more than 9 percent per year. As LOS dropped steadily over the next four years, the annual increase in per case costs followed a similar path—declining sharply until dipping below zero in both 1994 and 1995 (see Figure A-2).

Figure A-2. Change in PPS Average Length of Stay and Alternative Measures of Costs Per Case, Fiscal Years 1990-1996 (In Percent)



Note: The percent changes for fiscal years 1991 to 1994 are for PPS hospitals and PPS-covered stays only; those for 1995 and 1996 are based on patients 65 and older in community hospitals. PPS operating costs per discharge are measured for PPS years, which correspond roughly to fiscal years.

SOURCE: ProPAC analysis of MedPAR data from the Health Care Financing Administration and data from the American Hospital Association Annual Survey of Hospitals.

PPS data are not available for fiscal year 1996, but data from the American Hospital Association National Hospital Panel Survey show that length of stay for the elderly population has continued to fall at the rate of 6 percent. Similarly, overall cost growth has remained modest—about 2 percent—through 1996. These trends strongly suggest that the recent trend in PPS cost per case growth will persist as well.

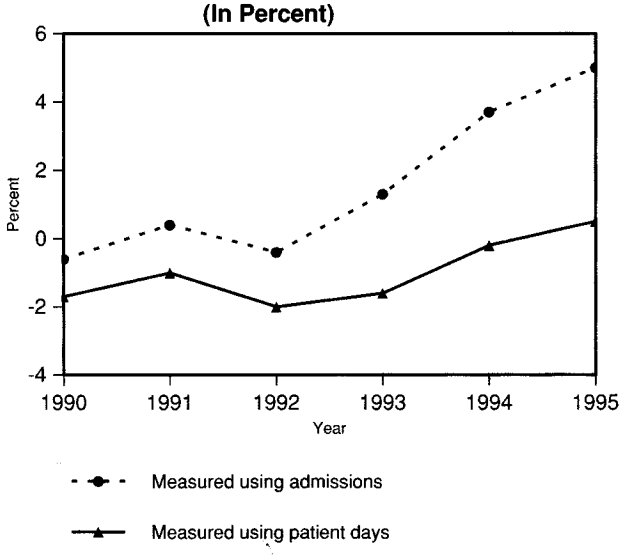
Recent Changes and Productivity Growth

Although the direction of the trends in PPS costs per case and length of stay are the same, the decline in the annual rate of change in costs has been much steeper. Between 1990 and 1994, for example, the yearly change in per case costs dropped 10 percentage points (from 9 to –1), while the change in LOS fell only about 6 percentage points (from zero to –6). This suggests that factors other than length of stay have helped tame hospital cost inflation. One key reason is smaller wage hikes. Hospital wages have been rising more slowly than those in the general economy since 1993, after having increased faster for many years before that.[11] But another important factor is productivity.

Adjusted patient days per full-time equivalent employee (FTE) measures labor productivity while controlling for the influence of LOS changes. Using this measure, productivity declined by 2.0 percent in 1992. But the annual change began rising in 1993 and reached 0.5 percent by 1995 (see Figure A-3). Even this small improvement measured in terms of patient days per FTE is significant, given that most costly procedures (especially surgery) are performed toward the beginning of a patient's stay. Eliminating days at the end of a stay tends, all else equal, to increase the average costliness of the remaining days, and any productivity improvement achieved is net of this effect.

When a measure of adjusted admissions rather than adjusted patient days per FTE is used, the effects

Figure A-3. Change in Hospital Labor Productivity, 1990-1995 (In Percent)



Note: Labor productivity is measured as admissions or as patient days (both outpatient adjusted) per full-time equivalent employee.

SOURCE: American Hospital Association Annual Survey of Hospitals.

of service changes associated with length of stay reductions are captured along with the impact of labor productivity gains. This measure also shows a trend of marked improvement since 1992, but the growth in each year is higher. By 1995, the gain reached 5.0 percent, which is by far the largest single year increase in the more than three decades data have been kept.

During the 1980s, hospitals' actual labor productivity growth always fell short of the target the Commission had established a year earlier in setting the productivity adjustment. But since 1990—when the downward trend in length of stay began—the industry has exceeded ProPAC's standard in most years. During the three years in which LOS fell the most and per case cost growth was the smallest—fiscal years 1994, 1995, and 1996—the gap between actual and expected productivity improvement was almost 8 percentage points (see Table A-4).

The Commission's Decision

ProPAC has traditionally based its productivity adjustment on the performance of other industries. The improvement in labor productivity for all nonfarm industries averaged 2.6 percent per year from 1965 through 1973, and 1.1 percent thereafter through 1993 (see Table A-5).[12] The gains have been smaller in recent years, averaging 0.5 percent from 1994 through 1996. Because the Commission believes the savings from improving productivity should be shared with hospitals, the adjustment would generally be set at half the gain acheived in other industries. Focusing on the period since PPS began, these data support a range of from –0.3 percent to –0.6 percent.

This year, the Commission wanted to account for both the productivity gains that hospitals can reasonably be expected to achieve in fiscal year 1998 and changes in the nature of the services hospitals furnish in its adjustment. Because the kinds of service

Table A-4. Cumulative Hospital Productivity Growth, Fiscal Years 1990-1996 (In Percent)

Indicator	Fiscal Years 1990 to 1996	Fiscal Years 1993 to 1996
Productivity growth expected by the Commission in developing its productivity adjustments	7.0%	3.0%
Actual labor productivity growth	12.1	10.8
Gap between actual and expected productivity growth	5.1	7.8

SOURCE: ProPAC's annual *Report and Recommendations to the Congress* and the American Hospital Association Annual Survey of Hospitals.

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Table A-5. Average Annual Growth in Labor Productivity for Non-Farm Businesses, Fiscal Years 1966-1996 (In Percent)

Fiscal Year	Labor Productivity Growth	Implied Productivity Adjustment
Historical:		
1966 to 1973	2.6%	1.3%
1974 to 1983	1.1	0.6
1984 to 1993	1.1	0.6
Recent:		
1994	0.3	0.2
1995	0.7	0.4
1996	0.5*	0.3

* Seasonally adjusted average of the first three quarters of 1996.

SOURCE: Bureau of Labor Statistics.

changes seen in the hospital industry in recent years have not occurred in most other industries, a substantially larger adjustment than general economy data suggest is warranted. Accordingly, ProPAC recommends a range of –1.0 percent to –3.0 percent for this component.

ADJUSTMENT FOR CASE-MIX CHANGE

Under PPS, each discharge is assigned to a diagnosis-related group (DRG) based on the patient's condition and other information pertaining to the treatment he or she is expected to receive. The DRGs are intended to group cases with similar resource requirements. Each case's anticipated costliness is represented by the DRG weight. The Medicare case-mix index is the average DRG weight for all cases paid under PPS. Because the DRG weight determines the PPS payment for each case, an increase in the CMI results in an equal percentage change in hospital payments.

The CMI may rise from year to year because of real growth in case mix or because of upcoding. Real case-mix change entails greater patient resource requirements due to the mix of patients or their treatment. For example, increases in the average severity of illness of patients who are admitted to hospitals or in the complexity of services that are provided on an inpatient basis are real case-mix changes. Upcoding is a change in medical record documentation or coding practices that results in assignment of cases to higher-weighted DRGs without increased patient resource requirements.

Hospitals should be compensated for real case-mix change, but not for upcoding. ProPAC's update recommendation reflects this belief by removing the net effects of upcoding in the current year from the payment rate for the upcoming year.

The Commission's task in developing its case-mix change recommendations has been complicated by a lack of data. While the actual increase in the CMI can be estimated relatively easily, determining how much of that change is real and also how much real case-mix change is not captured by the DRGs is considerably more difficult. While previous studies have attempted to measure components of real case complexity change relative to the change in the case-mix index, they were based on data from 1990 and earlier. The Commission's estimates therefore must rely on a combination of this past research and its own judgment as to the amount of real change that has taken place.

There is some promise of improvement in this area. In January 1995, HCFA introduced its Medicare Quality Indicator System, a software tool to develop data for the agency's Health Care Quality Improvement Program. These data are intended to help Peer Review Organizations (PROs) carry out their quality review activities and develop collaborative projects with hospitals and other health care providers. Two Clinical Data Abstraction Centers abstract carefully specified information from medical records. In late 1995, HCFA began creating a nationally representative sample of 30,000 Medicare hospital discharge records each year. The resulting database could be used to compare the original DRG used for payment for each case with the DRG assigned by independent expert coders at a later date. This comparison could provide measures of real case-mix change and upcoding. At this time, however, HCFA is still engaged in validation of the data. Since the data are being developed to assist the PROs and there are tight restrictions on their use, HCFA has no immediate plans to use them to study case-mix change.

The Commission's case-mix change adjustment consists of three components. An estimate of total CMI change in the year prior to the update (for example, fiscal year 1997 for the 1998 update) is subtracted from the update factor to remove the effects of both real case-mix change and upcoding. A positive adjustment is then made for the portion of the CMI increase that reflects real across-DRG case-mix change. Another positive adjustment is made for real case-mix change that is not captured by changes in the CMI—within-DRG case complexity change. These components together reflect the effects of real case-mix change while discounting the effects of upcoding.

Total Case-Mix Index Change

The CMI increased by 5.6 percent in fiscal year 1985 (see Figure A-4). Between 1985 and 1994, case-mix index change declined annually except for 1988 and 1991. In 1988, CMI change rose to 3.5 percent, up from 2.6 percent in 1987. This acceleration was primarily due to two modifications in DRG definitions. Age greater than 69 was eliminated as a DRG classification criterion, and two heavily weighted DRGs were created that included mechanical ventilation and tracheostomy as classification criteria. These revisions gave hospitals incentives to further improve their medical record documentation and coding practices, resulting in a larger increase in the CMI.

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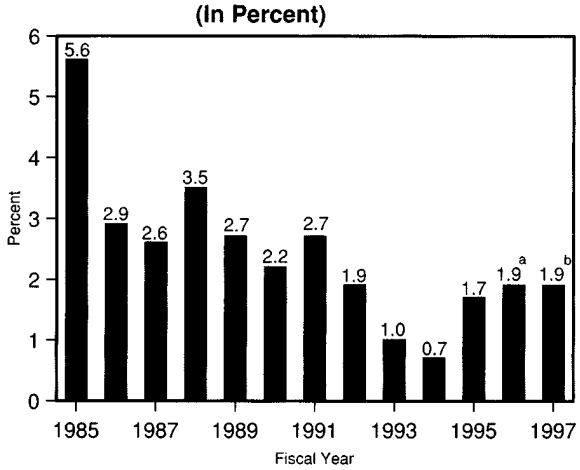
Figure A-4. Change in Medicare Case-Mix Index, Fiscal Years 1985-1997 (In Percent)



[a] Estimate.

[b] Projection.

SOURCE: ProPAC analysis of MedPAR and other data from the Health Care Financing Administration.

Additional modifications to DRG definitions resulted in another jump in the rate of CMI growth in 1991, to 2.7 percent compared with 2.2 percent in 1990. This was the result of several changes that provided additional opportunities for upcoding. Thirteen new DRGs were added: two restructured how diseases and disorders of the circulatory system are classified for payment, while the rest affected the assignment of bone marrow transplants, liver transplants, tracheostomies, multiple significant traumas, and human immunodeficiency virus infections.

In fiscal years 1992, 1993, and 1994, HCFA made relatively modest changes to the DRG definitions. In 1992, it permitted reporting more diagnoses and procedures on the Medicare bill, increasing the former from five to nine and the latter from three to six. These changes make it likelier that the bill will include a diagnosis that classifies the case into a higher-weighted DRG, increasing payment to the hospital and contributing to a higher overall CMI. However, CMI growth continued to slow to 1.9 percent in 1992, 1.0 percent in 1993 and 0.7 percent in 1994.

For fiscal years 1995, 1996, and 1997, HCFA made additional revisions to the DRG definitions. Although these changes also were modest, the rate of CMI change accelerated to 1.7 percent in 1995. Based on preliminary data from discharges during 1996, ProPAC estimates that CMI change was 1.9 percent in 1996 and projects CMI change for 1997 of 1.9 percent.

Real Across-DRG Case-Mix Change

Having removed from the payment base the entire increase in the CMI, ProPAC then replaces it with the portion of that increase that is thought to represent real case-mix change. For several years, the Commission's estimates of real case-mix change reflected the empirical evidence provided by a major study conducted in 1988 and 1989 by RAND. Sponsored by HCFA with support from ProPAC, the study involved reabstracting medical records and comparing the originally coded data with the recoded data. The methodology of the study allowed for the apportionment of CMI change into real and upcoding components.

RAND estimated that about two-thirds of the 2.4 percent increase in the CMI from fiscal year 1986 to 1987 was real case-mix change. It concluded that real case-mix change accounted for one-half of the 3.0 percent increase from 1987 to 1988. Although the observed increases in the CMI were very different in the two years, the estimates of real case-mix change were very similar: 1.6 percent and 1.5 percent, respectively.

From fiscal year 1989 through 1993, the Commission's judgments were consistent with RAND's findings. In 1994, however, the Commission adjusted its estimate to reflect the lower rate of CMI growth.

The resurgence of CMI growth in the past several years may reflect changes in the role of hospital care. These changes may result in real case-mix increases rather than further improvements in coding practices. ProPAC's estimate of real across-DRG case-mix change for fiscal year 1997 is 1.7 percent to 1.9 percent. This reflects the judgment of the Commission that upcoding will have only a small impact, if any, on CMI change in 1997.

Within-DRG Case Complexity Change

Within-DRG case complexity measures the distribution of patients within DRGs and how this affects anticipated costliness. It may increase

because patients with a particular principal diagnosis are sicker when they enter the hospital or because less complex patients are being increasingly treated in other settings. For several years, the Commission's estimates of within-DRG case complexity change were based on analyses by SysteMetrics, Inc.[14] These studies were conducted using a database that consisted of all Medicare discharges from a 10 percent stratified random sample of PPS hospitals in each year. Each discharge was classified within the DRG based on the principal diagnosis, disease stage, and the number of unrelated comorbidities. Disease stage was assigned using SysteMetrics' patient classification system, Disease Staging.

Within-DRG case complexity change has generally decreased over time. This results from refinements to the DRGs, with cases grouped more accurately with others of similar complexity and costliness. However, SysteMetrics' estimate of within-DRG case complexity change increased from 0.7 percent in fiscal year 1991 to 1.0 percent in 1992. These results may have been due to the effect of upcoding rather than to real case complexity change.

Given these technical difficulties and the apparent stabilization of case-mix change at the time, the Commission concluded that within-DRG case complexity changed 0.4 percent in 1993, 0.2 percent in 1994, and 0.2 percent in 1995. It estimated a zero percent to 0.2 percent range in 1996. ProPAC estimates that within-DRG case complexity change will be between zero percent and 0.2 percent in 1997.

Overall Adjustment

The Commission's judgment is that the effects of upcoding and within-DRG case complexity change should offset each other. Therefore, the appropriate case-mix adjustment to the update for fiscal year 1998 is zero.

FISCAL YEAR 1998 UPDATE FOR PAYMENTS TO DIALYSIS FACILITIES

Since 1983, dialysis facilities have been paid a prospectively set amount per dialysis treatment provided to patients with ESRD.[15] This amount, called the composite rate, was developed in 1983 based on a sample of Medicare Cost Reports from 1977 through 1979. It represents the median cost per treatment, weighted for the proportion of patients that dialyzed in the facility and at home.[16]

The base composite rates for independent and hospital-based facilities are $122 and $126 per treatment, respectively. The labor-related portion of each facility's base rate is adjusted by its wage index. These indexes reflect the relative differences in labor prices across geographic areas. Unlike payments to PPS hospitals, the composite rate has not been updated annually. Although minor changes were made in 1986 and 1991, current payments per treatment are essentially equal to those set in 1983.

The Omnibus Budget Reconciliation Act of 1990 requires ProPAC to recommend an update to the composite rate each year. The Commission uses a consistent analytic framework to develop its update recommendation for dialysis; this framework is conceptually similar to the one used for PPS hospitals. ProPAC's recommendation is intended to adjust the composite rate to account for expected changes in the cost of dialysis treatment. In addition, the Commission assesses the appropriateness of current payment rates by examining the relationship between facility costs and Medicare payments, and the change in this relationship over time.

ProPAC's Update Framework

The update framework for dialysis facilities consists of three components. The market basket index measures the increase in the price of inputs. Both the allowance for scientific and technological advances and the target for productivity improvement account for changes in the use of inputs resulting from the cost-increasing effects of scientific innovations and from gains in efficiency.

Market Basket Index—The market basket index is a measure of the expected effect of price inflation on the cost of providing a dialysis treatment. Because an index specific to dialysis facilities is not available, ProPAC constructs its own. The dialysis market basket has four components—capital, labor, other direct costs, and overhead—representing the full range of goods and services purchased by dialysis facilities. Each component is associated with a forecasted price change, which is measured by a proxy. Select price proxies from HCFA's PPS hospital, skilled nursing facility, and home health agency market basket indexes were combined to construct the price proxies for dialysis facilities.[17] Each component also is associated with a weight that represents its proportion of total facility costs. These weights are based on the cost allocations reported by facilities in unaudited 1995 cost reports.[18] The change in the market basket index is, therefore, the sum of the weighted price changes for the four components.

The market basket analysis indicates that prices will rise by 2.8 percent for independent and hospital-based dialysis facilities between fiscal years 1997 and 1998.

Scientific and Technological Advances—The S&TA allowance is intended to recognize the costs associated with the adoption and diffusion of scientific innovations that improve the quality of patient care. The dialysis S&TA allowance reflects the incremental operating and capital costs of substantial advances that increase the cost of providing routine services covered by the composite rate.

Past S&TA allowances have ranged from 0.6 percent to 1.1 percent (see Table A-6). These estimates of S&TA costs were derived from technology-specific analyses performed for ProPAC.[19] This year, to evaluate the broad effects of S&TA on dialysis costs, ProPAC used a qualitative approach similar to the one used for the PPS hospital operating update recommendation. This study began by reviewing the technologies that were included in the prior years' analyses. Recent industry trends in the use and cost of new technologies were then examined to determine the level of the increase in facilities' cost per treatment due to S&TA, compared to last year.[20]

The study suggests that the emerging technologies included in last year's S&TA allowance are continuing to diffuse and are likely to boost the costs of dialysis in the coming year. These are newer generation hemodialysis machines, computer

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Table A-6. Scientific and Technological Advances Allowances for Dialysis Facilities, Fiscal Years 1994-1997 (In Percent)

Fiscal Year	Percent of Total Dialysis Payments
1994	1.1%
1995	0.7
1996	0.6
1997	0.7

SOURCE: ProPAC.

information systems (such as those used to create treatment records and to analyze trends in chemical balances), kinetic modeling (an algorithm comparing delivered and prescribed dialysis doses, which requires blood tests or used dialysate samples), increased dialysate needs in peritoneal dialysis patients, and new cycling machines for continuous cycling peritoneal dialysis. The evidence is less clear whether synthetic dialyzers and blood volume/hematocrit monitors will increase S&TA costs. Two newer technologies, home hemodialysis machines and single exchange cyclers for continuous ambulatory peritoneal dialysis (CAPD) patients, are not expected to affect 1998 costs, but may increase dialysis costs in the future.

On the basis of this review, ProPAC concluded that the increase in costs due to technological advances should be consistent with prior estimates. The S&TA allowance for fiscal year 1998 thus ranges from 0.5 percent to 1.0 percent.

Productivity Improvements—The productivity adjustment reflects the cost-decreasing effects of using inputs more efficiently. Historically, substantial productivity improvements in the dialysis industry have resulted in substantial cost reductions. Although the data indicate that productivity has improved in the recent past as well, comparable gains are not likely for fiscal year 1998 (see Table A-7).

Trends in a number of productivity indicators from the Medicare Cost Report are examined to estimate the productivity gains dialysis facilities can reasonably be expected to attain in the coming year. These indicators are the number of total treatments (including hemodialysis and peritoneal dialysis) per FTE, staff mix, the number of in-facility hemodialysis treatments per station, the average length of a hemodialysis session, and the average number of times dialyzers are reused.

Dialysis facilities have increased staff productivity, shown by the increase in the number of total treatments per FTE. This measure suggests that labor productivity is higher at independent facilities than at hospital-based facilities. Facilities based in hospitals have a more highly skilled mix of staff; this is measured by the ratio of registered nurses (RNs) to all direct patient care staff (including RNs, licensed practical nurses, nursing assistants, and technicians). Hospital-based facilities have an RN to all staff ratio of 0.55, compared to 0.36 in independent facilities. This ratio has remained relatively stable since fiscal year 1991 for both types of facilities.

Dialysis facilities have also been more productive with capital, increasing the number of hemodialysis treatments provided per station. Hospital-based facilities have higher capital productivity than independent facilities. At the same time, the average length of dialysis in hospital-based facilities is about 4.5 hours, a level that has remained stable since 1991. The average length of dialysis in independent facilities is 4.3 hours.

On the basis of these measures, the Commission believes that providers can continue to achieve modest productivity improvements of between 0.5 percent to 1.0 percent, offsetting the costs of S&TA.

Dialysis Facility Costs and Payments

ProPAC uses its update framework as the basis of its update recommendation, but it has also considered other factors. These factors include evidence regarding quality of care provided by dialysis facilities, and the adequacy of payment rates.

Medicare payment to cost ratios measure the extent to which Medicare's dialysis payments cover the costs of providing these services to beneficiaries. Aggregate facility costs were calculated from the most recent available data, unaudited fiscal year 1995 cost reports. The payments are based on wage-adjusted composite rates for each facility, including in-facility hemodialysis and home CAPD.[21] These ratios were updated to reflect 1997 costs.

Table A-7. Productivity Indicators for Hospital-Based and Independent Dialysis Facilities, Fiscal Years 1991-1995

Facility Type (Fiscal Year)	Total Treatments Per FTE	Staff Mix	Hemodialysis Treatments Per Station	Length of Dialysis (In Hours)
Hospital-based				
1991	558	0.64	630	4.5
1992	568	0.63	630	4.5
1993	575	0.63	646	4.3
1994	602	0.61	648	4.5
1995	644	0.58	646	4.5
Independent				
1991	619	0.35	554	4.5
1992	631	0.33	567	4.5
1993	615	0.35	560	4.5
1994	672	0.36	572	4.2
1995	687	0.36	572	4.3

Note: FTE = full-time equivalent employee. Staff mix = ratio of registered nurses to direct patient care staff, including registered and licensed practical nurses, nursing assistants, and technicians.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

ProPAC is concerned about the quality and accuracy of Medicare Cost Report data for dialysis facilities. Cost and treatment data are missing, inconsistent across facilities, and widely variable; these problems may occur because data are not used for payment purposes. Data from hospital-based facilities are especially poor, and information on peritoneal dialysis costs is particularly unreliable.

Facility Costs and Payments for Fiscal Year 1995—The 1994 and 1995 data are from improved cost reports for independent facilities, which were introduced in 1994. Among other changes, the new format corrects for an overhead allocation error in which a portion of independent facilities' indirect administrative and general costs was incorrectly removed from facility cost estimates. The cost estimates based on the new cost report therefore are higher than before. Largely because of this correction, the aggregate payment to cost ratio for independent facilities fell from 1.11 in 1993 to 1.04 in 1994 (see Table A-8).

In fiscal year 1995, Medicare payments covered about 74 percent of the costs reported by hospital-based facilities. Independent facilities fared better, with payments in 1995 that covered 103 percent of the reported costs of dialysis treatment. Most hospital-based facilities (84 percent) reported losses in 1995, as did 45 percent of independent facilities. Nevertheless, more than 40 percent of independent providers had payment to cost ratios higher than 1.05. The 10 percent of facilities with the best performance had an aggregate payment to cost ratio of 1.40.

The data indicate the presence of economies of scale for both types of facilities; that is, facilities that provide more treatments have lower costs per treatment, and thus have higher payment to cost ratios. In fiscal year 1995, Medicare covered 79 percent of its reported costs in large hospital-based facilities, whereas in small hospital-based facilities, payments covered only 60 percent of costs. The payment to cost ratio for dialysis treatments in large independent facilities was 1.06, while in small facilities the ratio dipped to 0.93.

Payment to cost ratios for independent facilities were one percentage point higher in 1994 if the facility was proprietary, rather than nonprofit. The difference widened in 1995 because the ratio for nonprofit facilities fell from 1.03 to 0.97, while the ratio for proprietary facilities stayed at 1.04.

Estimated Costs and Payments for Fiscal Year 1997—Costs for 1997 were estimated by inflating unaudited 1995 costs by ProPAC's dialysis market

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Table A-8. Payment to Cost Ratios for Hospital-Based and Independent Dialysis Facilities, for All Dialysis Treatments, Fiscal Years 1991-1995

	Hospital-Based Facilities					Independent Facilities				
Facility Type	1991	1992	1993	1994	1995	1991	1992	1993	1994	1995
All	0.80	0.78	0.77	0.77	0.74	1.13	1.12	1.11	1.04	1.03
Urban	0.80	0.77	0.76	0.77	0.73	1.13	1.12	1.12	1.05	1.03
Rural	0.83	0.82	0.87	0.82	0.81	1.12	1.12	1.08	1.01	1.02
Nonprofit	0.80	0.78	0.77	0.77	0.73	1.03	1.02	1.05	1.03	0.97
Profit	0.86	0.67	0.99	1.07	1.07	1.14	1.14	1.12	1.04	1.04
Small	0.69	0.64	0.62	0.64	0.60	1.04	1.03	1.00	0.95	0.93
Medium	0.77	0.75	0.71	0.71	0.68	1.11	1.10	1.09	1.02	1.01
Large	0.87	0.83	0.85	0.85	0.79	1.17	1.16	1.16	1.08	1.06

Note: Includes both hemodialysis and peritoneal dialysis.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

basket index for 1996 and 1997. For 1997, ProPAC estimates that composite rate payments to independent dialysis facilities will be 2 percent below unaudited costs, while payments to hospital-based facilities will cover 71 percent of costs. Audited cost data, however, would probably indicate more favorable financial performance.

Unaudited cost reports overstate true Medicare-allowable costs because of nonallowable or incorrectly reported expenses. When HCFA audited a sample of 1991 dialysis facility cost reports, it found that independent dialysis facilities overreported their costs by 12.2 percent and hospital-based facilities overreported their costs by 4.6 percent. The National Renal Administrators Association (NRAA), however, has argued that Medicare's definition of allowable costs understates the actual costs of providing dialysis. Specifically, the NRAA maintains that the salary limits for the medical director and facility administrator are too low because they were established in 1984 and have not been updated. The Commission estimated that if these salaries were not held to 1984 levels, the independent facility adjustment would be 10.5 percent. Further, the differential between actual and audited costs may be narrower than indicated by the analysis because of efforts by HCFA and the NRAA to make cost reporting more accurate.

Since past experience has demonstrated that reported costs are overstated, but recent information suggests that the differential has been reduced, the true costs of providing dialysis are unknown. Actual payment to cost ratios in fiscal year 1997 are sensitive to the level of the audit adjustment that is applied to costs. An appropriate adjustment is probably less than 10.5 percent for independent facilities and 4.6 percent for hospital-based ones. Therefore, for hospital-based facilities, aggregate payments are unlikely to cover reported costs, which include allocated overhead expenses from the hospital (see Table A-9). Payments probably remain above costs in independent facilities.

Table A-9. Estimated Payment to Cost Ratios for Hospital-Based and Independent Dialysis Facilities, With and Without Audit Adjustment, Fiscal Year 1997

Facility Type	Cost Per Treatment	Payment to Cost Ratio
Hospital-based		
Without audit	$185.08	0.71
With audit	176.56	0.74
Independent		
Without audit	127.90	0.98
With partial audit	114.47	1.10
With full audit	112.29	1.12

Note: The hospital-based audit adjustment is 4.6 percent, the independent partial audit adjustment is 10.5 percent, and the independent full audit adjustment is 12.2 percent.

SOURCE: ProPAC analysis of Medicare Cost Report data from the Health Care Financing Administration.

Notes to Appendix A

1. HCFA uses equal blends of hospital worker wages and economywide wages to represent the price increases for the professional and technical worker category, which accounts for 65.7 percent of total hospital labor expenses. Wage inflation in the other occupational categories included in the market basket is represented only by proxies based on economywide wages. By contrast, ProPAC uses equal blends of hospital worker wages and economywide wages for all occupational groups.

2. Abt Associates, Inc., *The Incremental Impact of Scientific and Technological Advances on Operating Costs in PPS Hospitals and PPS-Excluded Facilities (FY 1995)*, ProPAC Extramural Technical Report E-94-02, January 1994. Costs and diffusion rates for the chosen technologies were estimated by medical and industry experts and reviewed by a technical advisory panel.

3. The *Hospital Technology Scanner, New England Journal of Medicine, Journal of the American Medical Association, FDA Medical Bulletin, Modern Healthcare*, and selected on-line sources were used in this review.

4. John A. Bittl, "Advances in Coronary Angioplasty," *New England Journal of Medicine* 335(17): 1290-1302, October 24, 1996.

5. Christoph Bode and others, "Randomized Comparison of Coronary Thrombolysis Achieved with Double-Bolus Reteplase (Recombinant Plasminogen Activator) and Front-Loaded, Accelerated Alteplase (Recombinant Tissue Plasminogen Activator) in Patients with Acute Myocardial Infarction," *Circulation* 94(5): 891-98, September 1, 1996.

6. Vladimir Hachinski, "Thrombolysis in Stroke: Between the Promise and the Peril," *Journal of the American Medical Association* 276(12): 995-96, September 25, 1996.

7. Ronald G. Evens, "Radiology," *Journal of the American Medical Association* 275(23): 1854-55, June 19, 1996.

8. Food and Drug Administration, "Radiolabeled Antibodies for Diagnostic Imaging," *FDA Medical Bulletin* 26(3): 2-3, October 1996.

9. Donald A.B. Lindberg and Betsy L. Humphreys, "Medical Informatics," *Journal of the American Medical Association* 275(23): 1821-22, June 19, 1996.

10. These estimates are based on data from the American Hospital Association National Hospital Panel Survey.

11. Prospective Payment Assessment Commission, *Medicare and the American Health Care System, Report to the Congress*, June 1996, p. 76.

12. The commonly cited breakpoint between periods of robust productivity gains and much smaller gains, each lasting more than two decades, is 1973.

13. RAND Corporation, *Methodology for Measuring Case-Mix Change: How Much Change in the Case Mix Index is DRG Creep?* ProPAC Extramural Technical Report E-90-05, April 1990.

14. SysteMetrics, Inc., *Within DRG Case Complexity Change, 1992*, ProPAC Extramural Technical Report E-94-01, March 1994.

15. Medicare beneficiaries with end-stage renal disease have little or no kidney function; most are treated with dialysis. Dialysis is a process for removing dissolved substances from the patient's body by diffusion across a semipermeable membrane.

16. Two types of dialysis are commonly used: hemodialysis and peritoneal dialysis. Hemodialysis removes toxins, electrolytes, and fluid by circulating blood through a dialyzing membrane outside of the body (the "artificial kidney," or dialyzer). Each treatment lasts about three to five hours and is performed three times a week, usually at a dialysis facility. Peritoneal dialysis, which usually takes place at the patient's home, involves the infusion of dialysate solution into

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the peritoneal cavity through an indwelling catheter inserted into the abdomen. The peritoneal membrane acts as the dialyzing membrane. When the dialyzing solution is drained, waste products are removed. Continuous ambulatory peritoneal dialysis (CAPD) and continuous cycling peritoneal dialysis (CCPD) are two forms of peritoneal dialysis. With CAPD, the patient performs several exchanges during the day, through the catheter, with the dialysate remaining in the peritoneum between exchanges. With CCPD, the patient uses a cycling machine at night that automatically performs the exchanges. The payment for peritoneal dialysis is made on a weekly basis and is equal to three times the composite rate.

17. Prospective Payment Assessment Commission, *End-Stage Renal Disease Payment Policy*, ProPAC Congressional Report C-92-04, June 1992, pp. 41-44. Price proxies specific to the dialysis industry are not available. Even if they were, they might not be appropriate. Given the sizable amount of vertical integration in the dialysis industry (that is, firms that own facilities often own laboratories or suppliers that service the facilites), changes in a dialysis-specific price index may be influenced by corporate pricing strategies rather than market forces.

18. The Medicare Cost Report for dialysis facilities assigns all expenses into eight cost centers. These cost centers were collapsed into the four broader categories that make up the market basket.

19. Abt Associates, Inc., *The Incremental Impact of Scientific and Technological Advances on Cost Increases in Dialysis Facilities (FY 1997)*, ProPAC Extramural Technical Report E-96-01, January 1996. The cost for each selected technology was derived by estimating the cost per treatment of that technology and multiplying it by the number of beneficiaries expected to use it in the upcoming year. The total cost for all the technologies was then expressed as a percentage of total payments.

20. *Contemporary Dialysis & Nephrology*, informal discussions with exhibitors at the 1996 annual conference of the National Renal Administrators Association, and several on-line sources were used in this review.

21. Aggregate payments used in this analysis do not include additional payments that facilities receive through the exceptions process. HCFA estimates that current exceptions increase total payments to hospital-based facilities by about $2 per treatment and to independent facilities by about five cents per treatment.

Appendix B. Biographical Sketches of Commissioners

Joseph P. Newhouse, Chairman

Joseph P. Newhouse is the John D. MacArthur Professor of Health Policy and Management at Harvard University and director of Harvard's Division of Health Policy Research and Education. He has been at Harvard since 1988. Before that, Dr. Newhouse was deputy program manager for health sciences research and head of the Economics Department at RAND. He has conducted research in health care financing, economics, and policy and was principal investigator for the RAND Health Insurance Study. Dr. Newhouse has served on many technical panels and commissions for both government and private health-related organizations, including the National Academy of Social Insurance, the Agency for Health Care Policy and Research, the Health Care Financing Administration, the Workers' Compensation Research Institute, and the Association of American Medical Colleges. He is a member of the governing council of the Institute of Medicine of the National Academy of Sciences, a former member of the Physician Payment Review Commission, and a past president of the Association for Health Services Research. Dr. Newhouse has been elected to the American Academy of Arts and Sciences. He is editor of the *Journal of Health Economics* and associate editor of the *Journal of Economic Perspectives*. Dr. Newhouse received a B.A. from Harvard College and a Ph.D. in economics from Harvard University.

Susan S. Bailis

Susan S. Bailis is president and chief operating officer of The A•D•S Group, a wholly owned subsidiary of the Multicare Companies, and a senior vice president of Multicare. From 1983 to 1985, Ms. Bailis was associate director of New England Medical Center, where she managed the hospital's entry into the long-term care field. Earlier, she was director of social services at the medical center. Ms. Bailis has held a number of academic appointments, most recently as assistant professor of psychiatry at Tufts University School of Medicine. She serves on the boards of several hospitals and has held leadership positions in many local and national professional and community organizations. These include the executive committee of the American Health Care Association, president of the Massachusetts Federation of Nursing Homes, the board of the Big Sister Association, the board of Simmons College, and the board of overseers of the Florence Heller School at Brandeis University. In addition, Ms. Bailis is secretary of the National Association of Social Workers and president-elect of the Society for Hospital Social Work Directors of the American Hospital Association. A member of the Business Leadership Forum and Women's Leadership Forum of the Democratic National Committee, she also served on the Massachusetts Medicaid State Advisory Board. Ms. Bailis has published and lectured widely on health care and social welfare policy. She received a B.A. from Brandeis University and an M.S.W. from Simmons College School of Social Work.

Clay D. Edmands

Clay D. Edmands is president of Salina Regional Health Center in Salina, Kansas, an acute care rural referral center. His prior experience includes several years with the Fairview Community Hospital System in Minneapolis, where he held various positions, among them administrator for development and operations of regional health management and supportive services. Mr. Edmands was on the board of the Kansas Hospital Association from 1980 to 1992, serving as chairman, treasurer, and member of the executive committee. In addition to serving two terms on a regional policy advisory board of the American Hospital Association, Mr. Edmands was board president of the Health Systems Agency of Western Kansas. He is currently a preceptor for the University of Kansas program in health care administration and chair of the university's health care services advisory board. He holds a B.S. in business administration from the University of Kansas and an M.H.A. from the University of Minnesota.

Spencer Foreman

Spencer Foreman is president of Montefiore Medical Center of the Albert Einstein College of Medicine in the Bronx, New York. Before assuming leadership of Montefiore in 1986, Dr. Foreman

was president of Sinai Hospital in Baltimore. He is a board-certified pulmonary specialist, a fellow of the American College of Physicians and the New York Academy of Medicine, and a member of the National Academy of Science's Institute of Medicine. A professor of medicine and epidemiology and social medicine at the Albert Einstein College of Medicine, Dr. Foreman is a member of the boards of directors of the American Joint Jewish Distribution Committee and Ursinus College. He was chairman of the Association of American Medical Colleges and the Liaison Committee on Medical Education. He is a member and former board chairman of both the League of Voluntary Hospitals in New York and the board of governors of the Greater New York Hospital Association. Dr. Foreman is also a member of the board of trustees of the American Hospital Association and the board of directors of the Hospital Association of New York State. For 11 years, he served as a commissioned officer in the U.S. Public Health Service. He received a B.S. from Ursinus College and an M.D. from the University of Pennsylvania.

Spencer Johnson

Spencer Johnson has been president of the Michigan Health and Hospitals Association since 1985. Previously, he was executive vice president of the Hospital Association of New York State. Mr. Johnson's prior experience includes staff positions on the U.S. Senate Committee on Human Resources and in the U. S. House of Representatives. He was associate director of the Domestic Council for Health, Social Security, and Income Assistance from 1976 to 1977, where he was responsible for policy planning and development for President Gerald Ford. Mr. Johnson has been a member of the American Hospital Association's State Issues Forum and Council on Allied and Government Relations. He has served on various boards, including those of the Albany Medical College, the Washington Hospital Center, the Alpha Center for Health Planning, and the Genesee Regional Health Planning Council. He is currently a board member of Blue Cross Blue Shield of Michigan. Mr. Johnson received a B.A. in journalism from St. Bonaventure University and an M.P.A. in health policy and planning from Cornell University.

Clark E. Kerr

Clark E. Kerr is president of ConsumerFirst, a nonprofit public benefit corporation, and is chief executive officer of ConsumerFirst Television. He chairs the California Health Policy and Data Advisory Commission and the California Health Information Committee. He is a member of the board of directors of the Integrated Healthcare Association and is a member of the Health Benefits Advisory Council for the California Public Employees Retirement System. In addition, Mr. Kerr is executive producer and cohost of Health Upbeat, a television series on health care quality, access, and costs. Before joining ConsumerFirst, he held various positions at Bank of America, including vice president of government relations, manager of corporate health programs, and manager of benefits planning. Mr. Kerr formerly was the president of the California Business Group on Health, and a member of the boards of directors of the Washington Business Group on Health, the Pacific Business Group on Health, and the National Committee for Quality Assurance. He received a B.A. from the University of California, Davis, and an M.B.A. from the University of California, Berkeley.

James R. Kimmey

James R. Kimmey is vice president for health sciences and professor of public health at the St. Louis University Health Sciences Center, as well as professor of community and family medicine at the St. Louis University School of Medicine. In addition, Dr. Kimmey serves as chair and chief executive officer of SLUCare, the clinical services division of the university. He has taught at the University of Wisconsin, Johns Hopkins University, New York University, and Columbia University. He served as a commissioned officer in the Public Health Service (1962–68) and as president of the Institute for Health Planning (1978–87). Dr. Kimmey was administrator of the Division of Health Policy and Planning of the state of Wisconsin and executive director of the American Public Health Association. He served as president of the American Health Planning Association (1980–81) and was on its board of directors. Former editor of *Health Planning Memorandum* and managing editor of the *American Journal of Public Health*,

he has written extensively on health planning and other health policy topics. Dr. Kimmey received B.S., M.S., and M.D. degrees from the University of Wisconsin and an M.P.H. from the University of California, Berkeley.

Judith R. Lave

Judith R. Lave is professor of health economics and codirector of the Center for Research on Health Care at the University of Pittsburgh. She holds a primary academic appointment at the University of Pittsburgh Graduate School of Public Health, and secondary appointments in the Departments of Psychiatry, Economics, and the Katz Graduate School of Business. Formerly, Dr. Lave was a faculty member at Carnegie-Mellon University. At the U.S. Department of Health and Human Services, she was director of the Division of Economic and Quantitative Analysis and director of the Office of Research in the Health Care Financing Administration. Dr. Lave is also a member of the National Academy of Science's Institute of Medicine and the National Academy of Social Insurance. She is a distinguished fellow and past president of the Association for Health Services Research and a past president of the Foundation for Health Services Research. Dr. Lave chaired the technical panel on health and was a member of the expert panel on income and health care for the Advisory Council on Social Security. She serves on the editorial boards of the *Journal of Health Politics, Policy, and Law* and the *Health Administration Press,* and is a member of the Institute of Medicine's report review committee. Dr. Lave has also served as a consultant to numerous private and public organizations in the United States and Canada. She received a B.A. and an honorary LL.D. from Queens University in Canada and a Ph.D. in economics from Harvard University.

Hugh W. Long

Hugh W. Long is professor of health systems management at the Tulane University School of Public Health and Tropical Medicine. He also holds appointments with Tulane's Freeman School of Business, School of Law, and graduate faculty and is the director of the master of medical management degree program. Dr. Long has taught at Yale University, Stanford University, San Jose State University, and Ohio State University. He is acting chair of the Medicare Geographic Classification Review Board. Dr. Long has served as a witness and ad hoc adviser on health care financing to the U.S. House of Representatives' Committee on Ways and Means and to the U.S. Senate Committee on Finance. He has written numerous articles on health care financing and management and serves on the editorial board of *Decisions in Imaging Economics.* He is also a member of the Louisiana bar. Dr. Long received a B.A. from Ohio State University, an M.B.A. and a Ph.D. in business administration and finance from Stanford University, and a J.D. from the Tulane University School of Law.

William A. MacBain

William A. MacBain is executive director, Geisinger Health Plan, Inc., and senior vice president, Health Plan Operations–New York, of the Geisinger Health System. He is also a board member and past chairman of the Managed Care Association of Pennsylvania and a board member of the American Association of Health Plans. Before joining Geisinger, Mr. MacBain was chief operating officer at HMO of Western Pennsylvania. Formerly, he was director of operations at HMO of Oklahoma, vice president of finance with the Nassau Plan for Healthcare, and director of administration/planning at PrePaid Health Plan. Before that, he was assistant director of operations at Health Services Association, and a public health investigator with the New York State Health Department. He received a B.A. and an M.H.A. from Cornell University.

Robert J. Myers

Robert J. Myers was chief actuary of the Social Security Administration from 1947 to 1970 and deputy commissioner of Social Security from 1981 to 1982. Currently, he is a member of the Committee of Actuaries of the United Nations Joint Staff Pension Fund, as well as president of the International Fisheries Commissions Pension Society. He is a trustee for several organizations, including the investment program of the American Association of Retired Persons. An active participant in retirement and pension plan issues, Dr. Myers chaired the Commission on Railroad Retirement Reform (1988–90) and the Railroad Unemployment Compensation Committee (1983–85). He served on the Commission on the Social Security "Notch" Issue

(1993–94) and was executive director of the National Commission on Social Security Reform (1982–83). In addition, Dr. Myers has served as an actuarial consultant to various congressional committees, as a technical adviser on Social Security and pension programs to numerous foreign countries, and as president of both the American Academy of Actuaries and the Society of Actuaries. He has published widely on topics related to Social Security and retirement, and is professor emeritus at Temple University. He received a B.S. degree from Lehigh University, an M.S. degree from the University of Iowa, and honorary degrees from Lehigh University and Muhlenberg College.

Glenda Rosenbloom

Glenda Rosenbloom is president of Rosenbloom and Associates. From 1983 to 1995, she was vice president of prospective payment for American Medical International. Previously, she was health care consulting manager at Ernst & Whinney, where she was responsible for training hospital personnel implementing the Medicare prospective payment system. From 1972 to 1982, Ms. Rosenbloom was senior director for Medicare provider payment at the Blue Cross Blue Shield Association. Before that, she was audit supervisor at Peat, Marwick, Mitchell. Ms. Rosenbloom cochaired the Medicare Technical Advisory Group. She served on the board of the Federation of American Health Systems, chaired its legislative committee, and was vice chair of its health care financing committee. She received a B.S. from the University of Illinois and is a certified public accountant.

Gerald M. Shea

Gerald M. Shea is assistant to the president for government affairs of the American Federation of Labor-Congress of Industrial Organizations. Previously, he served there as executive assistant to both the president and the secretary-treasurer, and was director of the employee benefits department. Mr. Shea also headed the A.F.L.–C.I.O.'s health care reform campaign. His prior experience includes 12 years with the national office of the Service Employees International Union, where he held various positions, including assistant to the president for government affairs and health care division director. Before that, he was executive director and business manager of two local union offices. Mr. Shea is a member of the Joint Commission on the Accreditation of Health Care Organizations and the Advisory Board of the Social Security Administration. He received a B.A. from Boston College.

Roxane B. Spitzer

Roxane B. Spitzer is professor and associate dean for practice management at Vanderbilt University School of Nursing, professor of management at Vanderbilt's Owen Graduate School of Management, and executive director of University Community Health Systems. Previously, she was vice president of managed care at MEDICUS Systems. She also has been corporate vice president of St. Joseph Health System and chief operating officer of the Good Samaritan Hospital in Los Angeles. She holds various professorships at Texas Tech University Health Sciences Center; University of Southern California; University of California, Los Angeles; and Vanderbilt University. From 1981 to 1988, Dr. Spitzer was vice president, patient care services, at Cedars-Sinai Medical Center. Previously, she was director of nursing and practiced nursing in both inpatient and public health settings. She is a fellow of the American Academy of Nursing, a diplomate of the American College of Healthcare Executives, and serves on many other boards. She received a B.S. from Adelphi University, an M.A. in nursing service administration from Columbia University, and both an M.A. in management and an M.B.A. from Claremont Graduate School. Dr. Spitzer holds a Ph.D. in management from the Peter Drucker Management Center, Claremont Graduate School.

James R. Tallon Jr.

James R. Tallon Jr. is president of the United Hospital Fund of New York. He also chairs the Kaiser Commission on the Future of Medicaid and is a visiting lecturer at the Harvard University School of Public Health. In addition, Mr. Tallon is a member of the board of commissioners of the Joint Commission on the Accreditation of Healthcare Organizations. He serves on the boards of the Alliance for Health Reform, the Alpha Center for Health Planning, the Association for Health Services Research, the Commonwealth Fund, and the New York Academy of Medicine. Prior to joining the United Hospital Fund, he was the majority leader of the New York State Assembly, where he

served for 19 years beginning in 1975. Mr. Tallon was a member of the executive committee of the National Academy for State Health Policy and was liaison from the National Conference of State Legislatures to the President's Task Force on Health Care Reform. Before his election to the Assembly, Mr. Tallon was the executive director of the NYPENN Health Planning Council. He received a B.A. from Syracuse University and an M.A. from Boston University. Mr Tallon also holds honorary degrees from the College of Medicine and School of Graduate Studies of the State University of New York Health Science Center in Brooklyn, and New York Medical College.

Jae L. Wittlich

Jae L. Wittlich is president and chief operating officer, group operations, CNA Insurance Companies. He also served as vice president of the group benefits department from 1985 to 1990 and as vice president of the group operations division from 1977 to 1985. Before joining CNA Insurance, Mr. Wittlich was with Allstate for 12 years, most recently as assistant vice president of group life and health operations. He is currently chairman of the board of directors of the Health Insurance Association of America. Besides being a member of the executive committee and board of directors of the Association of Private Pension and Welfare Plans, he serves on the boards of directors of AmeriChoice Corporation; the Foundation for Health Enhancement; Managed Healthcare Systems of New York; and Private Healthcare Systems, Inc. In addition, Mr. Wittlich has served on many other industry association committees and lectured frequently on health care topics. He received the 1990 Health Insurance Association of America's Founders Medal. Mr. Wittlich is a fellow of the Society of Actuaries and a member of the American Academy of Actuaries. He holds B.A. and M.A. degrees from the University of Michigan.

Appendix C. Statutory Mandate of the Commission

The Congress established the Prospective Payment Assessment Commission (ProPAC) in Public Law 98-21 (the Social Security Amendments of 1983) on April 20, 1983. The current responsibilities of ProPAC are set forth in sections 1862(a) and 1886 of the Social Security Act. Further responsibilities are set forth in various Acts and conferences reports. Below are the passages of the relevant legislative sources, as amended through 1994.

Section 1886(d) of the Social Security Act

(4)(C)(i) The Secretary shall adjust the classifications and weighting factors established under subparagraphs (A) and (B) [DRG classifications], for discharges in fiscal year 1988 and at least annually thereafter, to reflect changes in treatment patterns, technology, and other factors which may change the relative use of hospital resources.

(ii) For discharges in fiscal year 1990, the Secretary shall reduce the weighting factor for each diagnosis-related group by 1.22 percent.

(iii) Any such adjustment under clause (i) for discharges in a fiscal year (beginning with fiscal year 1991) shall be made in a manner that assures that the aggregate payments under this subsection for discharges in the fiscal year are not greater or less than those that would have been made for discharges in the year without such adjustment.

(iv) The Secretary shall include recommendations with respect to adjustments to weighting factors under clause (i) in the annual report to Congress required under subsection (e)(3)(B).

Section 1886(e)(2) through (6) of the Social Security Act

(2)(A) The Director of the Congressional Office of Technology Assessment (hereinafter in this subsection referred to as the "Director" and the "Office," respectively) shall provide for appointment of a Prospective Payment Assessment Commission (hereinafter in this subsection referred to as the "Commission"), to be composed of independent experts appointed by the Director (without regard to the provisions of title 5, United States Code, governing appointments in the competitive service). The Commission shall review the applicable percentage increase factor described in subsection (b)(3)(B) and make recommendations to the [Congress] on the appropriate percentage change which should be effected for hospital inpatient discharges under subsections (b) and (d) for fiscal years beginning with fiscal year 1986. In making its recommendations, the Commission shall take into account changes in the hospital market-basket described in subsection (b)(3)(B), hospital productivity, technological and scientific advances, the quality of health care provided in hospitals (including the quality and skill level of professional nursing required to maintain quality care), and long-term cost-effectiveness in the provision of inpatient hospital services.

(B) In order to promote the efficient and effective delivery of high-quality health care services, the Commission shall, in addition to carrying out its functions under subparagraph (A), study and make recommendations for each fiscal year regarding changes in each existing reimbursement policy under this title under which payments to an institution are based upon prospectively determined rates and the development of new institutional reimbursement policies under this title, including recommendations related to payments during such fiscal year under the prospective payment system established under this section for determining payments for the operating costs of inpatient hospital services, including changes in the number of diagnosis-related groups used to classify inpatient hospitals discharges under subsection (d), adjustments to such groups to reflect severity of illness, and changes in the methods by which hospitals are reimbursed for capital-related costs, together with general recommendations on the effectiveness and quality of health care delivery systems in the United States and the effects on such systems of institutional reimbursements under this title.

(C) By not later than June 1 of each year, the Commission shall submit a report to Congress containing an examination of issues affecting health

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care delivery in the United States, including issues relating to—

(i) trends in health care costs;

(ii) the financial condition of hospitals and the effect of the level of payments made to hospitals under this title on such condition;

(iii) trends in the use of health care services; and

(iv) new methods used by employers, insurers, and others to constrain growth in health care costs.

(3)(A) The Commission, not later than March 1 before the beginning of each fiscal year (beginning with fiscal year 1986) shall report its recommendations to Congress on an appropriate change factor which should be used for inpatient hospital services in that fiscal year, together with its general recommendations under paragraph (2)(B) regarding the effectiveness and quality of health care delivery systems in the United States.

(B) The Secretary, not later than April 1, 1987, for fiscal year 1988 and not later than March 1, before the beginning of each fiscal year (beginning with fiscal year 1989), shall report to the Congress the Secretary's initial estimate of the percentage change that the Secretary will recommend under paragraph (4) with respect to that fiscal year.

(4)(A) Taking into consideration the recommendations of the Commission, the Secretary shall recommend for each fiscal year (beginning with fiscal year 1988) an appropriate change factor for inpatient hospital services for discharges in that fiscal year which will take into account amounts necessary for the efficient and effective delivery of medically appropriate and necessary care of high quality. The appropriate change factor may be different for all large urban subsection (d) hospitals, other urban subsection (d) hospitals, urban subsection (d) Puerto Rico hospitals, rural subsection (d) hospitals, and rural subsection (d) Puerto Rican hospitals, and all other hospitals and units not paid under subsection (d), and may vary among such other hospitals and units.

(B) In addition to the recommendation made under subparagraph (A), the Secretary shall, taking into consideration the recommendations of the Commission under paragraph (2)(B), recommend for each fiscal year (beginning with fiscal year 1992) other appropriate changes in each existing reimbursement policy under this title under which payments to an institution are based upon prospectively determined rates.

(5) The Secretary shall cause to have published in the *Federal Register,* not later than—

(A) the May 1 before each fiscal year (beginning with fiscal year 1986), the Secretary's proposed recommendations under paragraph (4) for that fiscal year for public comment, and

(B) the September 1 before such fiscal year after such consideration of public comment on the proposal as is feasible in the time available, the Secretary's final recommendations under such paragraph for that year.

The Secretary shall include in the publication referred to in subparagraph (A) for a fiscal year the report of the Commission's recommendations submitted under paragraph (3) for that fiscal year. To the extent that the Secretary's recommendations under paragraph (4) differ from the Commission's recommendations for that fiscal year, the Secretary shall include in the publication referred to in subparagraph (A) an explanation of the Secretary's grounds for not following the Commission's recommendations.

(6)(A) The Commission shall consist of 17 individuals. Members of the Commission shall first be appointed no later than April 1, 1984, for a term of three years, except that the Director may provide initially for such shorter terms as will insure that (on a continuing basis) the terms of no more than seven members may expire in any one year.

(B) The membership of the Commission shall include individuals with national recognition for their expertise in health economics, health facility management, reimbursement of health facilities or other providers of services which reflect the scope of the Commission's responsibilities, and other related fields, who provide a mix of different professional, broad geographic representation, and a balance between urban and rural representatives, including physicians and registered professional nurses, employers, third party payors, individuals skilled in the conduct and interpretation of

biomedical, health services, and health economics research, and individuals having expertise in the research and development of technological and scientific advances in health care.

(C) Subject to such review as the Office deems necessary to assure the efficient administration of the Commission, the Commission may—

(i) employ and fix the compensation of an Executive Director (subject to the approval of the Director of the Office) and such other personnel (not to exceed 25) as may be necessary to carry out its duties (without regard to the provisions of the title 5, United States Code, governing appointments in the competitive service);

(ii) seek such assistance and support as may be required in the performance of its duties from appropriate Federal departments and agencies;

(iii) enter into contracts or make other arrangements, as may be necessary for the conduct of the work of the Commission (without regard to section 3709 of the Revised Statutes (41 U.S.C. 5));

(iv) make advance, progress, and other payments which relate to the work of the Commission;

(v) provide transportation and subsistence for persons serving without compensation; and

(vi) prescribe such rules and regulations as it deems necessary with respect to the internal organization and operation of the Commission.

Section 10(a)(1) of the Federal Advisory Committee Act shall not apply to any portion of a Commission meeting if the Commission, by majority vote, determines that such portion of such meeting should be closed.

(D) While serving on the business of the Commission (including travel-time), a member of the Commission shall be entitled to compensation at the per diem equivalent of the rate provided for level IV of the Executive Schedule under section 5315 of title 5, United States Code; and while so serving away from home and his regular place of business, a member may be allowed travel expenses, as authorized by the Chairman of the Commission. Physicians serving as personnel of the Commission may be provided a physician comparability allowance by the Commission in the same manner as Government physicians may be provided such an allowance by an agency under section 5948 of title 5, United States Code, and for such purpose subsection (i) of such section shall apply to the Commission in the same manner as it applies to the Tennessee Valley Authority. For purposes of pay (other than pay of members of the Commission) and employment benefits, rights, and privileges, all personnel of the Commission shall be treated as if they were employees of the United States Senate.

(E) In order to identify medically appropriate patterns of health resources use in accordance with paragraph (2), the Commission shall collect and assess information on medical and surgical procedures and services, including information on regional variations of medical practice and lengths of hospitalization and on other patient-care data, giving special attention to treatment patterns for conditions which appear to involve excessively costly or inappropriate services not adding to the quality of care provided. In order to assess the safety, efficacy, and cost-effectiveness of new and existing medical and surgical procedures, the Commission shall, in coordination to the extent possible with the Secretary, collect and assess factual information, giving special attention to the needs of updating existing diagnosis-related groups, establishing new diagnosis-related groups, and making recommendations on relative weighting factors for such groups to reflect appropriate differences in resource consumption in delivering safe, efficacious, and cost-effective care. In collecting and assessing information, the Commission shall—

(i) utilize existing information, both published and unpublished, where possible, collected and assessed either by its own staff or under other arrangements made in accordance with this paragraph;

(ii) carry out, award grants or contracts for, original research and experimentation, including clinical research, where existing information is inadequate for the development of useful and valid guidelines by the Commission; and

(iii) adopt procedures allowing any interested party to submit information with respect to medical and surgical procedures and services (including new practices, such as the use of new technologies

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and treatment modalities), which information the Commission shall consider in making reports and recommendations to the Secretary and Congress.

(F) The Commission shall have access to such relevant information and data as may be available from appropriate Federal agencies and shall assure that its activities, especially the conduct of original research and medical studies, are coordinated with the activities of Federal agencies.

(G)(i) The Office shall have unrestricted access to all deliberations, records, and data of the Commission, immediately upon its request.

(ii) In order to carry out its duties under this paragraph, the Office is authorized to expend reasonable and necessary funds as mutually agreed upon by the Office and the Commission. The Office shall be reimbursed for such funds by the Commission from the appropriations made with respect to the Commission.

(H) The Commission shall be subject to periodic audit by the General Accounting Office.

(I)(i) There are authorized to be appropriated such sums as may be necessary to carry out the provision of this paragraph.

(ii) Eighty-five percent of such appropriation shall be payable from the Federal Hospital Insurance Trust Fund, and 15 percent of such appropriation shall be payable from the Federal Supplementary Medical Insurance Trust Fund.

(J) The Commission shall submit requests for appropriations in the same manner as the Office submits requests for appropriations, but amounts appropriated for the Commission shall be separate from amounts appropriated for the Office.

Section 1862(a) of the Social Security Act

(a) Notwithstanding any other provision of this title, no payment may be made under part A or part B for any expenses incurred for items or services—

(1)(A) which, except for items and services described in a succeeding subparagraph, are not reasonable and necessary for the diagnosis or treatment of illness or injury or to improve the functioning of a malformed body member,

(B) in the case of items and services described in section 1861(s)(10), which are not reasonable and necessary for the prevention of illness,

(C) in the case of hospice care, which are not reasonable and necessary for the palliation or management of terminal illness,

(D) in the case of clinical care items and services provided with the concurrence of the Secretary and with respect to research and experimentation conducted by, or under contract with, the Prospective Payment Assessment Commission or the Secretary, which are not reasonable and necessary to carry out the purposes of section 1886(e)(6), . . .

Section 1135(d) of the Social Security Act

(6)(A) The Secretary shall develop a model system for the payment for outpatient hospitals services other than ambulatory surgery.

(B) The Secretary shall submit to Congress a report on the model payment system under subparagraph (A) by January 1, 1991.

(7) The Secretary shall solicit the views of the Prospective Payment Assessment Commission in developing the systems under paragraphs (1) and (6), and shall include in the Secretary's reports under this subsection any views the Commission may submit with respect to such systems.

Section 9114 of the Consolidated Omnibus Budget Reconciliation Act of 1985, Pub. L. 99-272

(a) Disclosure of Information.—The Secretary of Health and Human Services shall make available to the Prospective Payment Assessment Commission, the Congressional Budget Office, and the Congressional Research Service the most current information on the payments being made under section 1886 of the Social Security Act to individual hospitals. Such information shall be made available in a manner that permits examination of the impact of such section on such hospitals.

(b) Confidentiality.—Information disclosed under subsection (a) shall be treated as confidential and shall not be subject to further disclosure in a manner that permits the identification of individual hospitals.

Section 6003(i) of the Omnibus Budget Reconciliation Act of 1989, Pub. L. 101-239: Legislative Proposal Eliminating Separate Average Standardized Amounts

(1) In General.—The Secretary of Health and Human Services (hereafter referred to as the "Secretary") shall design a legislative proposal eliminating the system of determining separate standardized amounts for subsection (d) hospitals (as defined in section 1886(d)(1)(B) of the Social Security Act) classified as being located in large urban, other urban, or rural areas under section 1886(d)(2)(D) of such Act, and shall include in such proposal the following—

(A) A transition period beginning in fiscal year 1992 during which a single rate for determining payment to hospitals in all areas shall be phased in with such single rate to be completely in effect by fiscal year 1995.

(B) Recommendations, where appropriate, for modifying or maintaining additional payments or adjustments under title XVIII of the Social Security Act for teaching hospitals, rural referral centers, sole community hospitals, disproportionate share hospitals, and outlier cases, and for creating additional payments or adjustments where deemed appropriate by the Secretary.

(C) Recommendations with respect to recalculating standardized amounts to reflect information from more recent cost reporting periods.

(D) Recommendations, where appropriate, for modifying reimbursement for hospitals that are not subsection (d) hospitals under title XVIII of such Act.

(E) A recommendation for a methodology to reflect the severity of illness of different patients within the same diagnosis related group (as determined in section 1886(d)(4)(B) of such Act).

(2) Report to Congress and ProPAC.—(A) Not later than October 1, 1990, the Secretary shall submit the proposal described in paragraph (1) and an accompanying analysis of the impact of the proposed elimination of separate average standardized amounts on various categories of hospitals to Congress and the Prospective Payment Assessment Commission.

(B) Not later than February 1, 1991, the Prospective Payment Assessment Commission and the Director of the Congressional Budget Office shall each prepare and submit to Congress a report analyzing the legislative proposal submitted under subparagraph (A), and shall include in such report an analysis of the probable impact of such legislation on hospitals participating in the Medicare program.

Section 6003(j) of the Omnibus Budget Reconciliation Act of 1989, Pub. L. 101-239: ProPac Study of Payments to Rural Sole Community Hospitals and Small Rural Hospitals

(1) Study.— The Prospective Payment Assessment Commission (hereinafter referred to as the "Commission") shall conduct a study of the feasibility and desirability of—

(A) using a cost-based reimbursement system to determine the amount of payments to be made under the Medicare program to small rural hospitals and rural sole community hospitals for the operating costs of inpatient hospital services;

(B) developing and applying alternative definitions of market share for use in determining the eligibility of hospitals for classification as sole community hospitals under section 1886(d)(5) of the Social Security Act; and

(C) developing and applying a method for accounting for decreases in the number of inpatients served in determining payment to small rural hospitals under section 1886(d) of the Social Security Act for the operating costs of inpatient hospital services.

(2) Report.—By not later than May 1, 1990, the Commission shall submit a report to Congress on the study conducted under paragraph (1).

Section 6011 of the Omnibus Budget Reconciliation Act of 1989, Pub. L. 101-239 Pass Through Payments for Hemophilia Inpatients

(a) Pass Through Payment for Hemophilia Inpatients.—The second sentence of section 1886(a)(4)

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of the Social Security Act . . . is amended to read as follows—

> For purposes of this section, the term "operating cost of inpatient hospital services" . . . does not include . . . costs with respect to administering blood clotting factors to individual with hemophilia.

(b) Determining Payment Amount.—The Secretary of Health and Human Services shall determine the amount of payment made to hospitals under part A of title XVIII of the Social Security Act for the costs of administering blood clotting factors to individuals with hemophilia by multiplying a predetermined price per unit of blood clotting factor (determined in consultation with the Prospective Payment Assessment Commission) by the number of units provided to the individual.

(c) Recommendations on Payments.—The Prospective Payment Assessment Commission and the Health Care Financing Administration shall develop recommendations with respect to payments under part A of title XVIII of the Social Security Act for the costs of administering blood clotting factors to individuals with hemophilia, and shall submit such recommendations to Congress not later than 18 months after the date of enactment of this Act.

Section 6137 of the Omnibus Budget Reconciliation Act of 1989, Pub. L. 101-239: ProPAC Study of Payments for Services in Hospital Outpatient Departments

(a) In General.—The Prospective Payment Assessment Commission shall conduct a study on payment under title XVIII of the Social Security Act for hospital outpatient services. Such study shall include an examination of—

(1) the sources of growth in spending for hospital outpatient services;

(2) the differences between the costs of delivering services in a hospital outpatient department as opposed to providing similar services in other appropriate settings (including ambulatory surgery centers and physician offices);

(3) the effects on outpatient hospital costs of the step-down method used to allocate hospital capital between inpatient and outpatient departments and the extent to which hospital outpatient costs were affected by the implementation of the prospective payment system of payment for inpatient hospital services and by increased review of such services by peer review organizations; and

(4) alternative methods for reimbursing hospitals for services in outpatient departments under the Medicare program, including prospective payment methods, fee schedules, and other such methods as the Commission may consider appropriate.

(b) Reports.—(1) By not later than July 1, 1990, the Commission shall submit a report to Congress on the study conducted under section (a) with respect to the portions of the study described in paragraphs (1), (2), and (3) of such subsection, and shall include in the report such recommendations as the Commission deems appropriate.

(2) By not later than March 1, 1991, the Commission shall submit a report to Congress on the study conducted under subsection (a) with respect to the portion of the study described in paragraph (4) of such subsection, and shall include such recommendations as the Commission deems appropriate.

Section 4002(d)(2) of the Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508: Study of the Area Wage Index Adjustments Based on Professional Occupational Component

(A) Study.—The Prospective Payment Assessment Commission shall examine available data from States and other sources measuring earnings and paid hours of employment of hospital workers by occupational category, and shall include in such examination an analysis of the impact of variation in occupational mix on the computation of the area wage index determined under section 1886(d)(3(E) of the Social Security Act.

(B) Report to Congress.—In its March 1991 report, the Commission shall include recommendations regarding the feasibility and desirability of modifying such area wage index to take into account occupational mix, including variations in

occupational mix resulting from differences in State codes and requirements.

Section 4002(g)(4) of the Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508: ProPAC Study of Medicaid Payments to Hospitals

(A) Study.—The Prospective Payment Assessment Commission shall conduct a study of hospital payment rates under State plans for medical assistance under title XIX of the Social Security Act, and shall specifically examine in such study the relationship between payments under such plans and payments made to hospitals under title XVIII of such Act, and the financial condition of hospitals receiving payments under such plans, with particular attention to hospitals in urban areas which treat large number of individuals eligible for medical assistance under title XIX of such Act and other low-income individuals.

(B) Report.—By not later than October 1, 1991, the Commission shall submit a report to Congress on the study conducted under subparagraph (A) and shall include in such report such recommendations relating to requirements for payments to hospitals under title XIX of such Act as the Commission deems appropriate.

Section 4005(b) of the of the Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508: Development of National Prospective Payment Rates for Current Non-PPS Hospitals

(1) Development of Proposal.—The Secretary of Health and Human Services shall develop a proposal to modify the current system under which hospitals that are not subsection (d) hospitals (as defined in section 1886(d)(1)(B) of the Social Security Act) receive payment for the operating and capital-related costs of inpatient hospital services under part A of the Medicare program or a proposal to replace such system with a system under which such payments would be made on the basis of nationally-determined average standardized amounts. In developing any proposal under this paragraph to replace the current system with a prospective payment system, the Secretary shall—

(A) take into consideration the need to provide for appropriate limits on increases in expenditures under the Medicare program;

(B) provide for adjustments to prospectively determined rates to account for changes in a hospital's case mix, severity of illness of patients, volume of cases, and the development of new technologies and standards of medical practice;

(C) take into consideration the need to increase the payment otherwise made under such system in the case of services provided to patients whose length of stay or costs of treatment greatly exceed the length of stay or cost of treatment provided for under the applicable prospectively determined payment rate;

(D) take into consideration the need to adjust payments under the system to take into account factors such as a disproportionate share of low-income patients, costs related to graduate medical education programs, differences in wages and wage-related costs among hospitals located in various geographic areas, and other factors the Secretary considers appropriate, and

(E) provide for the appropriate allocation of operating and capital-related costs of hospitals not subject to the new prospective payment system and distinct units of such hospitals that would be paid under such system.

(2) Report.—(A) By not later than April 1, 1992, the Secretary shall submit the proposal developed under paragraph (1) to the Committee on Finance of the Senate and the Committee on Ways and Means of the House of Representatives.

(B) By not later than June 1, 1992, the Prospective Payment Assessment Commission shall submit an analysis of and comments on the proposal developed under paragraph (1) to the Committee on Finance of the Senate and the Committee on Ways and Means of the House of Representatives.

Section 4008(k) of the Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508: Prospective Payment System for Skilled Nursing Facilities

(1) Development of Proposal.—The Secretary of Health and Human Services shall develop a proposal

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to modify the current system under which skilled nursing facilities receive payment for extended care services under part A of the Medicare program or a proposal to replace such system with a system under which such payments would be made on the basis of prospectively determined rates. In developing any proposal under this paragraph to replace the current system with a prospective payment system, the Secretary shall—

(A) take into consideration the need to provide for appropriate limits on increases in expenditures under the Medicare program without jeopardizing access to extended care services for individuals unable to care for themselves;

(B) provide for adjustments to prospectively determined rates to account for changes in a facility's case mix, volume of cases, and the development of new technologies and standards of medical practice;

(C) take into consideration the need to increase the payment otherwise made under such system in the case of services provided to patients whose length of stay or costs of treatment greatly exceed the length of stay or cost of treatment provided for under the applicable prospectively determined payment rate;

(D) take into consideration the need to adjust payments under the system to take into account factors such as a disproportionate share of low-income patients, differences in wages and wage-related costs among facilities located in various geographic areas, and other factors the Secretary considers appropriate; and

(E) take into consideration the appropriateness of classifying patients and payments upon functional disability, cognitive impairment, and other patient characteristics.

(2) Reports.—(A) By not later than April 1, 1991, the Secretary (acting through the Administrator of the Health Care Financing Administration) shall submit any research studies to be used in developing the proposal under paragraph (1) to the Committee on Finance of the Senate and the Committee on Ways and Means of the House of Representatives.

(B) By not later than September 1, 1991, the Secretary shall submit the proposal developed under paragraph (1) to the Committee on Finance of the Senate and the Committee on Ways and Means of the House of Representatives.

(C) By not later than March 1, 1992, the Prospective Payment Assessment Commission shall submit an analysis of and comments on the proposal developed under paragraph (1) to the Committee on Finance of the Senate and the Committee on Ways and Means of the House of Representatives.

Section 4151(b)(2) of the Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508: Prospective Payment System for Hospital Outpatient Services

(A) Development of Proposal.—The Secretary of Health and Human Services shall develop a proposal to replace the current system under which payment is made for hospital outpatient services under title XVIII of the Social Security Act with a system under which such payments would be made on the basis of prospectively determined rates. In developing any proposal under this paragraph, the Secretary shall consider—

(i) the need to provide for appropriate limits on increases in expenditures under the Medicare program;

(ii) the need to adjust prospectively determined rates to account for changes in a hospital's outpatient case mix, severity of illness of patients, volume of cases, and the development of new technologies and standards of medical practice;

(iii) providing hospitals with incentives to control the costs of providing outpatient services;

(iv) the feasibility and appropriateness of including payment for outpatient services not currently paid on a cost-related basis under the Medicare program (including clinical diagnostic laboratory tests and dialysis services) in the system;

(v) the need to increase payments under the system to hospitals that treat a disproportionate share of low-income patients, teaching hospitals, and hospitals located in geographic areas with high wages and wage-related costs;

(vi) the feasibility and appropriateness of bundling services into larger units, such as episodes or visits, in establishing the basic unit for making payments under the system; and

(vii) the feasibility and appropriateness of varying payments under the system on the basis of whether services are provided in a free-standing or hospital-based facility.

(B) Reports.—(i) By not later than January 1, 1991, the Administrator of the Health Care Financing Administration shall submit research findings relating to prospective payments for hospital outpatient services to the Committee on Finance of the Senate and the Committees on Ways and Means and Energy and Commerce of the House of Representatives.

(ii) By not later than September 1, 1991, the Secretary shall submit the proposal developed under subparagraph (A) to such Committees.

(iii) By not later than March 1, 1992, the Prospective Payment Assessment Commission shall submit an analysis of and comments on the proposal developed under subparagraph (A) to such Committees.

Section 4201(b) of the Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508: ProPAC Study on ESRD Composite Rates

(1) In General.—(A) Study.—The Prospective Payment Assessment Commission (in this subsection referred to as the "Commission") shall conduct a study to determine the costs and services and profits associated with various modalities of dialysis treatments provided to end stage renal disease patients provided under title XVIII of the Social Security Act.

(B) Recommendations.—Based on information collected for the study described in subparagraph (A), the Commission shall make recommendations to Congress regarding the method or methods and the levels at which the payments made for the facility component of dialysis services by providers of service and renal dialysis facilities under title XVIII of the Social Security Act should be established for dialysis services furnished during fiscal year 1993 and the methodology to be used to update such payments for subsequent fiscal years. In making recommendations concerning the appropriate methodology the Commission shall consider—

(i) hemodialysis and other modalities of treatment,

(ii) the appropriate services to be included in such payments,

(iii) the adjustment factors to be incorporated including facility characteristics, such as hospital versus free-standing facilities, urban versus rural, size and mix of services,

(iv) adjustments for labor and non-labor costs,

(v) comparative profit margins for all types of renal dialysis providers of service and renal dialysis facilities,

(vi) adjustments for patient complexity, such as age, diagnosis, case mix, and pediatric services, and

(vii) efficient costs related to high quality of care and positive outcomes for all treatment modalities.

(2) Report.—Not later than June 1, 1992, the Commission shall submit a report to the Committee on Finance of the Senate, and the Committees on Ways and Means and Energy and Commerce of the House of Representatives on the study conducted under paragraph (1)(A) and shall include in the report the recommendations described in paragraph (1)(B), taking into account the factors described in paragraph (1)(B).

(3) Annual Report.—The Commission, not later than March 1 before the beginning of each fiscal year (beginning with fiscal year 1993) shall report its recommendations to the Committee on Finance of the Senate and the Committees on Ways and Means and Energy and Commerce of the House of Representatives on an appropriate change factor which should be used for updating payments for services rendered in that fiscal year. The Commission in making such report to Congress shall consider conclusions and recommendations available from the Institute of Medicine.

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Section 4207(c) of the Omnibus Budget Reconciliation Act of 1990, Pub. L. 101-508: Development of Prospective Payment System for Home Health Services

(1) Development of Proposal.—The Secretary of Health and Human Services shall develop a proposal to modify the current system under which payment is made for home health services under title XVIII of the Social Security Act or a proposal to replace such system with a system under which such payments would be made on the basis of prospectively determined rates. In developing any proposal under this paragraph to replace the current system with a prospective payment system, the Secretary shall—

(A) take into consideration the need to provide for appropriate limits on increases in expenditures under the Medicare program;

(B) provide for adjustments to prospectively determined rates to account for changes in a provider's case mix, severity of illness of patients, volume of cases, and the development of new technologies and standards of medical practice;

(C) take into consideration the need to increase the payment otherwise made under such system in the case of services provided to patients whose length of treatment or costs of treatment greatly exceed the length or cost of treatment provided for under the applicable prospectively determined payment rate;

(D) take into consideration the need to adjust payments under the system to take into account factors such as differences in wages and wage-related costs among agencies located in various geographic areas and other factors the Secretary considers appropriate; and

(E) analyze the feasibility and appropriateness of establishing the episode of illness as the basic unit for making payments under the system.

(2) Reports.—(A) By not later than April 1, 1993, the Secretary of Health and Human Services shall submit the research findings upon which the proposal described in paragraph (1) shall be based to the Committee on Finance of the Senate and the Committee on Ways and Means of the House of Representatives.

(B) By not later than September 1, 1993, the Secretary shall submit the proposal developed under paragraph (1) to the Committee on Finance of the Senate and the Committee on Ways and Means of the House of Representatives.

(C) By not later than March 1, 1994, the Prospective Payment Assessment Commission shall submit an analysis of and comments on the proposal developed under paragraph (1) to the Committee on Finance of the Senate and the Committee on Ways and Means of the House of Representatives.

H.R. Rep. No. 964, 101st Cong., 1st Sess. (1990)

(Report of the Committee of Conferees, Pub. L. 101-508)

In performing this function [developing and modification of reimbursement policies], the conferees intend that ProPAC would include in its analysis and recommendations, proposals for changes in policies regarding: (1) payment for inner-city hospitals, including appropriate recognition of bad debt and charity care costs; (2) payment for rural hospitals including recommendations on appropriate responses to issues affecting access to health care services in rural areas; and (3) policies which help constrain the costs of health care to employers, including changes in Medicare and its payment policies which may affect other payers.

S.R. Rep. No. 516, 101st Cong., 2nd Sess. (1990)

(Report of the Senate Committee on Appropriations, H.R. 5257)

The Committee, therefore, requests that ProPAC issue a report listing (1) the adjustments that have been made to PPS since its inception (for example changes in standardized amount, outlier pool, consideration of part-time labor); and (2) the amount of increased payments (taking inflation into account) for PPS years 1-5 and what rural hospitals would have received if these adjustments had been in place from the system's beginning.

In addition, the Committee request that ProPAC in its 1991 report address in detail the impact of less-than-average patient volume on overhead costs and reimbursement, especially on small hospitals. This Committee remains concerned that the PPS

system, which is based on averages, inherently is inappropriate to small-volume hospitals.

Given the history of inequitable inpatient payments and the widespread concern over new systems of outpatient payments, the Committee finds it is necessary to investigate whether outpatient payment systems also will be biased against smaller rural providers. The Committee requests that ProPAC in its 1991 report identify all potential outpatient payment biases against small rural hospitals, and recommend actions to correct them.

The Committee is concerned that the Federal Office of Rural Health Policy lacks essential resources such as computer capability in order to fulfill its statutory mandate to provide impact analyses of proposed Medicare and Medicaid regulations. The Committee instructs ProPAC to provide its resources to the Office of Rural Health Policy in order to facilitate these analyses. The Committee expects The Commission to provide technical assistance to the Office of Rural Health Policy.

The Committee urges ProPAC to continue to study the use of nurse practitioners and other nonphysician providers in alternative settings to acute care and long-term institutional care.

Section 3(d) of the Medicaid Voluntary Contribution and Provider-Specific Tax Amendments of 1991, Pub. L. 102-234: Study of Medicaid DSH Payment Adjustments

(1) In General.—The Prospective Payment Assessment Commission shall conduct a study concerning—

(A) the feasibility and desirability of establishing maximum and minimum payment adjustments under section 1923(c) of the Social Security Act for hospitals deemed disproportionate share hospitals under State medicaid plans, and

(B) criteria (other than criteria described in clause (i) or (ii) of section 1923(f)(1)(D) of such Act) that are appropriate for the designation of disproportionate share hospitals under section 1923 of such Act.

(2) Items Included In Study.—The Commission shall include in the study—

(A) a comparison of the payment adjustments for hospitals made under such section and the additional payments made under title XVIII of such Act for hospitals serving a significantly disproportionate number of low-income patients under the medicare program; and

(B) an analysis of the effect the establishment of limits on such payment adjustments will have on the ability of the hospitals to be reimbursed for the resource costs incurred by the hospitals in treating individuals entitled to medical assistance under State medicaid plans and other low-income patients.

(3) Report.—Not later than January 1, 1994, the Commission shall submit a report on the study conducted under paragraph (1) to the Committee on Finance of the Senate and the Committee on Energy and Commerce of the House of Representatives. Such report shall include such recommendations respecting the designation of disproportionate share hospitals and the establishment of maximum and minimum payment adjustments for such hospitals under section 1923 of the Social Security Act as may be appropriate.

H.R. Rep. No. 103-213, 103rd Cong., 1st Sess. (1993)

(Report of the Conference Committee, Omnibus Budget Reconciliation Act of 1993, Pub. L. 103-66)

The conferees note that the Prospective Payment Assessment Commission has expressed concern that the Secretary's outlier policy penalizes hospitals that receive a large number of transfer cases. The conferees expect that the Commission will evaluate whether the changes in outlier policy required by this Act will be sufficient to reduce the risk of large losses on transfer cases for such hospitals and make recommendations regarding whether additional changes in payment methodology would be appropriate.

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H.R. Rep. No. 104-659, 104th Cong., 2nd Sess. (1996)

(Report of the House Committee on Appropriations, H.R. 3755)

The Committee is concerned about the impact of changes in government reimbursement programs and in the private market place on critical access urban providers. The Committee directs ProPAC to prepare a plan on how it will study the impact of these changes on hospitals which are urban, have at least 250 beds, and are government dependent, with at least 60% of their days reimbursed by a combination of Medicare and Medicaid; to provide a timetable on completion of the study; and to issue no later than December 1997 a separate technical report on the impact of government and market place changes on these essential urban hospitals.

Appendix D. Technical Report Series

Appendix D lists the Prospective Payment Assessment Commission's (ProPAC) extramural and intramural technical reports. These reports provide documentation related to the Commission's March and June annual reports to the Congress. The congressional reports are prepared upon request by the Congress. Each technical report is numbered according to type and year of publication. Numbers missing from the sequence refer to studies that have been replaced with more recent reports. Commission reports can be obtained from the Prospective Payment Assessment Commission, 300 7th Street, S.W., Suite 301B, Washington, D.C. 20024, or by calling the office at 202/401-8986.

EXTRAMURAL TECHNICAL REPORT SERIES

E-90-05: Methodology for Measuring Case-Mix Change: How Much Change in the Case Mix Index Is DRG Creep? (The RAND Corporation)

ProPAC assisted the Health Care Financing Administration in a medical record reabstraction study. This study develops a method to distinguish case-mix increases caused by changes in coding practices from changes in treatment patterns and patient mix. It also provides information for developing and refining alternative ongoing data collection methods to monitor case-mix change overtime. The Commission helped fund this project and provided support in designing, implementing, and monitoring the study. (4/90)

E-90-07: How Services and Costs Vary by Day of Stay for Medicare Hospital Stays (The RAND Corporation)

This study describes how the cost of services provided during Medicare hospital stays varies throughout the stay. It also examines how patterns of daily costs vary with clinical characteristics, hospital characteristics, and the types of services provided. The study was based on data on the daily services billed to Medicare patients between May 1987 and April 1988 from a sample of 105 hospitals, and was the first time such data had been used in this way. (3/90)

E-91-02: Study of Health Care Access in Counties Where the Only Hospital Closed (Abt Associates, Inc.)

This report describes a study of access to health services in 22 rural counties where the only hospital closed between 1987 and 1989. These counties are compared with a similar group of counties that did not have a hospital between 1980 and 1989. Access to health care services is evaluated on two dimensions. First, distances and travel times (from the population center of each county) to the nearest hospitals in contiguous counties are identified, and second, the types and numbers of health care providers (facilities and practitioners) in each of the counties are noted. This was accomplished using telephone surveys of county health department personnel and analysis of the Area Resource File. (5/91)

E-91-03: Utilization of Inpatient Hospital Services by Rural Medicare Beneficiaries (Codman Research Group, Inc.)

This study updates a previous analysis (E-90-01) on inpatient hospital utilization for Medicare beneficiaries living in rural and urban market areas of five states: Alabama, California, Illinois, Montana, and Texas. The analysis expands on the earlier study by looking at utilization patterns for rural beneficiaries using refined DRG case-type groupings and by separately examining utilization patterns for younger and older Medicare beneficiaries. The findings from the analysis are consistent with the earlier study, in that access to inpatient hospital services does not appear too constrained for rural Medicare beneficiaries. The study, however, raised concerns about access to ambulatory care in these communities. (5/91)

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E-91-06: An Evaluation of Winners and Losers Under Medicare's Prospective Payment System: A Synthesis of the Literature (Lewin/ICF)

This report summarizes the academic and popular literature on (1) hospital characteristics affecting hospital financial performance under Medicare; (2) the design features that affect winning and losing, and how hospitals responded to the incentives of PPS; and (3) the environmental and community characteristics of a hospital's local market that affect hospital financial performance. In addition, it outlines some of the perceived gaps in the literature and includes an extensive bibliography. (10/91)

E-92-01: Certification Requirements for Nursing Homes (Abt Associates, Inc.)

This report presents descriptive information on current Medicaid certification and state licensure requirements for nursing homes. It focuses on those requirements that are expected to impose significant costs on facilities and result in cost variations across states. (3/92)

E-92-02: An Evaluation of Winners and Losers Under Medicare's Prospective Payment System: Final Report (Lewin/ICF)

This report summarizes the findings of a series of case studies conducted by Lewin/ICF examining why, controlling for similar hospital characteristics, some hospitals do well under PPS while others do not. Factors examined include hospital behavior, such as successful management strategies; hospitals' responses to PPS; and broader environmental factors that shape hospital performance. The degree to which performance is within a hospital's control is discussed. Individual hospital descriptions are not provided. Rather, the report integrates site visit findings and synthesizes the similarities and differences between successful and unsuccessful hospitals. (5/92)

E-92-03: Report on Quality Assurance in Non-PPS Settings (Abt Associates, Inc.)

This study describes mechanisms used to ensure and monitor quality in settings in which Medicare services are reimbursed. Among these are skilled nursing facilities, home health agencies, and hospitals not paid under PPS (psychiatric hospitals and rehabilitation hospitals). The study also looks at quality assurance in selected outpatient facilities, including ambulatory surgical centers, hospital outpatient departments, ambulatory care centers, cardiac catheterization laboratories, freestanding clinical laboratories, dialysis facilities, diagnostic imaging centers, lithotripsy centers, and comprehensive outpatient rehabilitation facilities. Quality assurance mechanisms including certification, accreditation and monitoring by Federal, state, and voluntary organizations are described. Quality indicators are classified by structure, process, or outcome. (8/92)

E-93-01: Identifying Changes in the Factors of Production for Dialysis Services (Project HOPE)

This report describes an historical cost study of the factors of production for outpatient hemodialysis and peritoneal dialysis services. The study examines how the use or cost of inputs changed between 1983 and 1991, and estimates the incremental or decremental impact that the change in each input has on the cost per dialysis treatment. The study focuses on the incremental effects of scientific and technological advances in the dialysis industry and ensuing productivity improvements. (3/93)

E-93-03: Exploring the Growth of Hospital Outpatient Surgeries (Abt Associates, Inc.)

This report identifies and assesses the principal factors that contributed to the growth observed between 1988 and 1990 in the use of five groups of procedures performed in the hospital outpatient department. The five groups selected were knee arthroscopy, YAG laser, lithotripsy, sigmoidoscopy and colonoscopy, and breast biopsies. These families of procedures were selected because as a group they represented varying levels of complexity, exemplified a variety of clinical problems, were in the top 50 most frequently performed ASC-approved procedures, and had a high growth rate between 1988-90. The factors affecting increased procedure volume were physician practice patterns and treatment approaches, technology requirements, the capacity of physicians and hospitals to

perform the procedure, shifts in setting in which the procedure is performed, and reimbursement practices. (3/93)

E-93-04: Analysis of the Effect of the Economic Stabilization Program (Abt Associates, Inc.)

This report describes the effect of the economic stabilization program (1971-1974) on health care prices and expenditures. Previous studies of the program are reviewed and compared. Additionally, descriptive data on health care expenditures by type of service and program, health care prices, and hospital revenues and expenditures are displayed. (5/93)

E-93-05: State Regulations and Policies that Affect the Provision of Post-Acute Care (Abt Associates, Inc.)

This report presents descriptive information about state regulations and policies that affect the staffing requirements, services provided, and patient mix of Medicare-certified skilled nursing facilities and home health agencies. (5/93)

E-93-06: Development of Hospital Efficiency Measures (Jenifer Ehreth, Ph.D.)

This report evaluates several measures of how efficiently hospitals use their capital assets and compares asset efficiency and hospital financial performance across types of hospitals. Descriptive statistics and factor analysis are used to assess the reliability and validity of several measures over a three-year period. Three measures—the current ratio, the long-term debt to net fixed assets ratio, and an asset efficiency measure using data envelopment analysis techniques—are evaluated in more detail because they appear promising for analyzing the impact of payment policies on asset efficiency. (8/93)

E-94-01: Within-DRG Case Complexity Change, 1992 (SysteMetrics, Inc.)

This study measures the change in within-DRG case complexity from 1990 to 1991 and from 1991 to 1992. It also examines changes in the number of secondary diagnoses, complications and comorbidities from 1990 to 1992. ProPAC uses this information to estimate the annual amount of real case mix change within DRGs, which is not measured by the case mix index (CMI). Unlike previous studies of within-DRG case complexity change, this study investigates the long run trend for within-DRG case complexity change between 1985 and 1992, by hospital group. Potential explanations for the observed long run trend are discussed. (3/94)

E-94-02: The Incremental Impact of Scientific and Technological Advances on Operating Costs in PPS Hospitals and PPS-Excluded Facilities (FY 1995) (Abt Associates, Inc.)

This report provides supportive material for one component of ProPAC's update recommendations to the Congress_the allowance for scientific and technological advances (S&TA). It details the revised approach to estimating incremental costs attributable to technological change projected for fiscal year 1995. Two S&TA estimates were developed: one for changes in operating costs incurred by PPS hospitals and another for facilities excluded from PPS that are subject to the payment system established in the Tax Equity and Fiscal Responsibility Act of 1982. (1/94)

E-94-03: The Incremental Impact of Scientific and Technological Advances on Capital Costs in PPS Hospitals (FY 1995) (Abt Associates, Inc.)

This report provides supportive material for one component of ProPAC's PPS capital update recommendation to the Congress: the allowance for scientific and technological advances. It details the revised approach to estimating incremental capital costs attributable to technological change projected for fiscal year 1995. (1/94)

E-94-04: The Incremental Impact of Scientific and Technological Advances on Cost Increases in Dialysis Facilities (FY 1995) (Abt Associates, Inc.)

This report provides supportive material for one component of ProPAC's composite rate update recommendation to the Congress_the allowance for scientific and technological advances. It details the revised approach to estimating incremental costs

attributable to technological change projected for fiscal year 1995. (1/94)

E-94-05: Discussion Report: Assessing the Impact of Cost-Decreasing Technological Change on Medicare Inpatient Costs (Abt Associates, Inc.)

To support its PPS payment update recommendations submitted to the Congress each year, ProPAC uses a technology-specific methodology to assess changes in the cost-increasing effects of emerging technologies. This report provides discussion of the feasibility of applying this methodology to an analysis of the financial impact of cost-decreasing technologies used in the care provided to Medicare beneficiaries in the inpatient setting. (7/94)

E-94-06: Discussion Report: Assessing the Cost Impact of Technological Change on Medicare and Non-Medicare Populations Across Settings (Abt Associates, Inc.)

To support its PPS payment update recommendations submitted to the Congress each year, ProPAC uses a technology-specific methodology to assess changes in the cost-increasing effects of emerging technologies. The methodology is specific to the technologies used in the care provided to Medicare beneficiaries in the inpatient setting. This report provides discussion of the feasibility of applying this methodology to an analysis that would consider changes in the cost of technologies used in the care of Medicare and non-Medicare beneficiaries across settings: in the inpatient setting as well as other sites of care, including nursing homes, outpatient departments, and home health agencies. (7/94)

E-94-07: Medicaid Reimbursement Methodologies and Payment Rates for Home Health Agencies (Abt Associates, Inc.)

This study presents survey results on state Medicaid programs' reimbursement methodologies and payment rates for home health care services. Information is presented in table format for each service (skilled nursing; physical, speech, and occupational therapies; medical social services; and home health aides). Each table includes information on the following items: payment rates; rate-setting methodologies; whether the rate is agency-specific, class-based, or flat; cost components that are treated separately in the payment process; and payment update factors. (1/94)

E-94-08: Quality-Oriented State Licensing Requirements for Non-PPS Facilities (Abt Associates, Inc.)

This two-volume study presents survey results on state licensing requirements for 15 long-term care, home health, and ambulatory care providers. Information is presented on state standards for organizational structure and administration, personnel, service provision, medical documentation, internal quality assurance processes, minimum access and transfer affiliations, equipment, and certificate of need. Licensure requirements that differ from Medicare certification are emphasized. (7/94)

E-95-01: A Comparison of Cost Definitions (Project HOPE)

This report provides a comparison of cost definitions between Medicare principles of reimbursement and generally accepted accounting principles. It documents cost items pertaining to acute care hospital services and outpatient dialysis services that are nonallowable in accordance with Medicare payment policy. In addition, the report discusses providers' contests of Medicare's determination of allowable costs, where applicable, and the results of those cases. (2/95)

E-95-02: Medicaid Managed Care Program Access Requirements (Project HOPE)

This report examines seven states' strategies for ensuring access to health services for Medicaid-eligible people who are enrolled in managed care plans. It summarizes approaches states are using to ensure that enrollees receive medically appropriate services without facing geographic, cultural, and linguistic barriers to care. This report presents information gathered from both state Medicaid agencies and Medicaid managed care contractors. (4/95)

E-96-01: The Incremental Impact of Scientific and Technological Advances on Cost Increases in Dialysis Facilities (FY 1997) (Abt Associates, Inc.)

Each year, ProPAC recommends to the Congress an update to the composite rate for dialysis services. The Commission's update framework includes an allowance for the incremental impact of scientific and technological advances. This report describes ProPAC's estimate of the increase in operating and capital costs that will result from the diffusion of new and emerging dialysis-related technologies in fiscal year 1997. (1/96)

E-96-02: Hospital-Physician Relations: A Multivariate Analysis of Hospital Financial Performance (Project HOPE).

This report will examine the association between hospital-physician relations and hospital financial performance. Data from ProPAC's Hospital-Physician Relations study (I-95-02) were combined with secondary data on hospital market characteristics and hospital financial performance and analyzed using both univariate and multivariate techniques. (5/96)

E-96-03: Quality of Dialysis in the United States (Project HOPE)

This report is a critical review of the current literature relevant to the quality of outpatient dialysis services. It addresses issues related to the epidemiology and treatment of end-stage renal disease, defining and measuring quality of care, assessing patient outcomes, and comparing mortality rates between the United States and other countries. (6/96)

INTRAMURAL TECHNICAL REPORT SERIES

I-91-02: The Role of Profitability and Community Characteristics in Hospital Closures, an Urban and Rural Analysis

This study investigates hospital closures that occurred from 1985 through 1988. The analysis focuses on the relationship between profitability and closure. Further, the analysis evaluates the impact on profitability of characteristics related to the hospital's mission and standing in the community. In addition, the analysis is extended by examining the factors that influence profitability and its components: revenue per case, cost per case, and total cases. This report provides a detailed description of the data, methods, and results of the study. (2/91)

I-91-03: Improving the Area Wage Index: The Area Wage Index and the Mix of Occupations Across Areas

Currently, the area wage index incorporates differences in the price of labor, as well as the mix of occupations across areas. This report presents the results of ProPAC's study on the effect of adjusting the area wage index for occupational mix. The results are presented separately for metropolitan statistical areas and rural areas. The study is based on Uniform Reporting System data collected from California hospitals. The report also describes the method used in California to collect data by occupational category. (7/91)

I-91-04: The Trend and Distribution of Hospital Uncompensated Care Costs, 1980-1989

This report presents the results of an analysis of uncompensated care costs for both PPS and PPS excluded hospitals. Uncompensated care for this study is defined as the sum of charity care and bad debts, and uncompensated care costs are measured both with and without an offset for subsidies received from state and local governments. The study is based on data from the American Hospital Association Annual Survey of Hospitals over the period 1980 to 1989. Both the trend and distribution of uncompensated care costs are measured by hospital group. In addition, the relationship between uncompensated care costs and indirect medical education and disproportionate share payments under Medicare is examined. (10/91)

I-92-01: Winners and Losers Under PPS

Although the aggregate margin of hospitals under PPS has declined, some hospitals continue to perform well. In this report, ProPAC analyzes the characteristics of hospitals with consistently high and consistently low margins under PPS in 1986, 1987, and 1988. The characteristics are broken into

three groups: payment adjustments, factors within the hospital's control, and factors outside of the hospital's control. The focus of the study is to determine the relative role of these factors in performance under PPS. This report provides a detailed description of the data, methods, and results of the study. (6/92)

I-92-02: The Effect of the OBRA 1989 Payment Provisions for Small Rural Medicare-Dependent Hospitals

In 1989 and 1990, ProPAC analyzed the financial status of hospitals with high Medicare shares. The ProPAC analysis, described in Medicare-Dependent Hospitals Under PPS (TRS I-90-01), indicated that the classification of hospitals into groups based on Medicare dependence is arbitrary and inconsistent over time. Further, although hospitals with high Medicare shares tend to perform more poorly under PPS, this poor performance appears to be related to characteristics other than Medicare share, notably low occupancy rates and long average lengths of stay. Based on these findings, the Commission recommended that no payment adjustment be made for Medicare-dependent hospitals. In the Omnibus Budget Reconciliation Act (OBRA) of 1989, Congress provided special treatment under PPS for small rural Medicare-dependent hospitals for three years (cost reporting periods beginning on or after April 1, 1990, and ending on or before March 31, 1993). This provision expired in 1993. However, the Congress extended it through fiscal year 1994. This report describes an analysis of the financial performance of small rural Medicare-dependent hospitals as defined in OBRA 1989 and the impact of the special provision on Medicare payment of these hospitals. (7/92)

I-93-01: The Accuracy of Cost Measures Derived from Medicare Cost Report Data

This report summarizes the findings and policy implications of a study conducted by the Center for Health Policy Studies. The primary objective of the study was to assess the accuracy of the hospital-level and DRG-level cost measures that can be constructed using Medicare Cost Report data. The first part of the study tested the impact of potential refinements in the Medicare Cost Report cost finding approach, such as using a standard cost center configuration or a multiple allocation technique. These types of changes were found to have relatively little impact. The second part compared values from advanced hospital cost accounting systems with values from the cost reports of the same hospitals. Substantial differences were documented for total Medicare costs, routine and ancillary costs, and average cost per case by DRG. (3/93)

I-95-01: The Relationship Between Hospital Costs and Payments by Source of Revenue, 1980-1991

This report presents an analysis of community hospital losses and gains by source of revenue, including Medicare, Medicaid, uncompensated care, private payers, and non-patient revenue. The data for the analysis are from the American Hospital Association Annual Survey of Hospitals. The report includes trend data on payments, costs, and charges. Data from 1991 are used to analyze the distribution of gains and losses for the different revenue sources, the relationship between these losses and hospital margins, and state-by-state differences. The report also compares the characteristics of hospitals that are and are not able to recover significant losses from uncompensated care, Medicaid, and Medicare through cost shifting. (10/95)

I-95-02: Hospital-Physician Relations: A National Survey of Hospital Chief Executive Officers and Chiefs of Medical Staffs

In an effort to identify factors that affect the financial performance of hospitals, ProPAC has undertaken a study of the financial effects of different organizational structures and mechanisms hospitals use to influence physician behavior. In the first phase of the project, ProPAC sponsored a national survey of hospital chief executive officers (CEOs) and chiefs of medical staff (CMSs) to evaluate the various aspects of hospital-physician relations. The survey explored the organization of hospital services; physician recruitment, retention, and evaluation; physician roles and responsibilities within hospitals; and hospital-physician financial arrangements. It also sought to ascertain how CEOs and CMSs perceived the respective roles played by and the influence of hospital management and physician

staff within the hospital environment. The report will describe survey methods and results, including differences in approaches to hospital-physician relations employed by different types of hospitals. The next phase, a multivariate analysis, will link hospital financial data with data from the national survey. (11/95)

I-95-03: Medicare Transfer Payment Policy

This study develops and tests a measure to account for all resources used to treat aged Medicare beneficiaries, measured in a consistent way to enhance comparison across geographic areas. This measure, called "standardized resource costs per enrollee," is based on provider costs rather than Medicare payments; reflects costs covered by beneficiary payments along with program payments; omits graduate medical education costs (as devoted primarily to education rather than patient care); includes services provided in facilities operated by the Departments of Veterans Affairs and Defense; includes beneficiaries enrolled in managed care; and standardizes for geographic differences in input prices and beneficiary age and sex. Per capita costs using this measure are compared by state and by rural and urban areas, and the results are disaggregated into eight care settings. The study also explores the role of health status differences in explaining state-level variation in per enrollee costs. (6/95)

I-95-04: A Review of ProPAC's Allowances for Scientific and Technological Advances

This report describes the study ProPAC conducted to support the Commission's decisions regarding the allowances for scientific and technological advances (S&TA) for the PPS operating and capital payment update recommendations for fiscal year 1996. The Commission used a qualitative approach to assess S&TA costs, evaluating more generally whether any changes in technology costs have altered the trend established in previous years. This report reviews previous allowances, the technologies assessed, advances that may affect Medicare costs, and, finally, the Commission's decisions for the two PPS S&TA allowances for fiscal year 1996. It also discusses how ProPAC's technology-specific methodology differs from other approaches to technology costing, and evaluates how well the methodology captures the information intended by the S&TA allowance. (4/95)

I-95-05: Hospital Costs and Payments by Revenue Source: The Impact of Medicaid Payment Increases in 1992

This report supplements ProPAC's recent report on hospital losses and gains by source of revenue (TRS I-95-01). Like the first report, this one analyzes the trend in payments relative to costs by payer, as well as differences by type of hospital and by state. The focus throughout this report, however, is the impact of substantial increases in revenue received by many hospitals in 1992 from Medicaid disproportionate share payments. This includes the impact on overall Medicaid payments and on the pattern of cost shifting to the private sector. (10/95)

Joint Report to the Congress on Medicare Managed Care

The Prospective Payment Assessment Commission and the Physician Payment Review Commission prepared this joint report on the role of managed care within the Medicare program. It describes program policies and analyzes options concerning beneficiary enrollment, plan participation, payment policy, access and quality, and data constraints. (10/95)

I-96-01: State Variation in the Resource Costs of Treating Aged Medicare Beneficiaries

This study develops and tests a measure to account for all resources used to treat aged Medicare beneficiaries, measured in a consistent way to enhance comparison across geographic areas. This measure, called "standardized resource costs per enrollee," is based on provider costs rather than Medicare payments; reflects costs covered by beneficiary payments along with program payments; omits graduate medical education costs (as devoted primarily to education rather than patient care); includes services provided in facilities operated by the Departments of Veterans Affairs and Defense; includes beneficiaries enrolled in managed care; and standardizes for geographic differences in input prices and beneficiary age and sex. Per capita costs using this measure are compared by state and by

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rural and urban areas, and the results are disaggregated into eight care settings. The study also explores the role of health status differences in explaining state-level variation in per enrollee costs. (6/96)

PENDING

Medicare's Peer Review Organization Program

In 1993, HCFA implemented major changes to Medicare's Utilization and Quality Control Peer Review Organization (PRO) program. This report will describe the evolution of the PRO program, focusing on current quality assurance activities. (Forthcoming)

Providers of Post-Acute Care Services

This document presents an overview of Part A and Part B providers that furnish post-acute care services. Information is presented on Medicare coverage policy, beneficiary cost sharing requirements, certification requirements, and payment method for each type of provider. The report focuses on Part B providers that have not been considered in past ProPAC analyses: comprehensive outpatient rehabilitation facilities (CORFs), rural health clinics, federally qualified health centers, outpatient rehabilitation providers, physician's offices, independent therapists, and hospital outpatient departments. This report demonstrates the myriad of coverage requirements and payment methods that are currently used for providers of similar services. (Forthcoming)

CONGRESSIONALLY MANDATED REPORTS

C-88-01: An Evaluation of the Department of HHS Report to Congress on Studies of Urban-Rural and Related Geographical Adjustments in the Medicare PPS

The Omnibus Budget Reconciliation Act of 1987 required ProPAC to report to the Congress on its evaluation of the Secretary's study on the feasibility and impact of eliminating or phasing out separate urban and rural payment rates. The report is organized into four major sections: background and definition of issues, summary of the Secretary's study methods and findings, ProPAC's evaluation of the Secretary's study, and future direction of Commission activities. (6/88)

C-88-02: Linking Medicare Capital Payments to Hospital Occupancy Rates

The Omnibus Budget Reconciliation Act of 1987 required ProPAC to report to the Congress on the suitability and feasibility of linking Medicare capital payments to hospital occupancy rates. This was addressed by reviewing current Medicare capital payment principles, examining historical trends in capital costs and occupancy rates, and analyzing the relationship between capital costs and occupancy. (4/88)

C-88-03: Outlier Payment Alternatives for Burn Cases

The Omnibus Budget Reconciliation Act of 1987 required ProPAC to study alternative payment methods for burn outlier cases under the prospective payment system. In this report, the Commission examines costs and PPS payments for all burn cases, as well as those for outlier cases only. Differences between payments and costs for burn hospitals and units and other PPS hospitals are examined. (7/88)

C-88-04: The Views of the Prospective Payment Assessment Commission on Developing Medicare Payment for Hospital Outpatient Surgery

The Omnibus Budget Reconciliation Act of 1987 required the Secretary of Health and Human Services to solicit ProPAC's views in developing outpatient payment systems and to include these views in a series of reports to Congress. This report focuses on the facility component of payment for surgeries performed in hospital outpatient settings. (8/88)

C-88-05: Separate PPS Payment Rates for Hospitals in Large Urban Areas and Other Urban Areas

The Omnibus Budget Reconciliation Act of 1987 required ProPAC to "evaluate the desirability of maintaining separate DRG prospective payment rates for hospitals located in large urban areas...and in other urban areas." The

report first describes how PPS currently treats hospitals in different sized urban areas. Descriptive information comparing hospitals in these areas is then presented. This is followed by a discussion of the PPS policy implication of variation in costs and margins by metropolitan statistical area size. (12/88)

C-89-01: Medicare Payment for Hospital Outpatient Surgery: The Views of the Prospective Payment Assessment Commission

The Omnibus Budget Reconciliation Act of 1987 required the Secretary of Health and Human Services to solicit the Commission's views on prospective payment for hospital outpatient surgery. This report contains ProPAC's recommendations and related rationale on such payment policy beginning in fiscal year 1990. It also presents background information used by the Commission in its deliberations, including the findings of ProPAC's analysis of hospital outpatient surgery costs. (4/89)

C-89-02: Payment Rates for Hospitals Redesignated from Rural to Urban: Analysis and Recommendations

The Technical and Miscellaneous Revenue Act of 1988 required ProPAC to study and report to Congress on the appropriate PPS payment for hospitals redesignated as urban in the Omnibus Budget Reconciliation Act of 1987. This study evaluates the payment policy and the treatment of wage and wage-related costs in computing area hospital wage indexes. The financial impact of various policy options on both the redesignated hospitals and on other hospitals located in the affected urban and rural areas is also assessed. (8/89)

C-89-03: Adjustment to the Non-Labor-Related Portion of the Standardized Amounts

The Omnibus Budget Reconciliation Act of 1987 required ProPAC to analyze the feasibility and appropriateness of a geographic adjustment to the non-labor-related portion of the PPS standardized amounts. Price data for non-labor components of the hospital market basket are compiled from available data sources to determine whether non-labor prices vary by geographic area. The report contains this information and the Commission's determination of whether such an adjustment is feasible and appropriate. (8/89)

C-89-04: Adequacy of PPS Payment for Medicare Beneficiaries with Hemophilia

The House Ways and Means Committee asked ProPAC to assess the adequacy of PPS payment for Medicare inpatients with hemophilia. This report studies the population size, trends in the price of the clotting factor, and the financial impact on hospitals for treating these patients. (10/89)

C-90-01: Medicare Payments to Rural Sole Community Hospitals and Small Rural Hospitals

The Omnibus Budget Reconciliation Act of 1989 required the Commission to submit a report to Congress on the feasibility and desirability of using a cost-based reimbursement system for paying small rural hospitals and sole community hospitals. Further, ProPAC was to assess the impact of using alternative market share definitions to determine eligibility for sole community hospital classification, and of accounting for decreases in admissions in determining payments to small rural hospitals or their costs. This report summarizes the Commission's findings. (5/90)

C-90-02: Hospital Outpatient Services Background Report

The Omnibus Budget Reconciliation Act of 1989 required the Commission to submit a report to Congress on several issues related to outpatient payments. This report examines the growth in hospital outpatient services and the revenues generated by outpatient visits. The costs of providing services in hospital outpatient departments are compared to those associated with freestanding centers. Last, outpatient quality assurance and peer review are discussed. (7/90)

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Medicare-Dependent Hospitals

The Omnibus Budget Reconciliation Act of 1989 required the Commission to study the appropriateness of making an adjustment to Medicare payments to hospitals that treat a high proportion of Medicare discharges. Information on this topic was included in ProPAC's June 1990 report, Medicare Prospective Payment and the American Health Care System. (6/90)

Financial Status of High Case Mix Hospitals

The Omnibus Budget Reconciliation Act of 1989 required the Commission to study the financial status of high case mix hospitals with special attention devoted to capital investment. Information on this topic was included in ProPAC's June 1990 report, Medicare Prospective Payment and the American Health Care System. (6/90)

Area Wage Index

The Omnibus Budget Reconciliation Act of 1990 required ProPAC to examine available data from states and other sources measuring earnings and paid hours of employment of hospital workers by occupational category. The impact of variation in occupational mix on the computation of the area wage index is included. Information on this topic was included in ProPAC's March 1991 Report and Recommendations to the Congress. (3/91)

Nurse Practitioners and Other Non-Physician Providers

The Senate Committee on Appropriations asked that ProPAC study the use of nurse practitioners and other non-physician providers in settings other than acute care facilities and long-term care institutions. Information on this topic was included in ProPAC's June 1991 report, Medicare and the American Health Care System. (6/91)

C-91-01: Medicare's Capital Payment Policy

This report summarizes the Commission's analyses of hospital capital costs and views on Medicare's capital payment policy. ProPAC's objectives for evaluating capital payment, along with supporting data and opinions, are presented. The Commission also comments on the Secretary of Health and Human Services' prospective payment proposal. (5/91)

C-91-02: Medicaid Hospital Payment

The Omnibus Budget Reconciliation Act of 1990 required the Commission to conduct a study of Medicaid hospital payment rates. The study examines the relationship between Medicaid and Medicare payments, and the financial condition of the hospitals receiving Medicaid payments. Special attention is given to hospitals in urban areas that treat large numbers of people eligible for Medicaid and other low-income persons. (10/91)

C-91-03: Rural Hospitals Under Medicare's Prospective Payment System

The Senate Committee on Appropriations requested a report examining the changes made in rural hospital payment policies and their fiscal impacts. The report includes an analysis of the impact of 1991 payment rules on 1984 and 1989 hospital margins and assesses the relative importance of individual policy changes. In addition, ProPAC was asked to study the effect of low volume on overhead costs and payments. The report includes a discussion of the relationship between volume and financial performance, and case mix and performance. The adequacy of national DRG weights for rural hospitals and differences between sole community and other small rural hospitals' characteristics and financial condition are also discussed. Finally, the report includes a profile of services offered by rural hospitals. (10/91)

C-91-04: Passthrough Payments for Hemophilia Inpatients

The Omnibus Budget Reconciliation Act of 1989 required the Commission to submit a report to Congress that contains recommendations on paying for the cost of administering blood clotting factors to inpatients with hemophilia. This report summarizes the Commission's findings. (6/91)

C-92-01: Prospective Payment System for Medicare's Skilled Nursing Facility Payment Reform

The Omnibus Budget Reconciliation Act of 1990 required the Secretary of Health and Human Services to develop a proposal to modify the current system under which skilled nursing facilities receive payment for extended care services under Medicare Part A or a proposal to replace this system with a prospective payment system. The Commission is required to submit an analysis of and comments on the proposal. This background report describes the Medicare SNF benefit, payment method, and beneficiary utilization. A cost function analysis provides information on variations in costs across facilities. Federal and state regulations affecting facility costs and use of the benefit also are discussed. This report concludes with recommendations concerning the need for a nursing facility wage index and case-mix adjustment in Medicare's payment policy. When the Secretary's report is released, the Commission will submit comments to the Senate Committee on Finance and the House Committee on Ways and Means. (3/92).

C-92-02: Medicare Payment for Hospital Outpatient Services: The Views of the Prospective Payment Assessment Commission

The Omnibus Budget Reconciliation Act of 1990 required the Secretary of Health and Human Services to develop a model system for Medicare payment for hospital outpatient services. The Commission is required to submit an analysis of and comments on the proposal. This background report describes Medicare's outpatient payment policies, which may vary by site of care and type of service. Ambulatory surgery and radiology are used to discuss problems with the current payment policy. The report concludes with nine recommendations for outpatient payment policy reform. When the Secretary's report is released, the Commission will submit its comments. (3/92)

C-92-03: Optional Hospital Payment Rates for Private Payers Based on Medicare's Methods (As specified in H.R. 3626)

This report addresses the development and impact of a system of Medicare-based rates for optional use by private insurers to control the growth in their payments to hospitals. The first part of the report discusses the design decisions that would need to be made, the steps necessary for orderly implementation of the system, and the administrative processes for ongoing operation of the system. The second part presents data on cost shifting in the hospital industry, and then uses these and other data to estimate the savings that would result from using optional rates under several different sets of assumptions. It also includes a discussion of the effects of optional rates on hospitals, private and government insurers, other providers, and patients. (3/92)

C-92-04: End-Stage Renal Disease Payment Policy

The Omnibus Budget Reconciliation Act of 1990 required the Commission to conduct a study to determine the costs, services, and profits associated with various modalities of dialysis treatments provided to end-stage renal disease patients. This study is the basis for recommendations regarding the method and level of payments for the facility component of dialysis services beginning in fiscal year 1993. The methodology to be used to update payment for subsequent fiscal years is included. As part of its annual March report, starting with fiscal year 1993, ProPAC is required to report its recommendations to Congress on an appropriate payment update factor. (6/92)

C-92-05: Interim Report on Payment Reform for PPS-Excluded Facilities

The Omnibus Budget Reconciliation Act of 1990 required the Secretary of Health and Human Services to develop a proposal to modify the current system under which PPS-excluded hospitals receive payment for the operation and capital-related costs of inpatient hospital services under Part A of the Medicare program. Alternatively, the Secretary could propose a system with payments made on the basis of nationally determined average standardized amounts. Although the Secretary has not submitted her proposal, the Commission prepared this background report. When the Secretary's report is released, the Commission will analyze it and submit comments to the Senate Committee on Finance and the House Committees on Ways and Means, and Energy and Commerce. (10/92)

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C-93-01: Global Budgeting: Design and Implementation Issues

In response to a request from the House Committee on Ways and Means, Subcommittee on Health, the Commission examined the implementation of a global budgeting system. ProPAC focused on the system's application to hospitals and other institutional health care services. The report addresses issues involved in the allocation of a national budget among types of health care services, the availability of data to support the system, and the mechanisms for ensuring that budget targets are met. (7/93)

C-94-01: Analysis of Medicaid Disproportionate Share Payment Adjustments

The Medicaid Voluntary Contribution and Provider-Specific Tax Amendments of 1991 (P.L. 102-234) required ProPAC to conduct a study of Medicaid disproportionate share payment adjustments. This study examines the feasibility and desirability of establishing maximum and minimum payment adjustments for hospitals deemed disproportionate share hospitals. It also assesses criteria (other than existing ones) that are appropriate for designating disproportionate share hospitals under Section 1923 of the Social Security Act. The report was submitted to the Senate Committee on Finance and the House Committee on Energy and Commerce. (1/94)

C-94-02: Interim Analysis of Payment Reform for Home Health Services

The Omnibus Budget Reconciliation Act of 1990 required the Secretary of Health and Human Services to develop a proposal to modify the current system under which Medicare pays for home health services or a proposal to replace such system with a prospective payment system. The Commission is required to submit an analysis of and comments on the proposal to the Senate Committee on Finance and the House Committee on Ways and Means. This background report describes Medicare's home health benefit, payment method, use, and agency costs and payments. Federal and state regulations affecting access and quality of care also are discussed. When the Secretary's report is released, the Commission will submit comments to the Senate Committee on Finance and the House Committee on Ways and Means. (3/94)

C-95-01: Analysis of the Secretary's Proposal for Medicare Payment for Hospital Outpatient Services

The Omnibus Budget Reconciliation Act of 1990 required the Secretary of Health and Human Services to develop, and the Commission comment on, a model system for Medicare payment for hospital outpatient services. This report describes Medicare's payment policies for outpatient services, documents the increase in outpatient expenditures, and identifies problems related to the current payment system. The Secretary's proposed reforms are discussed, and three recommendations for the Congress and the Secretary are included. (7/95)

PENDING

Analysis of the Secretary's Proposal for Skilled Nursing Facility Payment Reform

The Omnibus Budget Reconciliation Act of 1990 required the Secretary of Health and Human Services to develop a proposal to modify the current system under which skilled nursing facilities receive payment for extended care services under Medicare Part A or a proposal to replace this system with a prospective payment system. The Commission is required to submit an analysis of and comments on the proposal to the Senate Committee on Finance and the House Committees on Ways and Means, and Energy and Commerce. (This report will be issued after the Secretary's proposal becomes available.)

Analysis of the Secretary's Proposal for Payment Reform for PPS-Excluded Facilities

The Omnibus Budget Reconciliation Act of 1990 required the Secretary of Health and Human Services to develop a proposal to modify the current system under which PPS-excluded hospitals receive payment for the operation and capital-related costs of inpatient hospital ser-

vices under Part A of the Medicare program. Alternatively, the Secretary could propose a system with payments made on the basis of nationally determined average standardized amounts. The Commission is required to submit an analysis of and comments on the Secretary's proposal to the Senate Committee on Finance and the House Committees on Ways and Means, and Energy and Commerce. (This report will be issued after the Secretary's proposal becomes available.)

Analysis of the Secretary's Proposal for Home Health Service Payment Reform

The Omnibus Budget Reconciliation Act of 1990 required the Secretary of Health and Human Services to develop a proposal to modify the current system under which Medicare pays for home health services or a proposal to replace such system with a prospective payment system. The Commission is required to submit an analysis of and comments on the proposal to the Senate Committee on Finance and the House Committee on Ways and Means. (This report will be issued after the Secretary's proposal becomes available.)

Analysis of the Secretary's Legislative Proposal Eliminating Separate Average Standardized Amounts

The Omnibus Budget Reconciliation Act of 1989 required the Secretary of Health and Human Services to prepare a legislative proposal eliminating separate average standardized amounts for hospitals located in large urban, other urban, and rural areas. It also directed ProPAC to submit a report to Congress analyzing this proposal and its impact on hospitals. (This report will be issued after the Secretary's proposal becomes available. It should be noted that in OBRA 1990, Congress mandated the elimination of the separate rural standardized payment amount by fiscal year 1995.)

Critical Access Urban Providers

The House Committee on Appropriations has directed ProPAC to study the impact of changes in government reimbursement programs and in the private marketplace on critical access urban providers. This group is defined by the Committee as hospitals that are located in urban areas, have at least 250 beds, and are government dependent, with at least 60 percent of their days reimbursed by Medicare or Medicaid. This report is due no later than December 1997.

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
1	1	SURG	CRANIOTOMY AGE >17 EXCEPT FOR TRAUMA	3.0932	3.0486	-1.4%
2	1	SURG	CRANIOTOMY FOR TRAUMA AGE >17	3.0095	3.0134	0.1
3	1	SURG	CRANIOTOMY AGE 0-17	1.8848	1.9167	1.7
4	1	SURG	SPINAL PROCEDURES	2.3296	2.3399	0.4
5	1	SURG	EXTRACRANIAL VASCULAR PROCEDURES	1.5798	1.5143	-4.1
6	1	SURG	CARPAL TUNNEL RELEASE	0.8124	0.7419	-8.7
7	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC WITH CC	2.6017	2.4886	-4.3
8	1	SURG	PERIPH & CRANIAL NERVE & OTHER NERV SYST PROC W/O CC	1.1794	1.0962	-7.1
9	1	MED	SPINAL DISORDERS & INJURIES	1.3047	1.2677	-2.8
10	1	MED	NERVOUS SYSTEM NEOPLASMS WITH CC	1.2299	1.2196	-0.8
11	1	MED	NERVOUS SYSTEM NEOPLASMS W/O CC	0.8000	0.8000	0.0
12	1	MED	DEGENERATIVE NERVOUS SYSTEM DISORDERS	0.9891	0.9457	-4.4
13	1	MED	MULTIPLE SCLEROSIS & CEREBELLAR ATAXIA	0.7858	0.7770	-1.1
14	1	MED	SPECIFIC CEREBROVASCULAR DISORDERS EXCEPT TIA	1.2065	1.1999	-0.5
15	1	MED	TRANSIENT ISCHEMIC ATTACK & PRECEREBRAL OCCLUSIONS	0.7227	0.7231	0.1
16	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS WITH CC	1.0639	1.0371	-2.5
17	1	MED	NONSPECIFIC CEREBROVASCULAR DISORDERS W/O CC	0.6026	0.6331	5.1
18	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W CC	0.9242	0.9319	0.8
19	1	MED	CRANIAL & PERIPHERAL NERVE DISORDERS W/O CC	0.5990	0.6230	4.0
20	1	MED	NERVOUS SYSTEM INFECTION EXCEPT VIRAL MENINGITIS	2.1157	2.4854	17.5
21	1	MED	VIRAL MENINGITIS	1.5350	1.4910	-2.9
22	1	MED	HYPERTENSIVE ENCEPHALOPATHY	0.8127	0.8353	2.8
23	1	MED	NONTRAUMATIC STUPOR & COMA	0.8090	0.8089	0.0
24	1	MED	SEIZURE & HEADACHE AGE >17 WITH CC	0.9908	0.9694	-2.2
25	1	MED	SEIZURE & HEADACHE AGE >17 W/O CC	0.5681	0.5793	2.0
26	1	MED	SEIZURE & HEADACHE AGE 0-17	0.8993	0.7387	-17.9
27	1	MED	TRAUMATIC STUPOR & COMA, COMA >1 HR	1.3476	1.3060	-3.1
28	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 WITH CC	1.2001	1.2033	0.3
29	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE >17 W/O CC	0.6217	0.6371	2.5
30	1	MED	TRAUMATIC STUPOR & COMA, COMA <1 HR AGE 0-17	0.3187	0.3241	1.7
31	1	MED	CONCUSSION AGE >17 WITH CC	0.7934	0.8412	6.0
32	1	MED	CONCUSSION AGE >17 W/O CC	0.4819	0.4861	0.9
33	1	MED	CONCUSSION AGE 0-17	0.2003	0.2037	1.7
34	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM WITH CC	1.0569	1.0673	1.0
35	1	MED	OTHER DISORDERS OF NERVOUS SYSTEM W/O CC	0.5914	0.6149	4.0
36	2	SURG	RETINAL PROCEDURES	0.5930	0.6134	3.4
37	2	SURG	ORBITAL PROCEDURES	0.8821	0.9323	5.7
38	2	SURG	PRIMARY IRIS PROCEDURES	0.4243	0.4282	0.9
39	2	SURG	LENS PROCEDURES WITH OR WITHOUT VITRECTOMY	0.5036	0.5184	2.9
40	2	SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE >17	0.7000	0.7072	1.0

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
41	2	SURG	EXTRAOCULAR PROCEDURES EXCEPT ORBIT AGE 0-17	0.3244	0.3299	1.7
42	2	SURG	INTRAOCULAR PROCEDURES EXCEPT RETINA, IRIS & LENS	0.5615	0.5816	3.6
43	2	MED	HYPHEMA	0.3665	0.4520	23.3
44	2	MED	ACUTE MAJOR EYE INFECTIONS	0.6150	0.6237	1.4
45	2	MED	NEUROLOGICAL EYE DISORDERS	0.6460	0.6525	1.0
46	2	MED	OTHER DISORDERS OF THE EYE AGE >17 WITH CC	0.7593	0.7656	0.8
47	2	MED	OTHER DISORDERS OF THE EYE AGE >17 W/O CC	0.4539	0.4664	2.8
48	2	MED	OTHER DISORDERS OF THE EYE AGE 0-17	0.2859	0.2907	1.7
49	3	SURG	MAJOR HEAD & NECK PROCEDURES	1.7701	1.7245	-2.6
50	3	SURG	SIALOADENECTOMY	0.7522	0.7686	2.2
51	3	SURG	SALIVARY GLAND PROCEDURES EXCEPT SIALOADENECTOMY	0.7325	0.7345	0.3
52	3	SURG	CLEFT LIP & PALATE REPAIR	0.8492	1.0271	20.9
53	3	SURG	SINUS & MASTOID PROCEDURES AGE >17	0.9392	1.0128	7.8
54	3	SURG	SINUS & MASTOID PROCEDURES AGE 0-17	0.4634	0.4712	1.7
55	3	SURG	MISCELLANEOUS EAR, NOSE, MOUTH & THROAT PROCEDURES	0.7238	0.7880	8.9
56	3	SURG	RHINOPLASTY	0.8195	0.8283	1.1
57	3	SURG	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	1.0450	0.9325	-10.8
58	3	SURG	T&A PROC, EXCEPT TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	0.2631	0.2676	1.7
59	3	SURG	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE >17	0.5963	0.7439	24.8
60	3	SURG	TONSILLECTOMY &/OR ADENOIDECTOMY ONLY, AGE 0-17	0.2004	0.2038	1.7
61	3	SURG	MYRINGOTOMY WITH TUBE INSERTION AGE >17	1.2221	1.1960	-2.1
62	3	SURG	MYRINGOTOMY WITH TUBE INSERTION AGE 0-17	0.2837	0.2885	1.7
63	3	SURG	OTHER EAR, NOSE, MOUTH & THROAT O.R. PROCEDURES	1.1462	1.2168	6.2
64	3	MED	EAR, NOSE, MOUTH & THROAT MALIGNANCY	1.1887	1.1737	-1.3
65	3	MED	DYSEQUILIBRIUM	0.5162	0.5195	0.6
66	3	MED	EPISTAXIS	0.5306	0.5366	1.1
67	3	MED	EPIGLOTTITIS	0.8060	0.8397	4.2
68	3	MED	OTITIS MEDIA & URI AGE >17 WITH CC	0.7094	0.7098	0.1
69	3	MED	OTITIS MEDIA & URI AGE >17 W/O CC	0.5270	0.5239	-0.6
70	3	MED	OTITIS MEDIA & URI AGE 0-17	0.3129	0.3727	19.1
71	3	MED	LARYNGOTRACHEITIS	0.7206	0.7702	6.9
72	3	MED	NASAL TRAUMA & DEFORMITY	0.6419	0.6532	1.8
73	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE >17	0.7730	0.7505	-2.9
74	3	MED	OTHER EAR, NOSE, MOUTH & THROAT DIAGNOSES AGE 0-17	0.3223	0.3278	1.7
75	4	SURG	MAJOR CHEST PROCEDURES	3.1034	3.1951	3.0
76	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES WITH CC	2.5601	2.6036	1.7
77	4	SURG	OTHER RESP SYSTEM O.R. PROCEDURES W/O CC	1.1219	1.1593	3.3
78	4	MED	PULMONARY EMBOLISM	1.4136	1.4292	1.1
79	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 WITH CC	1.6625	1.6300	-2.0
80	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE >17 W/O CC	0.9508	0.9436	-0.8

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
81	4	MED	RESPIRATORY INFECTIONS & INFLAMMATIONS AGE 0-17	0.9558	1.4845	55.3
82	4	MED	RESPIRATORY NEOPLASMS	1.3166	1.3319	1.2
83	4	MED	MAJOR CHEST TRAUMA WITH CC	0.9557	0.9782	2.4
84	4	MED	MAJOR CHEST TRAUMA W/O CC	0.5002	0.5319	6.3
85	4	MED	PLEURAL EFFUSION WITH CC	1.1917	1.2200	2.4
86	4	MED	PLEURAL EFFUSION W/O CC	0.6848	0.7117	3.9
87	4	MED	PULMONARY EDEMA & RESPIRATORY FAILURE	1.3589	1.3615	0.2
88	4	MED	CHRONIC OBSTRUCTIVE PULMONARY DISEASE	1.0018	0.9846	-1.7
89	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 WITH CC	1.1211	1.1156	-0.5
90	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE >17 W/O CC	0.6996	0.6978	-0.3
91	4	MED	SIMPLE PNEUMONIA & PLEURISY AGE 0-17	0.8366	0.7524	-10.1
92	4	MED	INTERSTITIAL LUNG DISEASE WITH CC	1.2000	1.2029	0.2
93	4	MED	INTERSTITIAL LUNG DISEASE W/O CC	0.7550	0.7498	-0.7
94	4	MED	PNEUMOTHORAX WITH CC	1.2378	1.1780	-4.8
95	4	MED	PNEUMOTHORAX W/O CC	0.6242	0.5996	-3.9
96	4	MED	BRONCHITIS & ASTHMA AGE >17 WITH CC	0.8390	0.8272	-1.4
97	4	MED	BRONCHITIS & ASTHMA AGE >17 W/O CC	0.6089	0.6035	-0.9
98	4	MED	BRONCHITIS & ASTHMA AGE 0-17	0.6696	0.7807	16.6
99	4	MED	RESPIRATORY SIGNS & SYMPTOMS WITH CC	0.6959	0.6869	-1.3
100	4	MED	RESPIRATORY SIGNS & SYMPTOMS W/O CC	0.5034	0.5113	1.6
101	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES WITH CC	0.9120	0.8748	-4.1
102	4	MED	OTHER RESPIRATORY SYSTEM DIAGNOSES W/O CC	0.5595	0.5335	-4.6
103	5	SURG	HEART TRANSPLANT	13.8273	15.3358	10.9
104	5	SURG	CARDIAC VALVE PROCEDURES WITH CARDIAC CATH	7.3143	7.3199	0.1
105	5	SURG	CARDIAC VALVE PROCEDURES W/O CARDIAC CATH	5.6310	5.5998	-0.6
106	5	SURG	CORONARY BYPASS WITH CARDIAC CATH	5.6187	5.5564	-1.1
107	5	SURG	CORONARY BYPASS W/O CARDIAC CATH	4.1803	4.0685	-2.7
108	5	SURG	OTHER CARDIOTHORACIC PROCEDURES	5.9455	5.9135	-0.5
109			NO LONGER VALID	NV	NV	NV
110	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES WITH CC	4.1308	4.1589	0.7
111	5	SURG	MAJOR CARDIOVASCULAR PROCEDURES W/O CC	2.2584	2.2875	1.3
112	5	SURG	PERCUTANEOUS CARDIOVASCULAR PROCEDURES	1.9922	2.0946	5.1
113	5	SURG	AMPUTATION FOR CIRC SYSTEM DISORDERS EXCEPT UPPER LIMB & TOE	2.7536	2.6935	-2.2
114	5	SURG	UPPER LIMB & TOE AMPUTATION FOR CIRC SYSTEM DISORDERS	1.5383	1.5152	-1.5
115	5	SURG	PERM CARDIAC PACEMAKER IMPLANT WITH AMI, HEART FAILURE OR SHOCK	3.5513	3.6827	3.7
116	5	SURG	OTHER PERM CARDIAC PACEMAKER IMPLANT OR AICD LEAD OR GENERATOR PROC	2.3949	2.4150	0.8
117	5	SURG	CARDIAC PACEMAKER REVISION EXCEPT DEVICE REPLACEMENT	1.1454	1.1764	2.7
118	5	SURG	CARDIAC PACEMAKER DEVICE REPLACEMENT	1.5260	1.5825	3.7
119	5	SURG	VEIN LIGATION & STRIPPING	1.1247	1.1435	1.7
120	5	SURG	OTHER CIRCULATORY SYSTEM O.R. PROCEDURES	1.9531	1.9318	-1.1

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
121	5	MED	CIRCULATORY DISORDERS WITH AMI & C.V. COMP DISCH ALIVE	1.6459	1.6482	0.1
122	5	MED	CIRCULATORY DISORDERS WITH AMI W/O C.V. COMP DISCH ALIVE	1.1614	1.1617	0.0
123	5	MED	CIRCULATORY DISORDERS WITH AMI, EXPIRED	1.4370	1.4555	1.3
124	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, WITH CARD CATH & COMPLEX DIAG	1.2933	1.3258	2.5
125	5	MED	CIRCULATORY DISORDERS EXCEPT AMI, WITH CARD CATH W/O COMPLEX DIAG	0.8767	0.9246	5.5
126	5	MED	ACUTE & SUBACUTE ENDOCARDITIS	2.6049	2.5379	-2.6
127	5	MED	HEART FAILURE & SHOCK	1.0302	1.0265	-0.4
128	5	MED	DEEP VEIN THROMBOPHLEBITIS	0.7929	0.7861	-0.9
129	5	MED	CARDIAC ARREST, UNEXPLAINED	1.1376	1.1316	-0.5
130	5	MED	PERIPHERAL VASCULAR DISORDERS WITH CC	0.9384	0.9352	-0.3
131	5	MED	PERIPHERAL VASCULAR DISORDERS W/O CC	0.6002	0.6038	0.6
132	5	MED	ATHEROSCLEROSIS WITH CC	0.6861	0.6840	-0.3
133	5	MED	ATHEROSCLEROSIS W/O CC	0.5347	0.5537	3.6
134	5	MED	HYPERTENSION	0.5800	0.5787	-0.2
135	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 WITH CC	0.8988	0.8838	-1.7
136	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE >17 W/O CC	0.5789	0.5629	-2.8
137	5	MED	CARDIAC CONGENITAL & VALVULAR DISORDERS AGE 0-17	0.7866	0.7999	1.7
138	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS WITH CC	0.8049	0.8008	-0.5
139	5	MED	CARDIAC ARRHYTHMIA & CONDUCTION DISORDERS W/O CC	0.4945	0.4971	0.5
140	5	MED	ANGINA PECTORIS	0.6312	0.6205	-1.7
141	5	MED	SYNCOPE & COLLAPSE WITH CC	0.7149	0.7128	-0.3
142	5	MED	SYNCOPE & COLLAPSE W/O CC	0.5216	0.5288	1.4
143	5	MED	CHEST PAIN	0.5159	0.5223	1.2
144	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES WITH CC	1.0689	1.0857	1.6
145	5	MED	OTHER CIRCULATORY SYSTEM DIAGNOSES W/O CC	0.6204	0.6208	0.1
146	6	SURG	RECTAL RESECTION WITH CC	2.5898	2.6363	1.8
147	6	SURG	RECTAL RESECTION W/O CC	1.5368	1.6018	4.2
148	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES WITH CC	3.3264	3.3710	1.3
149	6	SURG	MAJOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1.5654	1.5999	2.2
150	6	SURG	PERITONEAL ADHESIOLYSIS WITH CC	2.6561	2.6828	1.0
151	6	SURG	PERITONEAL ADHESIOLYSIS W/O CC	1.2606	1.2910	2.4
152	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES WITH CC	1.8860	1.9311	2.4
153	6	SURG	MINOR SMALL & LARGE BOWEL PROCEDURES W/O CC	1.1257	1.1568	2.8
154	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 WITH CC	4.2102	4.1817	-0.7
155	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE >17 W/O CC	1.3885	1.4059	1.3
156	6	SURG	STOMACH, ESOPHAGEAL & DUODENAL PROCEDURES AGE 0-17	0.8101	0.8238	1.7
157	6	SURG	ANAL & STOMAL PROCEDURES WITH CC	1.1048	1.1352	2.8
158	6	SURG	ANAL & STOMAL PROCEDURES W/O CC	0.5789	0.6077	5.0
159	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 WITH CC	1.1707	1.2268	4.8
160	6	SURG	HERNIA PROCEDURES EXCEPT INGUINAL & FEMORAL AGE >17 W/O CC	0.6746	0.7026	4.2

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DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
161	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 WITH CC	0.9554	1.0066	5.4
162	6	SURG	INGUINAL & FEMORAL HERNIA PROCEDURES AGE >17 W/O CC	0.5365	0.5707	6.4
163	6	SURG	HERNIA PROCEDURES AGE 0-17	0.7578	0.7706	1.7
164	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG WITH CC	2.2374	2.3386	4.5
165	6	SURG	APPENDECTOMY W COMPLICATED PRINCIPAL DIAG W/O CC	1.2365	1.2582	1.8
166	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG WITH CC	1.3695	1.4497	5.9
167	6	SURG	APPENDECTOMY W/O COMPLICATED PRINCIPAL DIAG W/O CC	0.7892	0.8431	6.8
168	3	SURG	MOUTH PROCEDURES WITH CC	1.1761	1.0929	-7.1
169	3	SURG	MOUTH PROCEDURES W/O CC	0.6434	0.6717	4.4
170	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES WITH CC	2.7116	2.7453	1.2
171	6	SURG	OTHER DIGESTIVE SYSTEM O.R. PROCEDURES W/O CC	1.1628	1.1202	-3.7
172	6	MED	DIGESTIVE MALIGNANCY WITH CC	1.2898	1.2920	0.2
173	6	MED	DIGESTIVE MALIGNANCY W/O CC	0.6569	0.6769	3.0
174	6	MED	G.I. HEMORRHAGE WITH CC	0.9880	0.9952	0.7
175	6	MED	G.I. HEMORRHAGE W/O CC	0.5457	0.5485	0.5
176	6	MED	COMPLICATED PEPTIC ULCER	1.0563	1.0856	2.8
177	6	MED	UNCOMPLICATED PEPTIC ULCER WITH CC	0.8270	0.8335	0.8
178	6	MED	UNCOMPLICATED PEPTIC ULCER W/O CC	0.5990	0.6091	1.7
179	6	MED	INFLAMMATORY BOWEL DISEASE	1.0993	1.1188	1.8
180	6	MED	G.I. OBSTRUCTION WITH CC	0.9240	0.9194	-0.5
181	6	MED	G.I. OBSTRUCTION W/O CC	0.5231	0.5338	2.0
182	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 WITH CC	0.7794	0.7789	-0.1
183	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE >17 W/O CC	0.5480	0.5553	1.3
184	6	MED	ESOPHAGITIS, GASTROENT & MISC DIGEST DISORDERS AGE 0-17	0.3910	0.5414	38.5
185	3	MED	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE >17	0.8892	0.8424	-5.3
186	3	MED	DENTAL & ORAL DIS EXCEPT EXTRACTIONS & RESTORATIONS, AGE 0-17	0.3088	0.3140	1.7
187	3	MED	DENTAL EXTRACTIONS & RESTORATIONS	0.6473	0.7104	9.7
188	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 WITH CC	1.0458	1.0591	1.3
189	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE >17 W/O CC	0.5438	0.5640	3.7
190	6	MED	OTHER DIGESTIVE SYSTEM DIAGNOSES AGE 0-17	1.2379	0.8769	-29.2
191	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES WITH CC	4.4495	4.4543	0.1
192	7	SURG	PANCREAS, LIVER & SHUNT PROCEDURES W/O CC	1.7103	1.7889	4.6
193	7	SURG	BILIARY TRACT PROC WITH CC EXCEPT ONLY CHOLECYST WITH OR W/O C.D.E.	3.2131	3.2878	2.3
194	7	SURG	BILIARY TRACT PROC W/O CC EXCEPT ONLY CHOLECYST WITH OR W/O C.D.E.	1.6937	1.7549	3.6
195	7	SURG	CHOLECYSTECTOMY WITH C.D.E. WITH CC	2.6147	2.6894	2.9
196	7	SURG	CHOLECYSTECTOMY WITH C.D.E. W/O CC	1.5695	1.6127	2.8
197	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. WITH CC	2.2034	2.2679	2.9
198	7	SURG	CHOLECYSTECTOMY EXCEPT BY LAPAROSCOPE W/O C.D.E. W/O CC	1.1355	1.1738	3.4
199	7	SURG	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR MALIGNANCY	2.3309	2.3728	1.8
200	7	SURG	HEPATOBILIARY DIAGNOSTIC PROCEDURE FOR NON-MALIGNANCY	3.0158	3.1772	5.4

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
201	7	SURG	OTHER HEPATOBILIARY OR PANCREAS O.R. PROCEDURES	3.2951	3.7669	14.3
202	7	MED	CIRRHOSIS & ALCOHOLIC HEPATITIS	1.3177	1.3675	3.8
203	7	MED	MALIGNANCY OF HEPATOBILIARY SYSTEM OR PANCREAS	1.2187	1.2486	2.5
204	7	MED	DISORDERS OF PANCREAS EXCEPT MALIGNANCY	1.2020	1.2004	-0.1
205	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA WITH CC	1.2276	1.2194	-0.7
206	7	MED	DISORDERS OF LIVER EXCEPT MALIG,CIRR,ALC HEPA W/O CC	0.6801	0.7159	5.3
207	7	MED	DISORDERS OF THE BILIARY TRACT WITH CC	1.0287	1.0508	2.1
208	7	MED	DISORDERS OF THE BILIARY TRACT W/O CC	0.5943	0.6045	1.7
209	8	SURG	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF LOWER EXTREMITY	2.2707	2.2606	-0.4
210	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 WITH CC	1.8616	1.8460	-0.8
211	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE >17 W/O CC	1.2893	1.2740	-1.2
212	8	SURG	HIP & FEMUR PROCEDURES EXCEPT MAJOR JOINT AGE 0-17	1.1296	1.1487	1.7
213	8	SURG	AMPUTATION FOR MUSCULOSKELETAL SYSTEM & CONN TISSUE DISORDERS	1.7196	1.7049	-0.9
214	8	SURG	BACK & NECK PROCEDURES WITH CC	1.9184	1.9255	0.4
215	8	SURG	BACK & NECK PROCEDURES W/O CC	1.0924	1.1119	1.8
216	8	SURG	BIOPSIES OF MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	2.1075	2.0784	-1.4
217	8	SURG	WND DEBRID & SKN GRFT EXCEPT HAND,FOR MUSCSKELET & CONN TISS DIS	2.8975	2.8812	-0.6
218	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR AGE >17 WITH CC	1.4231	1.4574	2.4
219	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR AGE >17 W/O CC	0.9179	0.9553	4.1
220	8	SURG	LOWER EXTREM & HUMER PROC EXCEPT HIP,FOOT,FEMUR AGE 0-17	0.5611	0.5706	1.7
221	8	SURG	KNEE PROCEDURES WITH CC	1.8463	1.8340	-0.7
222	8	SURG	KNEE PROCEDURES W/O CC	0.9747	1.0177	4.4
223	8	SURG	MAJOR SHOULDER/ELBOW PROC, OR OTHER UPPER EXTREMITY PROC WITH CC	0.8364	0.8720	4.3
224	8	SURG	SHOULDER,ELBOW OR FOREARM PROC,EXC MAJOR JOINT PROC, W/O CC	0.6983	0.7417	6.2
225	8	SURG	FOOT PROCEDURES	0.9504	1.0020	5.4
226	8	SURG	SOFT TISSUE PROCEDURES WITH CC	1.3656	1.3831	1.3
227	8	SURG	SOFT TISSUE PROCEDURES W/O CC	0.7273	0.7449	2.4
228	8	SURG	MAJOR THUMB OR JOINT PROC,OR OTH HAND OR WRIST PROC WITH CC	0.9315	0.9349	0.4
229	8	SURG	HAND OR WRIST PROC, EXCEPT MAJOR JOINT PROC, W/O CC	0.5965	0.6512	9.2
230	8	SURG	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES OF HIP & FEMUR	1.0399	1.0567	1.6
231	8	SURG	LOCAL EXCISION & REMOVAL OF INT FIX DEVICES EXCEPT HIP & FEMUR	1.2131	1.2263	1.1
232	8	SURG	ARTHROSCOPY	1.0578	1.0884	2.9
233	8	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC WITH CC	1.9275	2.0170	4.6
234	8	SURG	OTHER MUSCULOSKELET SYS & CONN TISS O.R. PROC W/O CC	1.0039	1.0675	6.3
235	8	MED	FRACTURES OF FEMUR	0.8501	0.8395	-1.2
236	8	MED	FRACTURES OF HIP & PELVIS	0.7818	0.7620	-2.5
237	8	MED	SPRAINS, STRAINS, & DISLOCATIONS OF HIP, PELVIS & THIGH	0.5711	0.5637	-1.3
238	8	MED	OSTEOMYELITIS	1.4356	1.3796	-3.9
239	8	MED	PATHOLOGICAL FRACTURES & MUSCULOSKELETAL & CONN TISS MALIGNANCY	1.0219	1.0115	-1.0
240	8	MED	CONNECTIVE TISSUE DISORDERS WITH CC	1.1900	1.2112	1.8

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
241	8	MED	CONNECTIVE TISSUE DISORDERS W/O CC	0.5986	0.6029	0.7
242	8	MED	SEPTIC ARTHRITIS	1.1295	1.0492	-7.1
243	8	MED	MEDICAL BACK PROBLEMS	0.7248	0.7241	-0.1
244	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES WITH CC	0.7446	0.7279	-2.2
245	8	MED	BONE DISEASES & SPECIFIC ARTHROPATHIES W/O CC	0.5050	0.4954	-1.9
246	8	MED	NON-SPECIFIC ARTHROPATHIES	0.5646	0.5887	4.3
247	8	MED	SIGNS & SYMPTOMS OF MUSCULOSKELETAL SYSTEM & CONN TISSUE	0.5534	0.5523	-0.2
248	8	MED	TENDONITIS, MYOSITIS & BURSITIS	0.7275	0.7325	0.7
249	8	MED	AFTERCARE, MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE	0.6558	0.6522	-0.5
250	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 WITH CC	0.7193	0.6915	-3.9
251	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE >17 W/O CC	0.4423	0.4640	4.9
252	8	MED	FX, SPRN, STRN & DISL OF FOREARM, HAND, FOOT AGE 0-17	0.2438	0.2479	1.7
253	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE >17 WITH CC	0.7637	0.7438	-2.6
254	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE >17 W/O CC	0.4365	0.4451	2.0
255	8	MED	FX, SPRN, STRN & DISL OF UPARM,LOWLEG EX FOOT AGE 0-17	0.2838	0.2886	1.7
256	8	MED	OTHER MUSCULOSKELETAL SYSTEM & CONNECTIVE TISSUE DIAGNOSES	0.6419	0.7651	19.2
257	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY WITH CC	0.8997	0.9015	0.2
258	9	SURG	TOTAL MASTECTOMY FOR MALIGNANCY W/O CC	0.6965	0.7087	1.8
259	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY WITH CC	0.8765	0.8640	-1.4
260	9	SURG	SUBTOTAL MASTECTOMY FOR MALIGNANCY W/O CC	0.5749	0.6083	5.8
261	9	SURG	BREAST PROC FOR NON-MALIGNANCY EXCEPT BIOPSY & LOCAL EXCISION	0.8080	0.8286	2.5
262	9	SURG	BREAST BIOPSY & LOCAL EXCISION FOR NON-MALIGNANCY	0.7115	0.7695	8.2
263	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS WITH CC	2.2344	2.1226	-5.0
264	9	SURG	SKIN GRAFT &/OR DEBRID FOR SKN ULCER OR CELLULITIS W/O CC	1.1633	1.1270	-3.1
265	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS WITH CC	1.4131	1.4993	6.1
266	9	SURG	SKIN GRAFT &/OR DEBRID EXCEPT FOR SKIN ULCER OR CELLULITIS W/O CC	0.7451	0.7629	2.4
267	9	SURG	PERIANAL & PILONIDAL PROCEDURES	0.8022	0.8330	3.8
268	9	SURG	SKIN, SUBCUTANEOUS TISSUE & BREAST PLASTIC PROCEDURES	0.9068	0.9916	9.4
269	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC WITH CC	1.6495	1.6416	-0.5
270	9	SURG	OTHER SKIN, SUBCUT TISS & BREAST PROC W/O CC	0.6796	0.7003	3.0
271	9	MED	SKIN ULCERS	1.1157	1.0816	-3.1
272	9	MED	MAJOR SKIN DISORDERS WITH CC	1.0208	1.0158	-0.5
273	9	MED	MAJOR SKIN DISORDERS W/O CC	0.6403	0.6346	-0.9
274	9	MED	MALIGNANT BREAST DISORDERS WITH CC	1.0741	1.0760	0.2
275	9	MED	MALIGNANT BREAST DISORDERS W/O CC	0.4845	0.5085	5.0
276	9	MED	NON-MALIGANT BREAST DISORDERS	0.6418	0.6374	-0.7
277	9	MED	CELLULITIS AGE >17 WITH CC	0.8703	0.8526	-2.0
278	9	MED	CELLULITIS AGE >17 W/O CC	0.5822	0.5774	-0.8
279	9	MED	CELLULITIS AGE 0-17	0.7070	0.7190	1.7
280	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 WITH CC	0.6847	0.6750	-1.4

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
281	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE >17 W/O CC	0.4523	0.4560	0.8
282	9	MED	TRAUMA TO THE SKIN, SUBCUT TISS & BREAST AGE 0-17	0.2467	0.2509	1.7
283	9	MED	MINOR SKIN DISORDERS WITH CC	0.7171	0.6990	-2.5
284	9	MED	MINOR SKIN DISORDERS W/O CC	0.4307	0.4340	0.8
285	10	SURG	AMPUTAT OF LOWER LIMB FOR ENDOCRINE,NUTRIT,& METABOL DISORDERS	2.3880	2.2015	-7.8
286	10	SURG	ADRENAL & PITUITARY PROCEDURES	2.3163	2.3775	2.6
287	10	SURG	SKIN GRAFTS & WOUND DEBRID FOR ENDOC, NUTRIT & METAB DISORDERS	2.1126	1.9765	-6.4
288	10	SURG	O.R. PROCEDURES FOR OBESITY	2.0397	2.0104	-1.4
289	10	SURG	PARATHYROID PROCEDURES	1.0385	1.0198	-1.8
290	10	SURG	THYROID PROCEDURES	0.8537	0.8798	3.1
291	10	SURG	THYROGLOSSAL PROCEDURES	0.4657	0.5189	11.4
292	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC WITH CC	2.6301	2.6450	0.6
293	10	SURG	OTHER ENDOCRINE, NUTRIT & METAB O.R. PROC W/O CC	1.1866	1.2671	6.8
294	10	MED	DIABETES AGE >35	0.7579	0.7594	0.2
295	10	MED	DIABETES AGE 0-35	0.7634	0.7159	-6.2
296	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 WITH CC	0.9166	0.8929	-2.6
297	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE >17 W/O CC	0.5353	0.5364	0.2
298	10	MED	NUTRITIONAL & MISC METABOLIC DISORDERS AGE 0-17	0.4756	0.5221	9.8
299	10	MED	INBORN ERRORS OF METABOLISM	0.9790	0.8330	-14.9
300	10	MED	ENDOCRINE DISORDERS WITH CC	1.0919	1.0950	0.3
301	10	MED	ENDOCRINE DISORDERS W/O CC	0.6181	0.6182	0.0
302	11	SURG	KIDNEY TRANSPLANT	4.1370	3.9047	-5.6
303	11	SURG	KIDNEY,URETER & MAJOR BLADDER PROCEDURES FOR NEOPLASM	2.6171	2.6409	0.9
304	11	SURG	KIDNEY,URETER & MAJOR BLADDER PROC FOR NON-NEOPL WITH CC	2.3715	2.3716	0.0
305	11	SURG	KIDNEY,URETER & MAJOR BLADDER PROC FOR NON-NEOPL W/O CC	1.1600	1.1776	1.5
306	11	SURG	PROSTATECTOMY WITH CC	1.2441	1.2258	-1.5
307	11	SURG	PROSTATECTOMY W/O CC	0.6639	0.6708	1.0
308	11	SURG	MINOR BLADDER PROCEDURES WITH CC	1.4848	1.5252	2.7
309	11	SURG	MINOR BLADDER PROCEDURES W/O CC	0.8061	0.8860	9.9
310	11	SURG	TRANSURETHRAL PROCEDURES WITH CC	0.9694	1.0015	3.3
311	11	SURG	TRANSURETHRAL PROCEDURES W/O CC	0.5486	0.5670	3.4
312	11	SURG	URETHRAL PROCEDURES, AGE >17 WITH CC	0.8891	0.9124	2.6
313	11	SURG	URETHRAL PROCEDURES, AGE >17 W/O CC	0.5008	0.5223	4.3
314	11	SURG	URETHRAL PROCEDURES, AGE 0-17	0.4756	0.4836	1.7
315	11	SURG	OTHER KIDNEY & URINARY TRACT O.R. PROCEDURES	2.0612	2.0574	-0.2
316	11	MED	RENAL FAILURE	1.2996	1.3034	0.3
317	11	MED	ADMIT FOR RENAL DIALYSIS	0.6556	0.4845	-26.1
318	11	MED	KIDNEY & URINARY TRACT NEOPLASMS WITH CC	1.1007	1.1296	2.6
319	11	MED	KIDNEY & URINARY TRACT NEOPLASMS W/O CC	0.5432	0.5772	6.3
320	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 WITH CC	0.9320	0.9048	-2.9

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
321	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE >17 W/O CC	0.6104	0.6077	-0.4
322	11	MED	KIDNEY & URINARY TRACT INFECTIONS AGE 0-17	0.6651	0.5133	-22.8
323	11	MED	URINARY STONES WITH CC, &/OR ESW LITHOTRIPSY	0.7281	0.7496	3.0
324	11	MED	URINARY STONES W/O CC	0.3992	0.4159	4.2
325	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 WITH CC	0.6436	0.6377	-0.9
326	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE >17 W/O CC	0.4233	0.4320	2.1
327	11	MED	KIDNEY & URINARY TRACT SIGNS & SYMPTOMS AGE 0-17	0.2302	0.2341	1.7
328	11	MED	URETHRAL STRICTURE AGE >17 WITH CC	0.6672	0.6886	3.2
329	11	MED	URETHRAL STRICTURE AGE >17 W/O CC	0.4233	0.4567	7.9
330	11	MED	URETHRAL STRICTURE AGE 0-17	0.3063	0.3115	1.7
331	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 WITH CC	1.0122	0.9914	-2.1
332	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE >17 W/O CC	0.6176	0.6070	-1.7
333	11	MED	OTHER KIDNEY & URINARY TRACT DIAGNOSES AGE 0-17	0.8701	0.8562	-1.6
334	12	SURG	MAJOR MALE PELVIC PROCEDURES WITH CC	1.6948	1.6653	-1.7
335	12	SURG	MAJOR MALE PELVIC PROCEDURES W/O CC	1.3044	1.2610	-3.3
336	12	SURG	TRANSURETHRAL PROSTATECTOMY WITH CC	0.8802	0.8848	0.5
337	12	SURG	TRANSURETHRAL PROSTATECTOMY W/O CC	0.6128	0.6147	0.3
338	12	SURG	TESTES PROCEDURES, FOR MALIGNANCY	1.0260	1.0499	2.3
339	12	SURG	TESTES PROCEDURES, NON-MALIGNANCY AGE >17	0.9330	1.0194	9.3
340	12	SURG	TESTES PROCEDURES, NON-MALIGNANCY AGE 0-17	0.2723	0.2769	1.7
341	12	SURG	PENIS PROCEDURES	1.0699	1.0745	0.4
342	12	SURG	CIRCUMCISION AGE >17	0.7360	0.7578	3.0
343	12	SURG	CIRCUMCISION AGE 0-17	0.1479	0.1504	1.7
344	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROCEDURES FOR MALIGNANCY	1.0209	1.0083	-1.2
345	12	SURG	OTHER MALE REPRODUCTIVE SYSTEM O.R. PROC EXCEPT FOR MALIGNANCY	0.8435	0.8422	-0.2
346	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, WITH CC	0.9626	0.9559	-0.7
347	12	MED	MALIGNANCY, MALE REPRODUCTIVE SYSTEM, W/O CC	0.4853	0.5096	5.0
348	12	MED	BENIGN PROSTATIC HYPERTROPHY WITH CC	0.7106	0.7107	0.0
349	12	MED	BENIGN PROSTATIC HYPERTROPHY W/O CC	0.4241	0.3974	-6.3
350	12	MED	INFLAMMATION OF THE MALE REPRODUCTIVE SYSTEM	0.6810	0.6611	-2.9
351	12	MED	STERILIZATION, MALE	0.2271	0.2309	1.7
352	12	MED	OTHER MALE REPRODUCTIVE SYSTEM DIAGNOSES	0.5932	0.5877	-0.9
353	13	SURG	PELVIC EVISCERATION, RADICAL HYSTERECTOMY & RADICAL VULVECTOMY	1.9483	1.9174	-1.6
354	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG WITH CC	1.4609	1.4643	0.2
355	13	SURG	UTERINE,ADNEXA PROC FOR NON-OVARIAN/ADNEXAL MALIG W/O CC	0.8881	0.9056	2.0
356	13	SURG	FEMALE REPRODUCTIVE SYSTEM RECONSTRUCTIVE PROCEDURES	0.7323	0.7376	0.7
357	13	SURG	UTERINE & ADNEXA PROC FOR OVARIAN OR ADNEXAL MALIGNANCY	2.3679	2.3824	0.6
358	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY WITH CC	1.1458	1.1713	2.2
359	13	SURG	UTERINE & ADNEXA PROC FOR NON-MALIGNANCY W/O CC	0.8072	0.8285	2.6
360	13	SURG	VAGINA, CERVIX & VULVA PROCEDURES	0.8739	0.8459	-3.2

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
361	13	SURG	LAPAROSCOPY & INCISIONAL TUBAL INTERRUPTION	1.1984	1.1148	-7.0
362	13	SURG	ENDOSCOPIC TUBAL INTERRUPTION	0.2902	0.2951	1.7
363	13	SURG	D&C, CONIZATION & RADIO-IMPLANT, FOR MALIGNANCY	0.6881	0.6911	0.4
364	13	SURG	D&C, CONIZATION EXCEPT FOR MALIGNANCY	0.6667	0.6739	1.1
365	13	SURG	OTHER FEMALE REPRODUCTIVE SYSTEM O.R. PROCEDURES	1.7739	1.7237	-2.8
366	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM WITH CC	1.1405	1.1941	4.7
367	13	MED	MALIGNANCY, FEMALE REPRODUCTIVE SYSTEM W/O CC	0.5179	0.5216	0.7
368	13	MED	INFECTIONS, FEMALE REPRODUCTIVE SYSTEM	0.9841	1.0230	4.0
369	13	MED	MENSTRUAL & OTHER FEMALE REPRODUCTIVE SYSTEM DISORDERS	0.5130	0.5454	6.3
370	14	SURG	CESAREAN SECTION WITH CC	0.9573	1.0401	8.6
371	14	SURG	CESAREAN SECTION W/O CC	0.6531	0.6838	4.7
372	14	MED	VAGINAL DELIVERY WITH COMPLICATING DIAGNOSES	0.5558	0.5439	-2.1
373	14	MED	VAGINAL DELIVERY W/O COMPLICATING DIAGNOSES	0.3446	0.3602	4.5
374	14	SURG	VAGINAL DELIVERY WITH STERILIZATION &/OR D&C	0.6721	0.6775	0.8
375	14	SURG	VAGINAL DELIVERY WITH O.R. PROC EXCEPT STERIL &/OR D&C	0.6587	0.6698	1.7
376	14	MED	POSTPARTUM & POST ABORTION DIAGNOSES W/O O.R. PROCEDURE	0.4418	0.5638	27.6
377	14	SURG	POSTPARTUM & POST ABORTION DIAGNOSES WITH O.R. PROCEDURE	0.8181	0.8188	0.1
378	14	MED	ECTOPIC PREGNANCY	0.7409	0.8054	8.7
379	14	MED	THREATENED ABORTION	0.3962	0.3591	-9.4
380	14	MED	ABORTION W/O D&C	0.3742	0.4775	27.6
381	14	SURG	ABORTION W D&C, ASPIRATION CURETTAGE OR HYSTEROTOMY	0.4673	0.5151	10.2
382	14	MED	FALSE LABOR	0.1922	0.2013	4.7
383	14	MED	OTHER ANTEPARTUM DIAGNOSES WITH MEDICAL COMPLICATIONS	0.4587	0.4655	1.5
384	14	MED	OTHER ANTEPARTUM DIAGNOSES W/O MEDICAL COMPLICATIONS	0.2818	0.3921	39.1
385	15	MED	NEONATES, DIED OR TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	1.3219	1.3443	1.7
386	15	MED	EXTREME IMMATURITY OR RESPIRATORY DISTRESS SYNDROME, NEONATE	4.3591	4.4329	1.7
387	15	MED	PREMATURITY WITH MAJOR PROBLEMS	2.9772	3.0276	1.7
388	15	MED	PREMATURITY W/O MAJOR PROBLEMS	1.7964	1.8268	1.7
389	15	MED	FULL TERM NEONATE WITH MAJOR PROBLEMS	2.3785	2.2451	-5.6
390	15	MED	NEONATE WITH OTHER SIGNIFICANT PROBLEMS	0.6218	1.2845	106.6
391	15	MED	NORMAL NEWBORN	0.1465	0.1490	1.7
392	16	SURG	SPLENECTOMY AGE >17	3.1908	3.2443	1.7
393	16	SURG	SPLENECTOMY AGE 0-17	1.2949	1.3168	1.7
394	16	SURG	OTHER O.R. PROCEDURES OF THE BLOOD AND BLOOD FORMING ORGANS	1.6252	1.5994	-1.6
395	16	MED	RED BLOOD CELL DISORDERS AGE >17	0.8359	0.8362	0.0
396	16	MED	RED BLOOD CELL DISORDERS AGE 0-17	0.5980	0.6966	16.5
397	16	MED	COAGULATION DISORDERS	1.2825	1.2612	-1.7
398	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS WITH CC	1.2360	1.2106	-2.1
399	16	MED	RETICULOENDOTHELIAL & IMMUNITY DISORDERS W/O CC	0.6934	0.7030	1.4
400	17	SURG	LYMPHOMA & LEUKEMIA WITH MAJOR O.R. PROCEDURE	2.6034	2.5572	-1.8

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
401	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA WITH OTHER O.R. PROC WITH CC	2.4533	2.4834	1.2
402	17	SURG	LYMPHOMA & NON-ACUTE LEUKEMIA WITH OTHER O.R. PROC W/O CC	0.9428	1.0255	8.8
403	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA WITH CC	1.6823	1.6925	0.6
404	17	MED	LYMPHOMA & NON-ACUTE LEUKEMIA W/O CC	0.8140	0.8059	-1.0
405	17	MED	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE 0-17	1.8358	1.8669	1.7
406	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL WITH MAJ O.R.PROC WITH CC	2.6558	2.6841	1.1
407	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL WITH MAJ O.R.PROC W/O CC	1.1626	1.1787	1.4
408	17	SURG	MYELOPROLIF DISORD OR POORLY DIFF NEOPL WITH OTHER O.R.PROC	1.6840	1.7393	3.3
409	17	MED	RADIOTHERAPY	0.9475	0.9763	3.0
410	17	MED	CHEMOTHERAPY W/O ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS	0.7172	0.7514	4.8
411	17	MED	HISTORY OF MALIGNANCY W/O ENDOSCOPY	0.5015	0.3837	-23.5
412	17	MED	HISTORY OF MALIGNANCY WITH ENDOSCOPY	0.4530	0.4080	-9.9
413	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG WITH CC	1.3422	1.3257	-1.2
414	17	MED	OTHER MYELOPROLIF DIS OR POORLY DIFF NEOPL DIAG W/O CC	0.7285	0.7337	0.7
415	18	SURG	O.R. PROCEDURE FOR INFECTIOUS & PARASITIC DISEASES	3.4769	3.4430	-1.0
416	18	MED	SEPTICEMIA AGE >17	1.4770	1.4838	0.5
417	18	MED	SEPTICEMIA AGE 0-17	0.8764	0.8089	-7.7
418	18	MED	POSTOPERATIVE & POST-TRAUMATIC INFECTIONS	0.9777	0.9697	-0.8
419	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 WITH CC	0.9223	0.8991	-2.5
420	18	MED	FEVER OF UNKNOWN ORIGIN AGE >17 W/O CC	0.6258	0.6264	0.1
421	18	MED	VIRAL ILLNESS AGE >17	0.6982	0.7153	2.4
422	18	MED	VIRAL ILLNESS & FEVER OF UNKNOWN ORIGIN AGE 0-17	0.5446	0.5347	-1.8
423	18	MED	OTHER INFECTIOUS & PARASITIC DISEASES DIAGNOSES	1.5828	1.5947	0.8
424	19	SURG	O.R. PROCEDURE WITH PRINCIPAL DIAGNOSES OF MENTAL ILLNESS	2.4543	2.3637	-3.7
425	19	MED	ACUTE ADJUST REACT & DISTURBANCES OF PSYCHOSOCIAL DYSFUNCTION	0.7129	0.7051	-1.1
426	19	MED	DEPRESSIVE NEUROSES	0.5949	0.5680	-4.5
427	19	MED	NEUROSES EXCEPT DEPRESSIVE	0.5794	0.5495	-5.2
428	19	MED	DISORDERS OF PERSONALITY & IMPULSE CONTROL	0.6847	0.7303	6.7
429	19	MED	ORGANIC DISTURBANCES & MENTAL RETARDATION	0.9537	0.9075	-4.8
430	19	MED	PSYCHOSES	0.8670	0.8391	-3.2
431	19	MED	CHILDHOOD MENTAL DISORDERS	0.6362	0.6556	3.0
432	19	MED	OTHER MENTAL DISORDER DIAGNOSES	0.7018	0.7363	4.9
433	20	MED	ALCOHOL/DRUG ABUSE OR DEPENDENCE, LEFT AMA	0.3080	0.2986	-3.1
434	20	MED	ALC/DRUG ABUSE OR DEPEND, DETOX OR OTH SYMPT TREAT WITH CC	0.7373	0.7141	-3.1
435	20	MED	ALC/DRUG ABUSE OR DEPEND, DETOX OR OTH SYMPT TREAT W/O CC	0.4249	0.4164	-2.0
436	20	MED	ALC/DRUG DEPENDENCE WITH REHABILITATION THERAPY	0.8384	0.8183	-2.4
437	20	MED	ALC/DRUG DEPENDENCE, COMBINED REHAB & DETOX THERAPY	0.7972	0.7657	-4.0
438			NO LONGER VALID	NV	NV	NV
439	21	SURG	SKIN GRAFTS FOR INJURIES	1.6599	1.6144	-2.7
440	21	SURG	WOUND DEBRIDEMENTS FOR INJURIES	1.7792	1.7725	-0.4

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
441	21	SURG	HAND PROCEDURES FOR INJURIES	0.8785	0.9294	5.8
442	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES WITH CC	2.0836	2.1653	3.9
443	21	SURG	OTHER O.R. PROCEDURES FOR INJURIES W/O CC	0.8130	0.8849	8.8
444	21	MED	TRAUMATIC INJURY AGE >17 WITH CC	0.7290	0.7312	0.3
445	21	MED	TRAUMATIC INJURY AGE >17 W/O CC	0.4664	0.4845	3.9
446	21	MED	TRAUMATIC INJURY AGE 0-17	0.2846	0.2894	1.7
447	21	MED	ALLERGIC REACTIONS AGE >17	0.4976	0.4918	-1.2
448	21	MED	ALLERGIC REACTIONS AGE 0-17	0.0896	0.0777	-13.3
449	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 WITH CC	0.7886	0.7902	0.2
450	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE >17 W/O CC	0.4329	0.4274	-1.3
451	21	MED	POISONING & TOXIC EFFECTS OF DRUGS AGE 0-17	0.2527	0.2570	1.7
452	21	MED	COMPLICATIONS OF TREATMENT WITH CC	0.9127	0.9473	3.8
453	21	MED	COMPLICATIONS OF TREATMENT W/O CC	0.4752	0.4822	1.5
454	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG WITH CC	0.8906	0.8575	-3.7
455	21	MED	OTHER INJURY, POISONING & TOXIC EFFECT DIAG W/O CC	0.4689	0.4467	-4.7
456	22	MED	BURNS, TRANSFERRED TO ANOTHER ACUTE CARE FACILITY	1.9410	1.8327	-5.6
457	22	MED	EXTENSIVE BURNS W/O O.R. PROCEDURE	1.5849	1.4657	-7.5
458	22	SURG	NON-EXTENSIVE BURNS WITH SKIN GRAFT	3.4645	3.4991	1.0
459	22	SURG	NON-EXTENSIVE BURNS WITH WOUND DEBRIDEMENT OR OTHER O.R. PROC	1.9398	1.6538	-14.7
460	22	MED	NON-EXTENSIVE BURNS W/O O.R. PROCEDURE	0.9369	0.9547	1.9
461	23	SURG	O.R. PROC W DIAGNOSES OF OTHER CONTACT WITH HEALTH SERVICES	1.0104	0.9963	-1.4
462	23	MED	REHABILITATION	1.4731	1.4298	-2.9
463	23	MED	SIGNS & SYMPTOMS WITH CC	0.7416	0.7101	-4.2
464	23	MED	SIGNS & SYMPTOMS W/O CC	0.4972	0.5028	1.1
465	23	MED	AFTERCARE W HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	0.4362	0.5571	27.7
466	23	MED	AFTERCARE W/O HISTORY OF MALIGNANCY AS SECONDARY DIAGNOSIS	0.5601	0.5905	5.4
467	23	MED	OTHER FACTORS INFLUENCING HEALTH STATUS	0.4291	0.4588	6.9
468		SURG	EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	3.5391	3.6028	1.8
469			PRINCIPAL DIAGNOSIS INVALID AS DISCHARGE DIAGNOSIS	NV	NV	NV
470			UNGROUPABLE	NV	NV	NV
471	8	SURG	BILATERAL OR MULTIPLE MAJOR JOINT PROCS OF LOWER EXTREMITY	3.6458	3.5980	-1.3
472	22	SURG	EXTENSIVE BURNS WITH O.R. PROCEDURE	10.6993	10.9989	2.8
473	17	MED	ACUTE LEUKEMIA W/O MAJOR O.R. PROCEDURE AGE >17	3.4797	3.5740	2.7
474			NO LONGER VALID	NV	NV	NV
475	4	MED	RESPIRATORY SYSTEM DIAGNOSIS WITH VENTILATOR SUPPORT	3.7015	3.6765	-0.7
476		SURG	PROSTATIC O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	2.2703	2.2479	-1.0
477		SURG	NON-EXTENSIVE O.R. PROCEDURE UNRELATED TO PRINCIPAL DIAGNOSIS	1.5682	1.7266	10.1
478	5	SURG	OTHER VASCULAR PROCEDURES WITH CC	2.2709	2.2883	0.8
479	5	SURG	OTHER VASCULAR PROCEDURES W/O CC	1.3864	1.4080	1.6
480		SURG	LIVER TRANSPLANT	16.3066	13.9424	-14.5

Appendix E. Change in DRG Relative Weights from Fiscal Year 1996 to Fiscal Year 1997

DRG	MDC	TYPE	TITLE	FY 1996 WEIGHT	FY 1997 WEIGHT	PERCENT CHANGE
481		SURG	BONE MARROW TRANSPLANT	11.6796	11.2299	-3.9
482		SURG	TRACHEOSTOMY FOR FACE,MOUTH & NECK DIAGNOSES	3.6620	3.6578	-0.1
483		SURG	TRACHEOSTOMY EXCEPT FOR FACE,MOUTH & NECK DIAGNOSES	16.1090	16.0413	-0.4
484	24	SURG	CRANIOTOMY FOR MULTIPLE SIGNIFICANT TRAUMA	5.4488	5.6821	4.3
485	24	SURG	LIMB REATTACHMENT, HIP AND FEMUR PROC FOR MULTIPLE SIGNIFICANT TR	3.2610	3.2058	-1.7
486	24	SURG	OTHER O.R. PROCEDURES FOR MULTIPLE SIGNIFICANT TRAUMA	4.8763	4.7915	-1.7
487	24	MED	OTHER MULTIPLE SIGNIFICANT TRAUMA	1.9932	2.0305	1.9
488	25	SURG	HIV WITH EXTENSIVE O.R. PROCEDURE	4.2177	4.7905	13.6
489	25	MED	HIV WITH MAJOR RELATED CONDITION	1.7856	1.8141	1.6
490	25	MED	HIV WITH OR W/O OTHER RELATED CONDITION	1.0476	1.0116	-3.4
491	8	SURG	MAJOR JOINT & LIMB REATTACHMENT PROCEDURES OF UPPER EXTREMITY	1.6088	1.6308	1.4
492	17	MED	CHEMOTHERAPY WITH ACUTE LEUKEMIA AS SECONDARY DIAGNOSIS	4.1529	4.0299	-3.0
493	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. WITH CC	1.6501	1.7100	3.6
494	7	SURG	LAPAROSCOPIC CHOLECYSTECTOMY W/O C.D.E. W/O CC	0.8769	0.9169	4.6
495		SURG	LUNG TRANSPLANT	9.5678	9.2870	-2.9

Note: NV = A DRG category that is not valid for classification and payment under PPS.

[FR Doc. 97–14248 Filed 5–30–97; 8:45 am]
BILLING CODE 4120–03–C